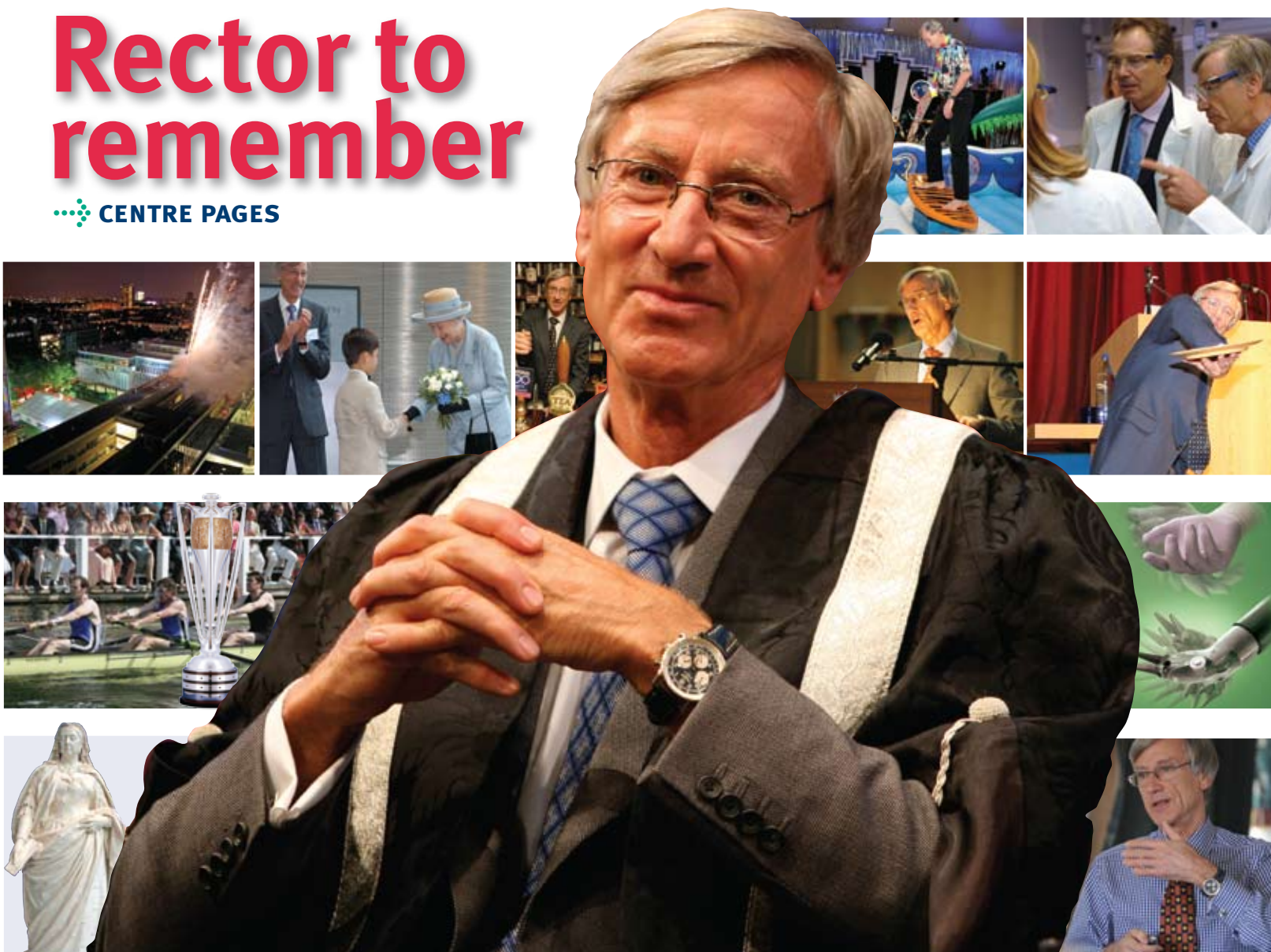




Rector to remember

CENTRE PAGES



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COMPUTERS**
New route to
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in brief

Queen's birthday honours

Professor Anthony Newman Taylor, Head of the NHLI, and Professor Christopher Edwards, formerly Principal of the Faculty of Medicine and current Chairman of Chelsea and Westminster Healthcare NHS Foundation Trust, were each awarded a knighthood in the Queen's birthday honours announced on 13 June. In addition, Professor Dennis Anderson, Emeritus Professor of Energy and Environmental Studies in the Centre for Environmental Policy (CEP), who died on 20 April this year, was posthumously awarded an OBE for services to the energy industry and Professor Paul McMahan Matthews was recently honoured with an OBE for services to Neuroscience.

Undergraduate open day

On 26 June, 1,600 students are expected to attend the science and engineering undergraduate open day on the South Kensington Campus. The Faculties of Engineering and Natural Sciences, the



Department of Humanities, the Imperial College Union and other student services will showcase their activities in a marquee on the Queen's Lawn. Prospective students will also be able to take part in tours around the Ethos sports centre and halls of residence.

Journal recognition for Physics paper

A research paper written by Professor Tom Kibble (Physics) and two colleagues in 1964 has been selected as one of the most important papers of the last 50 years in the leading journal *Physical Review Letters*. The paper has been named a milestone paper, as part of the journal's 50th anniversary celebrations, during which selected papers from a particular year have been highlighted in each week's issue.

Changes to South Kensington buildings access

Due to events to mark the Rector's retirement, access to a number of buildings on the South Kensington Campus will change for periods in the week commencing 23 June with the Main Entrance closed from 16.00. On Thursday 26 June the Dalby Court area will be closed to non ticket holders from 15.30 to 19.00. Staff, students and visitors accessing Electrical Engineering, RSM, Bessemer, Tanaka Business School, Mechanical Engineering, the Grantham Institute for Climate Change and



the Faculty Building on these days need to be aware of alternative routes. For more information please visit the staff webpage: www.imperial.ac.uk/staff

Launch of £3.4 million Centre for Respiratory Infection

Research into respiratory infections is an urgent priority, according to the medics and scientists at a new research centre which launched this month at Imperial.

The Centre for Respiratory Infection, funded by a £3.4 million award from the Wellcome Trust, will bring together more than 200 scientists to work on a range of problems. These will include how common cold viruses cause disease and affect long-term health, how to make better vaccines to prevent lung infections, and how to diagnose TB more accurately.

Being part of the Academic Health Science Centre means that researchers at the new Centre will be able to move their discoveries and innovations into practice more quickly and effectively than ever before.

The researchers will explore issues such

"Respiratory disease has never been as well funded as it deserves to be, considering the impact it has on health."

as how better treatments can be devised for those patients who come into hospital with acute respiratory infections. They are also establishing a team of clinicians who can be ready to spring into action if there is a new outbreak of pandemic flu such as a mutated form of bird flu, or SARS.

Professor Peter Openshaw (NHLI), the Director of the new centre, said: "Respiratory disease has never been as well funded as it deserves to be, considering the impact it has on health."

Respiratory infections are at the root of many of the diseases that we treat every day. This new initiative is a great opportunity to get something done. We have a lot of very talented groups working on different aspects of lung infections, and bringing them together with solid shared support will help them work on common goals, to the great benefit of patients."

—LAURA GALLAGHER, COMMUNICATIONS

£20 million boost for Trusts

NHS patients in north west London will benefit from a multi-million pound research project leading to the rapid introduction of new, effective treatments for a wide range of medical conditions.

Over the next five years, £20 million will be available for NHS hospitals, primary care trusts and community services in north west London, led by Imperial College Healthcare NHS Trust, and Chelsea and Westminster NHS Foundation Trust.

This month, Public Health Minister Dawn Primarolo announced National Institute for Health Research (NIHR) funding of £10 million for the North West London Collaboration for Leadership in Applied Health Research and Care (CLAHRC), which will be matched by £10 million of funding from the organisations involved.

The North West London CLAHRC is one of seven new research partnerships between NHS trusts and leading universities to receive NIHR funding.

"we are ensuring that when we make a new medical breakthrough, or devise a better way to treat people, patients will quickly see improvements in their care."

The collaboration will develop service innovations to improve the care of acutely ill patients and patients with chronic diseases across different NHS organisations.

Professor Steve Smith, Principal of the Faculty of Medicine, said: "Research into

chronic and acute illness at Imperial College London is of a very high quality and this recognition underlines that. However, it's not enough just to do research, we also have to make sure it benefits the people who need it.

