

Cutting edge

£10 million donation to develop
the medical robotics of the future  **PAGE 2**



**KAUST
ALLIANCE**
Imperial to
partner new
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**ACCESS WORLD
CLASS RESEARCH**
Spiral digital
repository
launched
CENTRE PAGES



EDUCATION FOCUS
Pro Rector Julia
Buckingham
discusses her
new role
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in brief

HEFCE funding rewards Imperial excellence

The high quality of research and teaching at Imperial has been recognised with a 2008–09 total recurrent grant of £153.4 million from the Higher Education Funding Council for England (HEFCE), a rise of 5.1 per cent on the previous year's allocation. This compares to the sector-wide increase of 3.3 per cent, and to increases of 3.4 per cent and 2.3 per cent respectively for the Universities of Oxford and Cambridge. The majority of the College's grant is focused on research, which receives total funding of £97.7 million. The full table of higher education grant allocations is available online at: www.hefce.ac.uk

Opening doors to science

Over 200 female school pupils aged 14 and 15 attended science and engineering open days in February. Organised by the Women in SET (science, engineering and technology) student society, the open days were designed to encourage girls to study science and engineering subjects at A level and university. Led by student volunteers, the days included demonstrations and hands-on group projects. Eirini Spentza, civil engineering PhD student and Chair of the Women in SET student society, explained: "This is the third year this event has run and we have worked closely with Outreach to get more school-children involved. So many schools responded that we have had to expand the scheme and hold two separate open days for the first time."



Registry changes

The results of a review of the provision of Registry services have been announced and include a number of organisational changes to take effect from 1 April 2008. They will result in changes in the reporting lines for student outreach activities and the Careers Service to the Pro Rector for International Affairs, Professor Mary Ritter, and for student financial matters, which will become part of the Finance Division under Andrew Murphy. Responsibility for all remaining registry activities, which are to be reorganised in line with the outcome of the review, will rest with the Pro Rector for Education, Professor Julia Buckingham. A search will commence for an Academic Registrar to succeed Vernon McClure on his retirement in September 2008.



Royal Society Awards boost innovative research

Gut bugs that can turn raw sewage into energy and the next generation of fibre-based lasers were among Imperial research projects awarded Royal Society Brian Mercer Awards to support and encourage innovation this month.

Professor David Stuckey (Chemical Engineering and Chemical Technology) received the prestigious £250,000 Brian Mercer Award for Innovation to develop a revolutionary sewage treatment process using bacteria primarily found in the lower intestine to break down effluent.

Professor Stuckey believes he has developed a green system which creates energy and clean water, and reduces sludge by 90 per cent.

"Funds from my award will develop the world's first low waste bioreactor

which has the potential to revolutionise the way we deal with effluent," he said.

In addition, Professors Andrew Livingston (Chemical Engineering and Chemical Technology) and Roy Taylor (Physics) received £25,000 Brian Mercer Feasibility Awards. Professor Livingston's prize was awarded to develop a commercial-sized machine with the potential to construct super durable membranes for industrial use.

Professor Livingston has already developed tough thin film membranes required on a small scale.

He plans to use his award to conceive, design and build a new machine, similar to a printing press, which can roll out these membranes at 20 to 50 metre lengths.

"We are moving into uncharted territory because no one has ever built a machine like this before at an industrial level," he said.

Professor Taylor received the award for his group's work on compact, efficient and easy-to-use lasers based on fibre technology. They hope to create one laser that can do the work of many.

—COLIN SMITH AND DANIELLE REEVES, COMMUNICATIONS

New alliance with King Abdullah University of Science and Technology



Artist's rendering of KAUST's main campus quad

Imperial and the King Abdullah University of Science and Technology (KAUST) have signed a \$50 million (US) Academic Excellence Alliance which will see joint collaborations in research, curriculum development and academic recruitment.

Imperial will partner KAUST, a new international postgraduate research university opening in Saudi Arabia in 2009, during its first years of operation, to enable it to build up its academic staff and curriculum in materials science and chemical engineering.

The partnership will push forward research in a range of areas including carbon capture, hydrogen-rich fuels, membranes, materials for high stress environments,

structural ceramics such as fuel cell materials, energy engineering, process systems engineering, materials for clean power generation, fluid mechanics and biomaterials.

Rector Sir Richard Sykes, a member of KAUST's International Advisory Council, welcomed the agreement saying: "High quality scientific research and teaching know no borders – they are global aspirations and key to improving quality of life worldwide. Because of that, we are delighted to partner KAUST in this new venture, which I hope will create a hub of research excellence that can play its part in tackling the challenges of the twenty-first century which science and technology will be vital to solving."

Nadhmi Al-Nasr, KAUST's Interim President, said: "KAUST's decision to enter into an academic alliance with both the Department of Chemical Engineering and Chemical Technology and the Department of Materials at Imperial College is based on its pre-eminent global reputation.

"Imperial College will provide KAUST not only with the practical tools to build the new university's intellectual capital, but is also a model of the sort of research university KAUST aspires to be."

—COLIN SMITH, COMMUNICATIONS

Shadow Chancellor talks green tech

A new vision of environmental entrepreneurship in the UK was outlined by a senior politician during a lecture at Imperial on 27 February.



George Osborne MP, the Shadow Chancellor of the Exchequer, spoke to captains of industry and finance, environmentalists, academics and students about new Conservative initiatives aimed at making the UK a world leader in environmental technology.

The Shadow Chancellor, speaking in the Sir Alexander Fleming Building, praised Imperial's environmental credentials and called for more universities to emulate its incubator model, which is providing green technology entrepreneurs with crucial financial support and business expertise.

He announced the creation of a working group to draw up a detailed roadmap for rolling out green technology incubators, similar to Imperial's, across all UK universities.

Mr Osborne said: "Professor Nagy Habib, the Pro Rector for Commercial Affairs here at Imperial, will contribute to the working group as co-chair, helping us to unleash the potential for environmental entrepreneurship that exists in our universities."

He also praised work undertaken by Imperial's Porter Alliance, a collaboration between the College, Rothamsted Research, the Institute of Grassland and Environmental Research and the John Innes Centre, which is working to develop sustainable methods of converting biomass.

Dr Tariq Ali, Director of Imperial's Energy and Environment Office and organiser of the event, welcomed Mr Osborne and outlined the College's commitment to world-leading energy and environmental research initiatives.

Mr Osborne's speech was followed by a question and answer session on Conservative environmental policies. He then toured a biotechnology laboratory to learn more about Imperial's efforts to create sustainable plant-based liquid fuels.

—COLIN SMITH, COMMUNICATIONS

Hamlyn donation launches Centre for Robotic Surgery

An international centre of excellence for medical robotics in the UK has been launched at Imperial, thanks to a £10 million philanthropic donation.

The Hamlyn Centre for Robotic Surgery, supported by a total of £10 million from the Helen Hamlyn Trust and Lady Helen Hamlyn personally, will push forward the integration of robotics into medicine and patient care.



From left to right: Professor Lord Ara Darzi, Lady Helen Hamlyn, Sir Richard Sykes and Professor Guang-Zhong Yang

Located at Imperial's South Kensington and St Mary's Campuses, the Centre will develop technologies that will transform conventional keyhole surgery, expand new ways of empowering robots with human intelligence and create revolutionary miniature 'microbots' that have integrated sensing and imaging for cancer surgery and treatment.

The Centre is to be codirected by two UK pioneers in medical robotics: Professor Lord Darzi, Parliamentary Under Secretary at the Department of Health, and Professor Guang-Zhong Yang, Director of Medical Imaging at Imperial.

In appreciation of the grant from the Helen Hamlyn Trust and the generous donation by Lady Hamlyn, Lord Darzi said: "Medical robotics and computer assisted surgery are used in a growing number of operating rooms around the world. This funding will allow the team to leverage our existing research programmes in pursuing adventurous, fundamentally new technologies that will allow more

widespread use of robotics in medicine and patient care."

The Centre will draw together world-leading experts in a range of disciplines, with the aim of creating a national resource in medical robotics. Professor Yang, the Centre's director of basic sciences and engineering research, said: "This creates a unique opportunity for developing new robotic devices that build on the latest developments in imaging, sensing, mechatronics and machine vision."

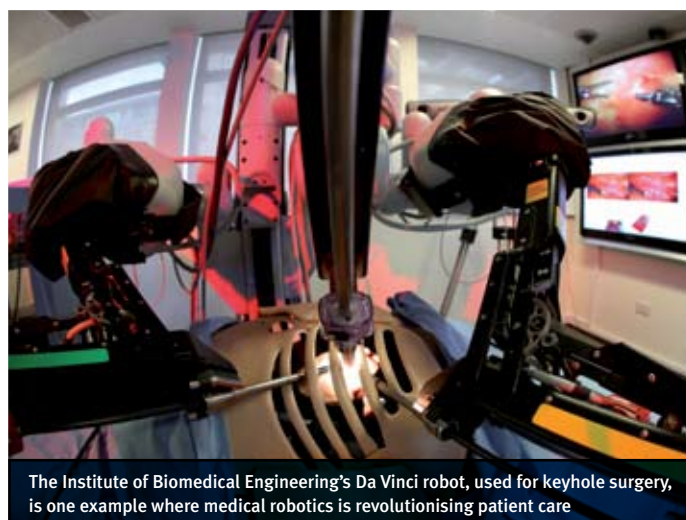
Lady Hamlyn also expressed her satisfaction at being able to contribute to the future development of robotics in the UK. She said: "I am delighted that the funding from my Trust, together with my personal donation, will be contributing to the future development of robotic surgery and other innovations in this very important new field, which will greatly improve patient care in many areas, particularly in cancer care."