"Through this new initiative with our colleagues at Chelsea and Westminster Hospital NHS Foundation Trust, and through our creation of the UK's first Academic Health Science Centre, we are ensuring that when we make a new medical breakthrough, or devise a better way to treat people, patients will quickly see improvements in their care."

—LAURA GALLAGHER, COMMUNICATIONS





World class research collaboration in carbonate reservoirs and carbon storage

Sustainably developing oil and gas reserves in the Middle East is the focus of a new US\$70 million research partnership between Imperial, Qatar Petroleum, Qatar Science and Technology Park and Shell, which aims to develop better methods of recovering oil and gas while reducing levels of CO₂ released into the atmosphere.

At a ceremony held at the South Kensington Campus, Dr Tidu Maini, Executive Chairman of Qatar Science and Technology Park (QSTP),

Ms. Linda Cook, Executive Director of Royal Dutch Shell plc, His Excellency Abdullah Bin Hamad Al-Attiyah, Qatar's Deputy Premier and Minister of Energy and Industry, and Sir Roy Anderson, Rector-elect (pictured above left to right), launched a 10-year joint research collaboration that will focus on further understanding carbonate reservoirs, which constitute the vast majority of hydrocarbon reservoirs across the Middle East, and CO₂ storage.

Imperial and Shell are currently working together to understand how CO₂ behaves in sandstone oil reservoirs such as those found in the North Sea. They will now join forces with Qatar Petroleum to look at carbonate reservoirs, many of which are found in the Middle East, and explore ways to increase the recovery of oil and gas and develop safe and secure methods of

capturing and storing CO₂ to help mitigate the effects of climate change.



"This is an exciting long-term partnership which aims to tackle one of the major challenges facing the world – securing sustainable sources of energy in a way that does not exacerbate climate damage."

Partnership

The agreement will see Imperial's Department of Chemical Engineering and Chemical Technology and Department of Earth Science and Engineering working together to push forward research both in the UK and in Qatar.

Professor Martin Blunt, Head of the Department of Earth Science and Engineering, said: "Under this project we will work with colleagues in Qatar and Shell to understand how oil, water, natural gas and carbon

dioxide flow in geologically complex reservoirs. The goal is to demonstrate effective storage of carbon dioxide in a field trial while training a new generation of scientists and engineers in reservoir management."

Speaking of the importance of this research, Programme Director Geoffrey Maitland, Professor of Energy Engineering, said: "If we are to continue to use fossil fuels without causing catastrophic climate change, it is essential that we capture and store the CO₂ we produce. Imperial is very excited about building on our existing strong collaboration with Shell, to work with them and our new partners in Qatar to develop a deeper understanding of carbonate reservoirs which will enable vast quantities of CO₂ to be stored securely underground in Qatar.

Training

Professor Maitland added: "this agreement will enable Imperial to train the carbon management engineers of the future who will return to drive research and development in the region, building the Qatari local capacity to turn this challenge of CO₂ mitigation into a reality."

Sir Richard Sykes welcomed the collaboration saying: "This is an exciting long-term partnership which aims to tackle one of the major challenges facing the

world – securing sustainable sources of energy in a way that does not exacerbate climate damage. One the beauties of collaboration is that we can achieve far more together than would be possible individually, so I am delighted that Imperial has Shell and Qatar Petroleum as its partners for this vital endeavour."

—COLIN SMITH, COMMUNICATIONS

► To watch a video on the landmark signing visit: www3.imperial.ac.uk/news/climateagreement



Sir Roy Anderson hosts guests on a tour of the South Kensington Campus

media mentions

—DANIELLE REEVES, COMMUNICATIONS

DAILY MAIL ▶ 29 MAY

Monkey mind control

Monkeys have learned to operate a bionic arm using the power of thought alone, it was reported in May. According to the *Daily Mail*, the monkeys used the arm to grasp and eat chunks of marshmallow and fruit in experiments to develop brain-controlled prosthetic limbs for paralysed people. Professor Paul Matthews (Neurosciences and Mental Health) told the *Daily Mail* that the range of movements of the shoulder, elbow, wrist and fingers made the bionic arm more advanced than anything already available. He said: “This moves the day when patients disabled after spinal cord injuries or amputations can use brain-controlled bionic limbs from the realm of science fiction towards science fact.”



REUTERS ▶ 6 JUNE

Red planet dust

The NASA Mars Phoenix lander sent the most high resolution pictures ever of dust and sand on the surface of another planet back to Earth this month, according to news agency *Reuters*. One of the grains captured by Phoenix’s camera was clear and white coloured, which scientists think is probably a mineral or salt. “What we’re seeing in the microscope is almost certainly not ice,” Tom Pike (Electrical and Electronic Engineering), Phoenix geology team leader, told *Reuters*. This is because a particle of ice that small would have melted before it could be photographed.



DAILY MAIL ▶ 29 MAY

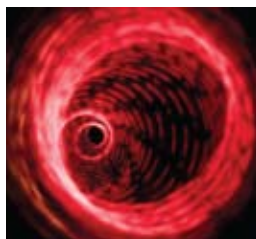
Pregnancy stress could increase risk of stillbirth

New research has shown that stressed mums-to-be are at almost double the risk of stillbirth, the *Daily Mail* reported. A study of almost 20,000 women revealed that those who were stressed, anxious or lacked self-esteem in the last weeks of their pregnancy were more likely to suffer a stillbirth. It is thought that rising levels of hormones in the mother result in the developing baby being deprived of oxygen. Professor Vivette Glover (SORA) told the *Daily Mail*: “People looking after pregnant women should pay much more attention to their emotional health and employers should be open to flexible working hours.”

THE DAILY TELEGRAPH ▶ 30 MAY

Hotter than the sun

Scientists have used a laser to heat matter to 10 million degrees Celsius, hotter than the surface of the sun, according to *The Daily Telegraph*. The scientists, who super-heated material a tenth the size of a human hair at the Rutherford Appleton Laboratory in Oxfordshire, believe their experiments have taken them one step closer to laser fusion, the process that powers the sun. Peter Norreys (Physics) one of the researchers involved, told the *Telegraph*: “This is an exciting development—we now have a new tool with which to study really hot, dense matter.”



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Imperial College Healthcare

NHS Trust

NEWS

AHSC vision

The objectives and long term plans for the Academic Health Science Centre (AHSC) have been set out in a new 10-year Vision document approved by Imperial’s Management Board and the Trust Board.

The document sets out the purpose and goals of the new organisation and will act as the foundation for the development of the AHSC’s corporate strategy, business planning process and organisational development programme.

Professor Stephen Smith, Chief Executive of the Trust and Principal of the Faculty of Medicine, said: “The AHSC’s vision is that the quality of life of our patients and populations will be vastly improved by taking the discoveries that we make and translating them into advances—new therapies and techniques—in as fast a timeframe as is possible. What this document does is set out how we can achieve this by aligning research, healthcare and education to deliver maximum patient benefit.”

Visit www.imperial.ac.uk/medicine (area on the AHSC to the bottom right of the page) to access the full Vision document.

£1.4 million birth centre opens its doors

The St Mary’s birth centre opened on 4 June after four years of planning and preparation. The £1.4 million centre, which received half of its funding from the former St Mary’s Paddington Charitable Trust, provides a comfortable, state-of-the-art space for women with uncomplicated pregnancies to deliver their babies.

Pauline Cooke, consultant midwife and head of the team of 14 staff, said: “The aim was to create a peaceful and private setting with a lot of attention to detail. For example, we have hairdryers in the bathrooms, adjustable lighting and wood panelling throughout. Water is also available in every room, which we know to be one of the main things to help relieve pain in childbirth.”

Networking event for international female researchers

An international group of women gathered at Imperial in early June for the second stage in a development programme for female scientists in science and engineering.

The TANDEMplus IDEA scheme, run by the IDEA League, a network of Europe's leading technical universities including Imperial, TU Delft, ETH Zürich and RWTH Aachen, held its second event at the College over 5-6 June, focusing on networking.

The scheme aims to increase the number of women in high level scientific positions through mentoring, training and networking.

Mary Ritter, Pro Rector for International Affairs, welcomed the female researchers to the College. She said: "This programme is extremely important. I want to congratulate everyone here who is on the scheme – it was very competitive to get on."

To kick-start the two day event, Professor Andrea Abele-Brehm, from the school of Humanities and Social Sciences at the Friedrich-Alexander-Universität Erlangen-Nürnberg, gave a presentation on women's participation in business and academia in

Europe after researching the issue.

A series of short presentations was given by Imperial academics, entitled *My personal journey*, highlighting significant events and people in their careers.

The second day of the programme focused on intercultural communication, covering how culture impacts on academic leadership style.

Niki Kringos, a civil engineering researcher from TU Delft, attended the event. "I am the only female in my department, but I don't mind it. I like the way this programme focuses on excellence and we have some great scientists talking to us today," she said.

Kim Everitt, Deputy Director of Human Resources and College Coordinator for the scheme, said: "The event provided excellent opportunities for networking and a good platform for the next session in Delft, which will focus on academic leadership."

—NAOMI WESTON, COMMUNICATIONS

► For more information please visit the website: www.idealeague.org/tandemplus

awards and honours

Student wins prestigious investment competition

Bing Wen Tan, an Electrical Engineering undergraduate, has won the 2008 Uni Investor Challenge, organised by the ifs School of Finance, a financial education charity. Collecting the top prize of £9,000, Bing Wen Tan invested a fantasy £100,000 in the stock market over a three month period. The aim of the competition was to achieve the greatest growth and write an investment report detailing why they made the decisions they did. Commenting on his win, he said: "I felt that the challenge was fun and enriching. It provided the excitement of stock trading without the risk of losing money. I got more interested in economics and financial news due to the challenge."



Scientific posters pick up first and second place prizes

A group of researchers from the National Heart and Lung Institute was awarded the Best Scientific Poster prize at the European section of the International Society of Heart Research annual meeting in Athens last month. The poster was entitled *Surface morphology and calcium control in myocytes from a rat MI model of heart failure*, and was a joint effort involving Alexander Lyon, Julia Gorelik, Sukhpreet Dubb, Ken Macleod, Philip Poole-Wilson and Sian Harding. Katharina Grikscheit, a PhD student in the team of Professor Nicholas Severs at the National Heart and Lung Institute, also won the second place prize for her poster on human heart failure.



Career of young maths professor highlighted

Mathematician Kevin Buzzard has been selected as one of 10 young academics in British universities who are contributing enormously to their disciplines, profiled by the *Times Higher Education* magazine on 29 May. Professor Buzzard, 39, is concentrating on the Langlands philosophy, which looks at the links between number theories first postulated in the 1970s. His work also has practical uses. He said: "Some of the algorithms for keeping your credit card details secure on the internet were discovered by number theorists. When there are breaches of security that make the news, this is almost always because of human error rather than some expert cracking a code discovered by a number theorist. The best codes invented by number theorists really do seem to be uncrackable currently."



Imperial undergrads test their flying machines

On 7 June a team of undergraduates from the Department of Mechanical Engineering took part in the Red Bull Flugtag, which sees daredevil pilots from across the UK flying and crashing their homemade machines into Hyde Park's Serpentine. David Mulholland, Alex Edgecombe, David Macknelly, Andrew MacDonald and Elizabeth Hyde have been designing, testing and building their glider, named Icarus Airkix, in the Mechanical Engineering workshops.

David Mulholland described the event: "There was a lot of camaraderie and it was great getting to know the other teams involved. Sadly when we flew we only reached 10 metres and came 22nd overall. We would have liked to have flown further but the low winds stunted our flight. Also, our trolley didn't provide enough stability to launch our flier at the right angle and the right speed. We are quite disappointed but maybe in the future another team could learn from our mistakes and excel in the competition."

—EMILY ROSS, COMMUNICATIONS

Lone asylum-seeking children experience high levels of war trauma



Lone asylum-seeking children are more likely to have experienced high levels of war trauma, combat and torture than those who arrived in the country with adult carers, according to a new study conducted by Imperial researchers, looking at the mental health of asylum seeking children in the UK.

The authors of the research, which has been published online in the *Journal of Child Psychology and Psychiatry*, are calling on the UK government to ensure that children who arrive in the country on their own are offered appropriate support.

The study reveals that lone asylum-seeking children are at much greater risk of mental health problems, such as post

traumatic stress symptoms, than their accompanied peers. Such children are sent away from their families, or flee their communities, because of persecution, organised violence or war.

There are an estimated 5,500 unaccompanied asylum-seeking children in the UK. According to the new research, placing such children in foster care greatly helps their mental health.

Dr Matthew Hodes (Neuroscience and Mental Health) is the lead author of the new study. He says: "These children often arrive in the UK after experiencing terrible things in their home country, and we would like to see

foster care or special children's homes offered to them in order to reduce their suffering."

—LAURA GALLAGHER, COMMUNICATIONS

"there is a close relationship between the levels of distress that these children experience and their living arrangements."

Why close relatives keep their distance

Mammals cannot share their habitat with closely related species because the need for the same kind of food and shelter would lead them to compete to the death, according to new research out last month in *Proceedings of the Royal Society B: Biological Sciences*.

Lead author of the study Natalie Cooper, a postgraduate student in the Department of Life Sciences, explains: "Mammal species that share a recent common ancestor have similar needs in terms of food and other resources. Our study shows that this has naturally resulted in closely related species keeping their distance from each other in the wild. Without this separation, one species outcompetes the other."

The team behind the study says that this is important because the retreat of natural habitats like rainforests caused by habitat destruction and climate change could inadvertently force closely related species to live closer together than before.

The new research focused on communities of three different types of mammals: new world monkeys (including marmosets, tamarins and spider monkeys), possums, and ground squirrels (including marmots, prairie dogs and chipmunks).

The team compared data from a 'family tree' showing the evolution of all mammal species on the planet, with checklists of which mammal species are found where.

They discovered that in the case of these monkeys, squirrels and possums, close evolutionary relatives do not tend to live in communities with one another.

—DANIELLE REEVES, COMMUNICATIONS



Mosquito genes affect malaria transmission

Mosquito genes that control how many malaria parasites can successfully develop inside the body of the mosquito have been identified by Imperial researchers, as reported in the journal *PLoS Pathogens*.

The parasites that cause malaria develop inside the bodies of mosquitoes for almost three weeks before they are transmitted to humans when the mosquito bites and takes a human blood meal.

Now in a field study in Cameroon, researchers have shown for the first time that if particular mosquito genes are deactivated,



the number of malaria parasites that are able to successfully grow and develop inside the body of the mosquito can change dramatically.

The researchers hope that understanding the roles different mosquito genes play in controlling the growth of malaria

parasites may one day lead to new ways of stopping the transmission of the disease.

The lead author of the paper, Dr Dina Vlachou (Life Sciences), explains: "This new research gives us an important new insight into how different

genes in the mosquito's body can affect how well malaria parasites can grow inside it. The more we know about the complex

relationship between malaria parasites and mosquito hosts in real-world scenarios, the better our chances are to develop ways to combat the disease."

Dr Vlachou and her colleagues carried out the new research in collaboration with scientists from France and Cameroon. They

collected blood samples from over 3,000 school children from a small town in Cameroon, and found that over half were infected with the deadly malaria parasite *Plasmodium falciparum*, with 6 per

cent of the infected group carrying parasites that transmit the disease.

—DANIELLE REEVES, COMMUNICATIONS

"This new research gives us an important new insight into how different genes in the mosquito's body can affect how well malaria parasites can grow inside it."



'Family tree' of British birds shows which species might be endangered next

A complete evolutionary 'family tree' showing how all British bird species are related to each other may provide clues about which ones are at risk of population decline, according to new research published in *Proceedings of the Royal Society B: Biological Sciences*.

Comparing the new family tree with existing lists of endangered bird species, author Dr Gavin Thomas (Life Sciences) found that British birds currently suffering population decline were clustered close together on the same branches of the family tree.

"populations of blackbirds in the UK are at risk of declining in the future."

Because of this the family tree, or 'phylogeny', could be used to predict which species are at risk of decline in the future.

Bird species which are not experiencing decline at the moment, but which sit close to species that are declining on the family tree, may be at risk next. This is because closely related species on the family tree share physical traits. Some of these traits, such as low reproductive rates or specific habitat requirements, may render them less able to cope with climate change or depletion of their habitat and make them exceptionally vulnerable to decline.

Dr Thomas explains, however, that the family tree could be used to provide vital clues to which species need to be protected from population decline: "Numbers of the common blackbird are currently not perceived as threatened at all. However, it has several close relatives, including the song thrush, that are experiencing severe levels of population decline. This could mean that populations of blackbirds in the UK are at risk of declining in the future."