The Centre's launch on 5 March was marked by an official reception at 170 Queen's Gate. In his speech, the Rector, Sir Richard Sykes, spoke about a growing awareness of the need for researchers from all kinds of different disciplines to come together in one place to tackle the big scientific problems.

"Because of that, we are very keen to create these multidisciplinary centres, where people like Ara [Darzi] and Guang-Zhong [Yang] can work side by side and bring their great expertise to bear on the same challenge. It's an approach that will reap dividends for many, many people," he predicted.

Sir Richard also personally thanked Lady Hamlyn and her Trust's generosity. He said: "We are absolutely delighted that you will be our partner in this new centre, and we look forward to sharing the adventures to come."

—COLIN SMITH, COMMUNICATIONS

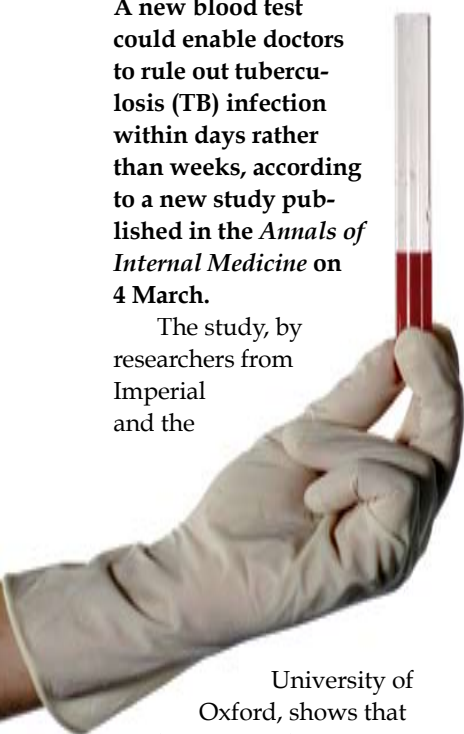


The Institute of Biomedical Engineering's Da Vinci robot, used for keyhole surgery, is one example where medical robotics is revolutionising patient care

New TB test means quicker and easier diagnosis

A new blood test could enable doctors to rule out tuberculosis (TB) infection within days rather than weeks, according to a new study published in the *Annals of Internal Medicine* on 4 March.

The study, by researchers from Imperial and the



University of Oxford, shows that doctors can determine that a patient does not have tuberculosis with 99 per cent accuracy when using

the new blood test, ELISpot-Plus, in conjunction with a skin test known as tuberculin skin testing, already in use.

TB is difficult to diagnose because many of its symptoms, such as fever, fatigue, and loss of appetite, are also commonly found in many other conditions. The combination of ELISpot-Plus and tuberculin skin testing is able to rule out TB within 48 hours, providing a much quicker result than existing testing methods.

Professor Ajit Lalvani (NHLI), who led the study team, said the new test could revolutionise the way people with suspected TB are managed. He explained: "By using the new blood test, together with the old skin test, we could establish

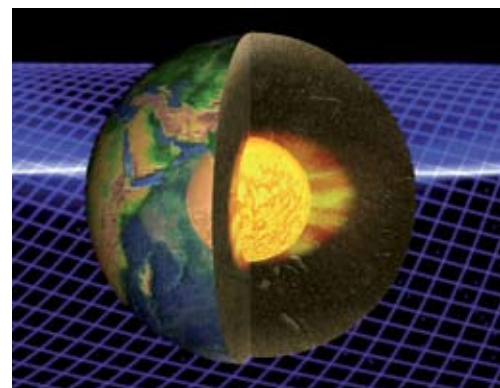
if someone does not have TB within two days of them coming in for tests, allowing doctors to focus on other possible diagnoses. If we cannot rule out TB, we can then refer them for further testing to confirm the diagnosis."

The ELISpot-Plus test works by detecting signs of a particular response that occurs when the immune system encounters TB infection. The test looks for a type of protein known as interferon- γ . This is secreted by T cells in the immune system when they encounter antigens found in the bacterium *Mycobacterium tuberculosis*, which causes most cases of TB.

The study involved 389 patients at Northwick Park, London and Heartlands Hospital, Birmingham. Britain is the only country in Western Europe where TB is on the rise.

— LAURA GALLAGHER, COMMUNICATIONS

Journey to the centre of the Earth—tracking tectonic plates



The first direct evidence of how and when tectonic plates move into the deepest reaches of the Earth was published in *Nature* on 20 February. Imperial researchers hope their description of how plates collide, with one sliding below the other into the rocky mantle, could potentially improve their ability to assess earthquake risks.