—DANIELLE REEVES, COMMUNICATIONS

Industrial dye holds the key to advancing spintronics

Commonly used industrial dyes hold the key to advancing the new science of 'spintronics', say Imperial researchers working on a new £2.5 million study.

Spintronics holds out the possibility of a range of future applications, such as quantum computing, which aims to deliver secure, low power computers capable of processing much larger quantities of data than is currently possible.

The science of spintronics focuses on storing, processing and receiving information by using

magnetic fields, electrical currents, light and microwaves to control the spin of electrons.

The new basic technology grant awarded by the Engineering and Physical Sciences Research Council will support research into the magnetic properties of metal atoms found in industrial dyes such as Metal Phthalocyanine (MPc), a blue dye used in clothing. The team, from the London Centre for Nanotechnology — a joint venture between Imperial and UCL — and the University of Warwick, believes that finding ways to control and exploit these molecules will allow spintronics to be applied in new ways.

Dr Sandrine Heutz (Materials), who works at the London Centre for Nanotechnology, said: "Molecules incorporate many different functionalities necessary for spintronics. They are cheap and can be processed easily. We believe they could have a real edge in the quest for smaller, faster, and more energy efficient devices."

—COLIN SMITH, COMMUNICATIONS



Study increases understanding of irritable bowel syndrome

People with irritable bowel syndrome have a higher than usual number of chilli pepper pain receptors, according to a new study published in the journal *Gut*.

The research, conducted by Imperial researchers, could lead to new therapies for the estimated one in five UK adults who have irritable bowel syndrome (IBS), a painful condition which is poorly understood. Symptoms of IBS include abdominal pain, bloating, and bowel problems such as constipation or diarrhoea.

The study shows that people with IBS have higher than usual levels of nerve fibres expressing the pain receptor TRPV1, responsible for causing a burning sensation when people eat chilli peppers. The study's authors, from the Divisions of Medicine and Neuroscience and Mental Health,

hope that doctors could treat the pain that people with IBS experience by targeting and blocking this receptor.

People with severe pain from IBS are currently treated with opiates, which can have serious side-effects.

Painkillers such as paracetamol and ibuprofen tend to offer little relief. New painkillers to target TRPV1 are currently being developed by pharmaceutical companies and the new findings suggest that such drugs could tackle some of the symptoms of IBS.

Professor Subrata Ghosh (Medicine), one of the authors of the study, said:

"IBS can seriously affect people's quality of life and our new study could explain some of its symptoms. At the moment patients don't have a lot of options for managing their condition and the treatments we can

offer can give disappointing results. We hope that our findings will lead to better treatments to help people with IBS."

—LAURA GALLAGHER, COMMUNICATIONS





Rector retrospective

Reporter's Abigail Smith looks back on Sir Richard's seven years as Rector of Imperial College London.

Shortly after taking up the post of Rector in January 2001, Sir Richard Sykes told *The Times*: "I would like to leave this university in a strong financial position and for it to be recognised as one of the top universities in the world."

Seven years later, there can be no doubt that this ambition has been fulfilled. The Imperial Sir Richard says farewell to is an independent university rated the fifth best in the world by the *Times Higher Education Supplement*, with the reputation and confidence to compete on a global stage.

A major reason for this international standing is the realisation of one of Sir Richard's overriding priorities – making Imperial financially secure. The establishment of the College Fund, plus pioneering schemes including the flotation of Imperial Innovations and a £50 million unsecured private placement borrowed over a 50-year period, have given the College greater financial freedom.

Building Imperial

Perhaps the most tangible signs of Imperial's ability to invest are the new and refurbished buildings across its campuses.

A visitor from 2001 might find it hard to recognise the South Kensington Campus of today, with its impressive Norman Foster-designed front entrance on Exhibition Road, opened by the Queen in 2004, and the re-imagined Dalby Court.

The students of seven years ago might also envy their 2008 counterparts, who live in high quality accommodation in place of the shabby Southside they knew and who have free access to state of the art sporting facilities in *Ethos*.

Growing interdisciplinary research

One of Sir Richard's first actions on arriving at Imperial was to introduce a faculty system streamlining management processes and encouraging cross-disciplinary research. The result has been the growth of institutes and centres, including the Institute of Biomedical Engineering, the Institute for Mathematical Sciences and the Grantham Institute for Climate Change.

At the same time, he led the College to completely rethink its pay scales, bringing Imperial out of national pay bargaining so it could offer competitive salaries to attract the best staff.

In between these achievements, he has led the College's Centenary celebrations and overseen the creation of the Imperial

College Healthcare NHS Trust, the UK's first Academic Health Science Centre.

Developing UK higher education

Throughout Sir Richard's term as Rector, he has acted as a high profile voice in controversial national debates on higher education funding and the importance of science to the economy. He was one of the first university leaders to speak in favour of increased tuition fees and has prominently criticised the quality of science teaching in secondary schools.

Other controversies include a proposed merger with UCL in 2002, which fell through due to weight of opposition. Commenting on *Live!* Mustafa Arif, the then ICU President, said: "You have to hand it to him. Sir Richard does have balls!"

With Imperial's international reputation now firmly established through a series of successes and a few high profile debates, there can be no doubt that Sir Richard Sykes is a Rector to remember.

"I would like to leave this university in a strong financial position and for it to be recognised as one of the top universities in the world"

◀ Sir Richard's portrait by Paul Brason, unveiled on 12 June at a dinner hosted by Lord Kerr of Kinlochard, Chairman of the Council, is on display alongside paintings of all former Rectors in the Council Room of 170 Queen's Gate

The Sykes legacy

“Richard has made many important contributions to Imperial but outstanding for me is his introduction of the faculty structure which enables us to work together as an institution in ways impossible before. There’s greater collaboration between the disciplines, positioning Imperial as a leader in new areas of research.”

Professor Dame Julia Higgins, Principal of the Faculty of Engineering (2006-07)



“I have been privileged to watch Imperial blossom and grow over the last ten years— Sir Richard has been instrumental to this success. His tenacity and unwavering support for the organisation is visible at every level of the university. On a personal level he has been a great advocate for craft specialties, such as academic surgery.”

Professor Lord Ara Darzi, Parliamentary Under-Secretary, Department of Health

“Richard has had a huge impact on my professional life. He invited me to become Head of Department and within six weeks we were discussing mergers with UCL – an atypical introduction to the job. Then at the end of my tenure he asked me to lead the College bid to BP for an Energy Biosciences Institute – we failed, but Richard kept our commitment to bioenergy research alive.”

Professor Richard Templer, Department of Chemistry

“RICHARD SYKES HAS MADE HIS MARK ON THE COLLEGE IN MANY WAYS: THE NEW ENTRANCE ON EXHIBITION ROAD, THE BUSINESS SCHOOL, THE REFURBISHMENT OF MANY BUILDINGS, THE NEW FACULTY STRUCTURE AND HE HAS CERTAINLY KEPT US IN THE MEDIA EYE. I’D LIKE TO THANK HIM FOR ALL HE HAS DONE.”

Professor Rod Smith, Department of Mechanical Engineering



“To make institutions like Imperial more friendly to women academics takes support from

the top. Richard has demonstrated serious commitment to the work of the Academic Opportunities Committee. He endorsed the Pledge to Academic Women, the creation of the Elsie Widdowson Fellowships for academics returning from maternity leave and contributed significantly to the Athena Project. These initiatives and others have begun to change the College’s culture.”

Professor Dot Griffiths, Chair of the Academic Opportunities Committee

“Public funding is finite. Richard understood that Imperial’s future also depends on accessing substantial money, for which a thriving business school is an asset. His unwavering support underpinned the transformation of Imperial’s business school from ugly duckling to emerging swan.”

Professor David Begg, Principal of Tanaka Business School



“Richard’s vision and insight into multidisciplinary research has begun to transform Imperial. The creation of the Institute of Biomedical Engineering, for example, and pulling together faculties to work on these large scale interfaces will be a lasting legacy of Sir Richard.”

Professor Chris Toumazou, Executive Director, Institute of Biomedical Engineering



The Fellwanderers at 928m—the summit of Moruisg, a munro in the Wester Ross region of Scotland.

Fellwanderers

The Imperial Fellwanderers club is all about escaping the big smoke and getting some good old fashioned exercise. Open to staff and students, the club runs walking trips to different parts of Britain such as the Peak District, as well as Sunday walks to places near London. On top of that, the club organises a week away at Christmas and Easter and a two week trip in the summer—this year members are going trekking in Jotunheim National Park in Norway.

Dr Rita Nunes (Clinical Sciences) is originally from Portugal and has been a member of the Fellwanderers since 2006. She says the club has helped her get to know the UK at the same time as increasing her level of fitness. The walks can range from 7–12 miles, and it's the feel-good factor of finishing the route which spurs her on during the tougher treks. Dr Nunes says: "I remember a

"the promise of a nice cup of hot chocolate was what got me through it!"

trip to Pembrokeshire when we got completely soaked and covered in mud. Wearing waterproof gear didn't seem to make any difference. The path was quite slippery at some points, but the promise of a nice cup of hot chocolate was what got me through it!"

Dr Nunes particularly enjoys the social aspect of the club—she explains: "The club has allowed me to meet people from

different departments within Imperial. As I am based at the Hammersmith Campus, this experience has significantly contributed to feeling part of Imperial."

—EMILY ROSS, COMMUNICATIONS

Walks: Weekend trips every other week, alternating with Sunday walks and longer trips over the breaks
Society size: 80
Walking group size: 8–30
www.imperial.ac.uk/union/rcc/fellwanderers

Walk the walk

Last month a team from the Faculty of Medicine completed the 2008 Moon Walk in aid of breast cancer research and raised £2,349.

The Moon Walk involves walking overnight for 26.2 miles (the distance of a marathon). This year's London Moon Walk took place on 17 May, beginning and ending in Hyde Park, and the team from Imperial who braved the cold included Helen Cullen (Faculty of Medicine), Kate Miles, Beth Janz and Isobel Anderson (all from SORA). Isobel Anderson explains why they got involved: "We were looking for a challenge as well as a chance to raise some money for charity and as so many people have been affected both directly and indirectly by breast cancer we decided the Moon Walk would be an ideal choice.

The route

"The walk started at midnight, when we, along with 17,000 other women (a token 100 men took part too!) set off on our challenge. The lack of sleep made the walk harder than expected and at the 13-mile point we couldn't believe we still had the same distance to walk again. It was nice to see the sun come up in the capital on the Sunday morning. The atmosphere was excellent and we were all pleased to finish with only one blister between us!"

—EMILY ROSS, COMMUNICATIONS

► For more information: www.walkthewalk.org



From left to right: Helen Cullen, Kate Miles, Beth Janz, Isobel Anderson



Riding the coast

Last month Dr Euan Stronach (SORA) completed a gruelling 3,353 mile motorbike ride around the UK coastline to raise money for the charity Ovarian Cancer Action (OCA).

Dr Stronach works as a cancer scientist in the Department of Oncology at the Hammersmith Campus. He explains that he wanted to support Ovarian Cancer Action as they are dedicated to improving survival rates for ovarian cancer through funding research, raising awareness and giving a voice to women who have ovarian cancer.

A keen motorcyclist, Dr Stronach set himself the eight-day challenge, travelling for up to

14 hours a day. Commenting on his journey, he says: "The final day I was struggling with an aching knee and a constant requirement for red bull! But other than that, all good! I'd love to do it again—however, my wife found a week with two kids and a dog on her own tougher than I found the ride!"

To date, Dr Stronach has raised £3,600 and he would like to acknowledge generous support from Oxford Gene Technology.

—EMILY ROSS, COMMUNICATIONS

► To sponsor Dr Stronach visit: www.justgiving.com/coastbusters. For more information on Ovarian Cancer Action visit: www.ovarian.org.uk

Super computers

High performance computing has been helping Imperial researchers to approach problems in a radically new way since the new service was launched at Imperial in 2006. *Reporter's* Emily Ross finds out what these powerful systems have to offer.

HPC

High performance computing (HPC) is the term used to describe a group (or cluster) of individual computers, each containing several processors, which are all connected together.

HPC is used to tackle long and complex scientific calculations and simulations in cases where desktop computers cannot meet researchers' requirements.

Dedicated HPC systems allow researchers to run their problem across a number of computers, which work together in parallel to find a solution.

To use these systems effectively programs must be written to run the problem through the many processors in parallel. HPC can then go on to save researchers a lot of time.



"before cx1, I had been forced to focus on algorithms and methods development, leaving most of the large scale computations to colleagues elsewhere."

HPC at Imperial

Imperial's HPC service, funded by £1 million from the Science Research Investment Fund (SRIF), went live in 2006. Housed in the ICT Data Centre in the Mechanical Engineering Building, it boasts two HPC systems comprising an SGI Altix shared memory system (ax1) and a Dell PC cluster (cx1).

ICT also has two specialist staff members – Simon Burbidge and Matt Harvey – who are dedicated to supporting and expanding the use of HPC at the College.

Benefits

There are a number of advantages of using HPC to solve a problem as Dr Gerard Gorman (Earth Science and Engineering), who works on a three-dimensional parallel ocean model (ICOM), explains: "HPC allows researchers to simulate physical environments in which to test their prototypes or theories. Using simulations or modelling allows researchers to do things they wouldn't be able to do otherwise, as physical experiments would be much more expensive and impractical. With HPC, massive sums that would normally take weeks or months can be solved in days or hours."

And it's not just about new projects: HPC can also be used to improve the rate of progress on current projects. As Professor Matthew Foulkes (Physics) explains: "The purchase of the cx1 parallel computer had a dramatic effect on the type of research I was able to do...before cx1, I had been forced to focus on algorithms and methods development, leaving most of the large scale computations to colleagues elsewhere."

Since the facilities have arrived at the College, he explains that he has been able to tackle problems head on and has used cx1 to resolve "a decade-long controversy about the correct value of the formation energy of a simple model of a metal surface."

Usage

There has been a steady growth in usage since HPC was first installed at Imperial. Today there are 452 individual users, representing most departments in the College. And it's not just scientists, the Business School is also using HPC to look at economic models.

In order to get more people up and running on HPC, Imperial offers regular courses including: Introduction to HPC Linux, MPI Programming and OpenMP Programming. These are organised by the HPC team and use professional trainers.



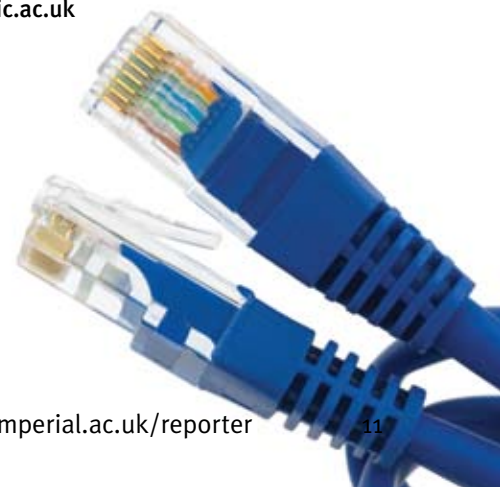
The HPC service, housed in the ICT Data Centre, has proved very popular with users from all faculties and Tanaka Business School since the service went live in 2006

Future

Arthur Spirling, Deputy Director of ICT and Head of IT Services, recognises that HPC is essential to the growth of the College. He says: "The potential for HPC at Imperial is immense and very relevant to today's and tomorrow's problems, for example simulating possible scenarios of a bird flu epidemic. All major universities already have or are acquiring central HPC services to support their research communities. Such facilities provide a crucial bridge between desktop computing and the national supercomputers. We need to ensure our graduates and researchers remain ahead of the game by getting them familiar with this new technology."

► Please contact Matt Burbidge if you think you could make use of HPC in your research.

www.hpc.ic.ac.uk



Professor Keith Barnham

QuantaSol

Professor Barnham, Emeritus Professor in the Department of Physics, set up spin-out company QuantaSol in 2007 to commercialise his research in photovoltaics (PV) — solar power technology that converts sunlight into electricity. The company has pioneered 'Quantum Well Solar Cells' which use semi-conductor gallium arsenide and achieve better efficiency than silicon PV cells.



"Our technology is capable of more than double the efficiency of the silicon PV cells currently on the market," he explains, "and our latest top cell is better than that of the present world record cell."

QuantaSol's highly efficient products appeal to an expanding global market for concentrator solar systems which focus light onto small cells so that fewer are needed for significant electricity output. QuantaSol's PV cells can also be used for new applications, such as 'smart windows' that can track sunlight and darken when necessary to act as blinds, while the PV cells provide electricity.

Professor Barnham took early retirement in 2005 to concentrate on his research.

"It has been hard work to get to this stage and a lot of people have contributed to our success," he says. "My colleague Professor Massimo Mazzer was on leave from an Italian university and able to offer great support. It was also important to have someone who could focus on the commercial facets of the company. Imperial Innovations helped us by finding a very good CEO who could lead the business."

QuantaSol has strong ethical policies, something Professor Barnham believes is important. He hopes the company's technology will provide electricity to the many parts of the developing world where there is lots of sunshine but no electrical grid, in the same way that mobile phones have provided lifelines in these areas without a telephone network.

"The gallium arsenide chips in mobile phones have made this method of communication cost-effective," he explains. "A square metre of concentrator PV cells contains the same amount of gallium arsenide as in two mobile phones and could supply electricity for one household in the developing world. However we need to drive the cost down by expanding the PV market."

Professor Barnham thinks the UK should follow the German example — Germany has similar sunshine levels to the UK but already 200 times the PV capacity. He says: "In the UK more than 60 per cent of electricity is used within buildings. There is seven times more solar energy that falls on those buildings than is consumed inside, therefore solar alone could supply their electricity."

—MICHELLE COTTERILL, IMPERIAL INNOVATIONS

► For further information about Imperial Innovations visit: www.imperialinnovations.co.uk or contact the team on 020 7581 4949.



Technician Jon Dyne explains the programming of the electrical discharge machining (EDM) wire eroder in the new Mechanical Instrumentation Workshop.

New facility adds to Imperial's instrumentation strength

More than 200 staff and guests attended the official opening on 15 May of the new Mechanical Instrumentation Workshop in the Department of Physics. The workshop is used by a team of technicians to design, develop and produce engineering equipment and components for the department's academic staff, researchers and students.

Over the last two years the workshop has undergone a massive £3.2 million refurbishment programme which culminated in an opening ceremony last month when the new workshop was unveiled to the College.

The new facilities include computer-numerically-controlled machine tools, (pictured above) allowing technicians to conduct several operations at the same time, as well as a three-dimensional rapid prototype printer which quickly assembles accurate and functional three-dimensional prototypes.

Alongside this cutting edge equipment, the workshop also invested in new versions of conventional tools including lathes, presses, and cutting and milling machines. The refurbishment has transformed the workshop from a poorly lit under-resourced area to a modern

high-tech environment which will cater for increasingly complex research needs within the Department of Physics and other parts of the College.

The team

Leading the refurbishment programme was Workshop Manager Paul Brown, who joined Imperial 18 years ago as a technician following an apprenticeship in mechanical engineering. He says:

"The past 18 months have been very heavy going, trying to maintain technical support with the refurbishment in progress. Our team of 13 technicians has played a major role in the specification and selection of the new equipment and I can see their enthusiasm for the improved working environment."

Recent projects include producing an X-ray spectrometer which uses light to measure very hot plasma for the Plasma Physics research group, and a

decelerator to slow down the movement of molecules for their study by researchers in the Centre for Cold Matter.

The impact

The workshop technicians believe that the refurbishment has made a huge difference to what they can offer.

Jon Dyne, technician for the Centre for Cold Matter, comments: "We'd reached a research plateau using mainly manual



Workshop Manager Paul Brown (left) with Professor Donal Bradley (centre) and Professor Sir Peter Knight (right), at the opening of the new workshop in May.

→ machines. What's been so good is that technicians were involved from the start. We looked at the space available and how we'd like it to be laid out. We then split into teams to research equipment we'd like installed, such as an EDM wire eroder [which uses electrical discharge to cut conductive materials]. We've also been on lots of training courses in-house and with the machine manufacturers to help us move from what was in some cases 1920s equipment to twenty-first century technology."

Mr Dyne, who has been with Imperial for seven years following an apprenticeship in the aircraft industry, adds: "On a personal level, it's made my job even more exciting."

The machines

Andrew Rochester, technician in charge of the new computer-aided design (CAD) area of the workshop, agrees that the refurbishment has already had a big impact. Mr Rochester, who joined Imperial as a mechanical engineering apprentice and has been with the College for 29 years, says there has been demand from all over for the new facilities. He explains that the workshop's rapid prototyping machine, which uses computer data and resins to 'print' three-dimensional models of almost any shape, has already been used by teams in engineering departments and the Imperial Incubator, as well as in Physics.

David Bowler, technician for the Experimental Solid State research group, also thinks that the workshop is paying dividends. Mr Bowler completed a mechanical engineering apprenticeship at Imperial in 1996 and joined Physics a year ago. He says: "I arrived during phase two of the refurbishment programme and it was exciting to see the project coming together. We are already seeing the benefits of being able to use the new technology to manufacture a wider variety of components—for example, 'substrate masks' [templates for evaporating metals onto glass slides] which used to be sent out to specialist companies are being produced in-house using our EDM wire machine."

He adds: "A lot of the success is down to the guys who work here. They've all been involved in the refurbishment. I've worked in various workshops across the College and I think this will be a benchmark for future developments."

The opening

The workshop opening was attended by the Head of Physics, Professor Donal Bradley, and Associate Head, Dr Kenny Weir. The Principal of the Faculty of Natural Sciences, Professor Sir Peter Knight, who recognised the need for the refurbishment and helped secure funding via the College's Strategic Research Investment Fund, and the Rector, Sir Richard Sykes, were also among the guests at an evening reception.

Paul Brown says: "We're all really proud of our new workshop. It was a mammoth task, but by working together as a group we have produced a fantastic outcome which gives us and the whole College enormous potential for the future."

—WENDY RAESIDE, COMMUNICATIONS

► To find out more about the workshop and its facilities, contact Paul Brown on 020 7594 7876.

Strengthening links with Europe

Since the European Union's new Framework Programme 7 (FP7) was launched last year with a €55 billion budget, the College has successfully applied for funding for 88 projects. FP7 is the umbrella under which the EU funds scientific and medical research and, so far, all faculties have benefited with 42 awards made to Engineering, 31 to Natural Sciences and 15 to Medicine.

FP7 funding is a useful way for researchers to set up networks involving collaboration

between many European partners. It provides a framework independent of national funding agencies, which aids and encourages researchers in Europe to find ways of working together.

One of the successful FP7 applicants is Professor Jordan Nash, (Physics) who is involved in a project preparing for the next generation of experiments using the Large Hadron Collider at CERN—the European organisation for nuclear research in Geneva. The money will help fund upgrades of existing experiments that will need to be built over the next decade.

Professor Nash explains the scale of the work: "The CMS upgrade project, which I am leading, involves more than 2,000 physicists from around 180 institutes in 38 countries, including more than 60 institutes in 15 European countries. It will involve more than 200 million Swiss Francs of funding that needs to be collected from a large number of different national funding agencies."

Speaking of the support provided by FP7, he added: "The funding helps

"given the extremely large collaborations which are required to work on the most challenging projects, having a source of funding like FP7 gives them a kick-start."

us to prepare the case for the new detectors, understand how much the upgrades are likely to cost, and present a plan for the upgrades. Particle physics has always had a tradition of international cooperation, however given the extremely large collaborations which are required to work on the most challenging projects, having a source of funding like FP7 gives them a kick-start."

The next stage

FP7 funding is divided into four programmes, the largest of which, Cooperation, awards funding to the best peer-reviewed proposals from Europe-wide consortia, specifically aimed at collaborative research and network-building. The next calls for proposals under the Cooperation programme are expected to be launched on 24 July and will focus on the Health, the Food, Agriculture and Fisheries, and Biotechnology themes.

—EMILY ROSS, COMMUNICATIONS

► For more information on FP7 opportunities visit: www.imperial.ac.uk/researchservices/contractsandcec/fp7 or contact Carole Meads on 020 7594 6579



Clarifications and corrections

Please note that in the article on the Rio Tinto Centre for Advanced Mineral Recovery on page 2 of the last issue (192), the following information should have been added: "The £6 million funds will be used over a five-year period and will see six postdocs and 12 researchers employed at Imperial's Department of Earth Science and Engineering to carry out research in this field."

To watch an interview with Professor Jan Cilliers, Rio Tinto Chair in Mineral Processing and one of the lead scientists at the Centre, based at Imperial's Department of Earth Science and Engineering, visit: www3.imperial.ac.uk/news/futuremine

celebrating long service



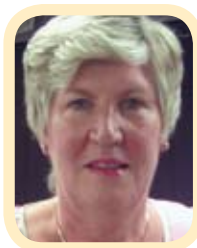
20 years

Professor Phillip Bennett • Clinical Professor (SORA)

Professor Denis Dugwell • Professor of Chemical Engineering (Chemical Engineering and Chemical Technology)

Dr Glenda Gillies • Reader (Neurosciences and Mental Health)

Professor Richard Underwood • (NHLI)



Diana Anderson, Silwood Park Campus Administrator (Biology)

Diana Anderson started at Imperial in 1988 as a PA to the Director of Silwood Park Campus, Professor Michael Hassell. Within three years she became Silwood Park Administrator and was then appointed to her current role as Campus Administrator.

Mrs Anderson's role sees her working across the Campus liaising with staff and students as well as residences, catering, estates and security. She is also responsible for organising work experience placements for pupils from local schools and colleges. She describes what has kept her at the College for 20 years: "Silwood has a timeless quality. We have 250 acres of natural parkland, rabbits, a Japanese garden, a lake, a vibrant student community and friendly staff—who wouldn't be happy to work here?"



Doru Procopiu, Deputy Accounts Payable Manager (Finance)

Doru Procopiu started at Imperial as a temporary staff member to help the Finance Division recover information after the College's central computer system crashed. Soon after joining the College he was offered a permanent job in Accounts Payable. In 1991 he was promoted to Deputy Accounts Payable Manager, a challenging role that has seen him help the division become more efficient and automated. Mr Procopiu says: "Since I started at Imperial, the College

has changed significantly. In Finance, invoices and other documents used to be stored in boxes on the floor, while most of the core processes were carried out manually."

He is particularly impressed with the Rector's impact. He says: "Sir Richard has moved the College on as a university and now we are at a stage where we can progress and become the leading university in the world."

30 years

Mr Paul Allatt • ICT Link Manager (ICT)



Professor Howard Wheeler, Professor of Hydrology and Head of the Environmental and Water Resource Engineering Section (Engineering)

Professor Howard Wheeler joined Imperial as a lecturer in hydrology in 1978. He became head of the section in 1995, which he describes as "a great section to be involved in—it is very multidisciplinary." Professor Wheeler's career has seen him work with DEFRA and the Environment Agency to improve UK flood, drought and water quality management. He has a wide international experience in this area. Professor Wheeler

says that one of his proudest moments was receiving the International Water Prize in 2006 for Water Resources Management in Arid and Semi-arid Regions, from Prince Sultan bin Abdulaziz Al-Saud, Crown Prince of Saudi Arabia. He also works as a consultant and has represented Hungary at the International Court of Justice in The Hague in a dispute concerning the dams on the Danube. He describes what has kept him at Imperial for 30 years: "We have so much freedom to develop our own interests—it's one of the biggest bonuses of the job."

Staff featured celebrate anniversaries during the period of 1 July–1 August. Data is supplied by HR and is correct at the time of going to press.

Obituaries

Dr Vadim Lebedenko (Physics) died on 11 May, whilst at home in Moscow. Working at a range of institutions throughout his career, including the Institute of Theoretical and Experimental Physics in Moscow and MIT in the USA, Dr Lebedenko's research focussed on the detection of radiation using liquified noble gases such as liquid xenon. In particular, the simultaneous detection of light and charge released by particles interacting in these liquids is now the most promising technology for direct searches of 'dark matter', the missing mass which seems to outweigh ordinary matter in the universe.



In 1998, Dr Lebedenko joined a new international dark matter experiment, ZEPLIN-III, moving to Imperial in 2000 to join the team led by Professor Tim Sumner (Physics). Speaking of Dr Lebedenko's contributions to this novel double-phase xenon detector, Professor Sumner said: "His role as the "father" of ZEPLIN-III is undisputed: he took it from a mere design concept to a final instrument, a true statement of skill, knowledge and resolve, from an outstanding scientist who mastered both the most intricate physics and the most challenging engineering. He passed away at the moment when his detector had started measuring relevant physical data, culminating his decade-long endeavour".



Professor Bruce Sayers FEng (Computing) died on 12 May, aged 80. His former colleagues, Anne O'Neill (Computing) and Richard Kitney (Bioengineering), recount some of his many achievements:

"In his long career at Imperial Bruce McArthur Sayers served both as Head of the Department of Electrical Engineering and, subsequently, as Head of the Department of Computing. He was also Dean of the City and Guilds College for two separate terms.

He joined Imperial in 1962 and became Professor of Engineering Applied to Medicine in 1968. He was, arguably, the father of the field of biomedical signal processing, which today is central to many areas of diagnosis involving medical scanners and other electronic instruments. With Colin Caro he founded research at the College involving the application of engineering and physical science to biomedical problems. Their laboratories became the Centre for Biological and Medical Systems in 1989 and a full department (Bioengineering) in the late 1990s.

Bruce published many important research papers on the application of signal processing and statistical techniques to biomedical problems, and was a dedicated teacher, held in deep affection by his students.

Bruce will be remembered as a leading world class research scientist and someone who really cared about education."

STAFF development news

MEd in University Learning and Teaching

The Centre for Educational Development is launching a new Master's in University Learning and Teaching (MEd ULT). The MEd was developed after staff who had completed the CASLAT (Certificate for Advanced Studies in Learning and Teaching) approached the Centre about building on their studies and acquiring a full MEd in the area.

The qualification has been designed to be open to all academic teaching staff working at Imperial. A number of entry routes will be available to accommodate for a range of applicants, including those who have not completed the CASLAT.

While the title of the MEd explicitly focuses on learning and teaching, participants will be encouraged to think laterally about educational issues that may impinge on learning and teaching, beyond classroom practice, such as course design, leadership, or the transition between secondary school and university.

The MEd has a flexible structure in order to give participants the opportunity to complete it at their own speed. Depending on the amount of time people wish to dedicate to it during the registration period, it can be completed in anything from 18 to 48 months. On average, the programme consists of four modules and allows for both face-to-face interaction and supervised private study around specific educational topics that are relevant to an individual's needs and interests. One module is a proper research-based dissertation that will be supported by a preliminary module on educational research methods.

Professor Julia Buckingham, Pro Rector for Education, has been heavily involved with the development of the MEd. She says: "The new degree programme will build on the foundations laid by CASLAT and offer an excellent opportunity for those staff in the College who wish to develop further the educational arm of their career."

—ROBERTO DI NAPOLI, CENTRE FOR EDUCATIONAL DEVELOPMENT

► For further information, please contact either Roberto Di Napoli (r.dinapoli@imperial.ac.uk) or Ms Heather Fry (h.fry@imperial.ac.uk) or visit the CED website www3.imperial.ac.uk/edudev

welcome new starters

Mr Abdul Ali, Mechanical Engineering
Mr Oliver Barrett, NHLI
Mr Shah Baten, Chemistry
Mrs Navdeep Bhondi, College Headquarters
Mr Thomas Blake, Physics
Ms Elena Borreani, NMH
Mrs Rosemary Bowen, SORA
Ms Alyson Brewer, Estates
Mr Michael Bright, Cell and Molecular Biology
Mr Johan Bruneel, Business School
Dr Nathan Callaghan, Biology
Miss Rosalyn Casey, NHLI
Dr Minsuk Choi, Mechanical Engineering
Dr A.T.M. Chowdhury, SORA
Dr Theopisti Chrysanthaki, Business School
Ms Justyna Czerwiska, Investigative Science
Mrs Louise Dawson, SORA
Dr Adolfo del Campo, Physics
Dr Anne Delille, Chemical Engineering and Chemical Technology
Dr Robert Duller, ESE
Miss Maria Fernandez, Investigative Science
Mr Robert Finnis, Physics
Mr Davide Grandolfo, NHLI
Mr Anil Gunesh, EPHPC
Miss Asa Hedman, Medicine
Mr Stephen Heeks, Reactor Centre
Dr Richard Hendricks, Physics
Mrs Sheena-Marie Holliday, Student Residences
Ms Ratika Jain, Business School
Miss Helen Kayiannidis, Faculty of Engineering
Mrs Margaret Kelleher, Kennedy Institute
Mrs Shallini Khillan, ICT
Mr Chris Li-In-On, Medicine
Dr Erh-Hsui Lim, Materials
Dr Sergio Lukic, Mathematics
Dr Nuria Martinez-Alier, Medicine
Miss Catriona McGilvery, Materials
Miss Anna McGrath, Library Services
Miss Aronrag Meeyai, EPHPC
Dr Mikhail Neklyudov, Mathematics
Miss Elly O'Brien, Library Services
Professor Keith O'Nions, Faculty of Natural Sciences
Miss Kat Parkins, ICT
Dr Anil Ramlackhansingh, NMH
Dr Anna Renz, EPHPC
Dr Maurice Riordan, Humanities
Mrs Devika Sawant, NHLI
Miss Rose Shaddock, Business School
Ms Sarah Shubinsky, Centre for Environmental Policy
Ms Antoine Simcock, Security Services
Mr Mikael Sodergren, SORA
Mrs Jane Srivastava, NHLI
Miss Helen Swanton, Estates
Ms Valentina Tartari, Business School

Ms Kim Van Der Heiden, NHLI
Dr Berend Van Wachem, Mechanical Engineering
Ms Mohini Venkatesh, EPHPC
Dr Bo Wang, Chemical Engineering and Chemical Technology
Dr Peter Washer, SORA
Mr Mark Wass, Molecular Biosciences
Miss Zoe Whitelaw, Materials
Dr Hazel Williams, Cell and Molecular Biology
Dr Hui Xu, NHLI
Miss Megan Youell, Student Residences

farewell moving on

Mrs Fatmata Akpokiniovo, Student Residences
Dr Claudia Alen Amaro, NHLI
Mr Brian-John Alford, Occupational Health Service
Dr Emma-Jane Allen, Biology (9 years)
Miss Halin Bareke, SORA
Dr Sebastian Barg, Medicine
Miss Louisa Bentley, Library Services
Dr Catherine Burton, Investigative Science

► Simon Franklin, Head of Reactor Centre is leaving

Imperial for GE Energy. Speaking of his time at Imperial he said: "It's been an incredible opportunity to manage the UK's only civilian nuclear research reactor over the past ten years, especially because I've been supported by such a fantastic professional and talented team. It was a hard decision to leave and I wish everyone at the Reactor Centre every success."



Mrs Linda Campbell, NMH
Dr Marcel Cardillo, Biology (6 years)
Dr Rebecca Chandler, Medicine
Miss Lynne Christian, NMH (9 years)
Dr Alexander Christofides, Business School (10 years)
Mr Ben Cottam, Chemistry
Dr Lotte Dinesen, Medicine
Mr Simon Eades, Medicine
Ms Rosemary Evans, Library Services
Mr Nuno Faisca, Chemical Engineering and Chemical Technology
Miss Audrey Fernandes, Materials
Mr Joseph Forrest, SORA
Dr Ioannis Fotinopoulos, Business School
Mr Simon Franklin, Reactor Centre (10 years)
Mrs Fiona Gammie, NHLI
Dr Bethanna Jackson, Civil and Environmental Engineering (7 years)
Mr Jehan Jayanetti, Computing
Miss Gemma Jennings, Biology
Dr Oliver Jordan, ESE
Dr Dimitrios Karagiannis, EEE

Dr Sye Keoh, Computing
Dr Eugene Kuzmin, SORA
Dr Philippe Lavoie, Aeronautics
Dr James Leaver, Physics
Mr Simon Lee, Registry
Mr Pinhu Liao, NHLI (5 years)
Miss Rebecca Martin, Faculty of Natural Sciences
Mr Douglas Mason, Occupational Health
Dr Simon Michaelis, Chemistry
Ms Jenny Morris, Medicine (26 years)
Dr Elisabet Nadal-Melsi6, Investigative Science
Miss Mignone Ngum, Centre for Environmental Policy
Miss Paula Nicholson, Faculty of Medicine
Ms Danielle Pompeo, Educational Quality Office (7 years)
Dr Francois Potgieter, NMH
Dr Mark Richards, Physics
Dr Zahid Sattar, NMH
Mrs Michele Sheehan, Cell and Molecular Biology (9 years)
Dr Harrison Shumba, Chemical Engineering and Chemical Technology
Mrs Michelle Smith, Faculty of Engineering

This data is supplied by HR and covers the period 18 May–7 June. It was correct at the time of going to press. Years of service are given where an individual has been a member of College staff for over five years. Asterisk (*) indicates where an individual will continue to play an active role in College life.

◆ Please send your images and/or brief comments about new starters, leavers and retirees to the Editor, e.ross@imperial.ac.uk who reserves the right to edit or amend these as necessary.

moving in. moving on.

what's on

19 JUNE 17.30–18.30

Interfacial fluid mechanics: what, how and who cares?

Professor Omar Matar, Professor of Fluid Mechanics

Inaugural lecture

Clore Lecture Theatre, Huxley Building

☒ Registration in advance: m.fleming@imperial.ac.uk



19 JUNE 17.30–18.30

Science communication: information or education?

Dr Lisa Jardine Wright, Physics Educational Outreach Officer, University of Cambridge

Lecture Theatre G16, Sir Alexander Fleming Building

☒ First come, first served

21 JUNE 10.00–24.00

Exhibition Road Music Day

A spectacular day of free live music events in the heart of London.

Exhibition Road Music Day is a unique free festival of live music for everyone, with over 400 artists across 20 stages

Exhibition Road, South Kensington

☒ For more details visit: www.exhibitionroadmusicday.org



23 JUNE 16.30–17.30

Experiences in structure-based drug discovery: opportunities for modelling and informatics

Professor Rod Hubbard, University of York

Lecture Theatre G34, Sir Alexander Fleming Building

☒ First come, first served



24 JUNE 17.30–18.30

From spinwaves to giant magnetoresistance and beyond

Professor P. Grünberg, Nobel laureate

Pippard Lecture Theatre, Sherfield Building

☒ Registration in advance: a.hartley-forbes@imperial.ac.uk

25 JUNE 17.30–18.30

Vitreous motion and stress on the retina induced by eye rotations

Dr Rodolfo Repetto, University of L'Aquila

Room 1.47, Royal School of Mines

☒ First come, first served



25 JUNE 17.30–18.30

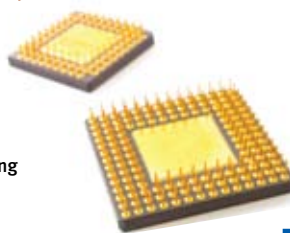
Engineering computer systems

Professor Wayne Luk, Professor of Computer Engineering

Inaugural lecture

Lecture Theatre G34, Sir Alexander Fleming Building

☒ Registration in advance: l.brown@imperial.ac.uk



30 JUNE 17.30–18.30

Conserving the saiga antelope: science in a changing world

Professor E.J. Milner-Gulland, Professor of Conservation Science

Inaugural lecture

Lecture Theatre G34, Sir Alexander Fleming Building

☒ Registration in advance: l.brown@imperial.ac.uk

► All events are at the South Kensington Campus unless otherwise stated.



Take note

Central Library closure

The final stage of the Central Library's refurbishment will take place between Saturday 28 June and Sunday 6 July. During this time there will be no access to the building or print collections. However, all other department and campus libraries will be open as normal and access to our online resources will not be affected. Central Library staff will still be working during the closure week and can be contacted by phone or email as usual. The library will re-open with its new ground floor entrance at 9.30 on Monday 7 July. For more information please visit: www.imperial.ac.uk/library

volunteering

Female mentors wanted

Project: Women's Mentor
Project ID: 2060
Organisation: The Arbour
Date(s): Ongoing
Location: All over east London

Female volunteers are needed to mentor women who attend the Young Women's Project at the Arbour, a community centre in Tower Hamlets. The project works with women who have just arrived in the UK, supporting them during their crucial first year here. The mentoring scheme is seeking to recruit mentors to work on a one to one basis with project participants. As a mentor you would share your knowledge of London and provide your mentee with a chance to practise their English. It is a great volunteering opportunity for those who would like to do something but have limited time as it only requires a commitment of one to two hours a week. All mentors will receive half a day's training.



For more information

To take part in a scheme or to hear more about volunteering in general, contact Lucy Mitchell
• 020 7594 8141
• volunteering@imperial.ac.uk

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

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

Reporter is published every three weeks during term time in print and online at www.imperial.ac.uk/reporter.



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