Scientists, from Imperial and the Institute of Geophysics, Switzerland, found that, contrary to common scientific predictions, dense plates tend to be held in the upper mantle, while younger and lighter plates sink more readily into the lower mantle.

"This process has been predicted by models before, but no-one has been able to link these predictions with observations, as we now do for plate motions."

The mantle is a zone underneath the Earth's crust encompassing its super hot molten core, and is divided into an upper and lower area. It is made up of a mass of churning, viscous rock 2,900 kilometres in circumference, which is constantly fed with new material from parts of tectonic plates sliding down from the surface.

Lead researcher Dr Saskia Goes (Earth Science and Engineering) said: "It is exciting to see direct evidence of plates transiting from the upper and lower mantle. This process has been predicted by models before, but no-one has been able to link these predictions with observations, as we now do for plate motions."

Dr Goes says more research is needed, but believes this study could potentially help scientists determine earthquake risks in zones where none have ever been recorded before.

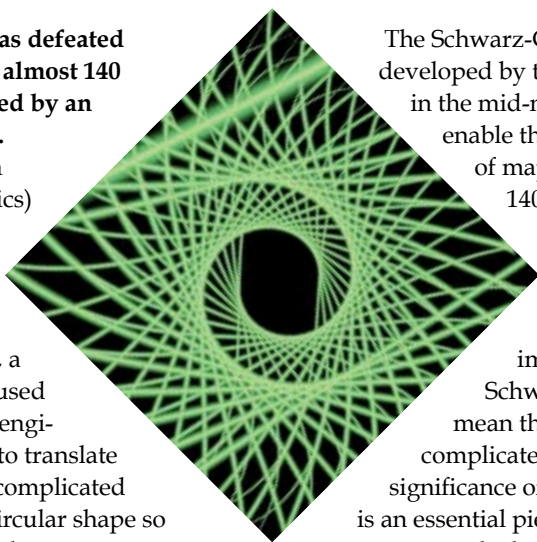
— COLIN SMITH, COMMUNICATIONS

Solving a 140-year-old maths problem

A problem which has defeated mathematicians for almost 140 years has been solved by an Imperial researcher.

Professor Darren Crowdy (Mathematics) has made the breakthrough in an area of maths known as conformal mapping, a key theoretical tool used by mathematicians, engineers and scientists to translate information from a complicated shape to a simpler circular shape so that it is easier to analyse.

This theoretical tool has a long history and has uses in many fields, including modelling airflow patterns over intricate wing shapes in aeronautics. It is currently being used in neuroscience to visualise the complicated structure of the grey matter in the human brain.



"This formula is an essential piece of mathematical kit which is used the world over."

The Schwarz-Christoffel formula was developed by two mathematicians in the mid-nineteenth century to enable them to carry out this kind of mapping. However, for 140 years the formula has only worked for shapes without any holes or irregularities.

Professor Crowdy's improvements to the Schwarz-Christoffel formula mean that it can be used for more complicated shapes. He explains the significance of his work: "This formula is an essential piece of mathematical kit which is used the world over. Now, with my additions, it can be used in far more complex scenarios than before. In industry, for example, this mapping tool was previously inadequate if a piece of metal or other material was not uniform all over—for instance, if it contained parts of a different material, or had holes."

— DANIELLE REEVES, COMMUNICATIONS

media mentions

—COLIN SMITH, COMMUNICATIONS

DAILY EXPRESS ▶ 6 MARCH 2008

HRT cancer link questioned

Hormone replacement therapy could give women a 24 per cent above average risk of developing cancer up to three years after they stop taking it, according to researchers from the US National Institutes of Health. However, Dr John Stevenson (National Heart and Lung Institute) said that women taking HRT should not worry. He told the *Daily Express*: “The vast majority of post-menopausal women in the UK who start on HRT do so within 10 years of their menopause. They can be reassured that the benefits of HRT will outweigh any risks, and the new findings do not alter this.”



THE TIMES ▶ 28 FEBRUARY 2008

All change for international MBA students

Proposed changes to a rule that gave individuals with an MBA from one of the world's top 50 business schools the right to work in the UK for a year will benefit international students, according to Tanaka Business School Principal, Professor David Begg. Under the new system, all students will apply for visas through a points system, and nobody will be granted an automatic right to work. Professor Begg told *The Times*: “The new system gives all MBA students an equal opportunity to work in the UK, and means that potential students can choose the business school that has the course best suited to their own background and needs, without being influenced by visa issues.”



NEW SCIENTIST ▶ 26 FEBRUARY

Did a collision create Venus as we know it?

Venus's hellish environment could be the by product of a colossal smash between two embryonic planets which lasted only a few hours, reports *New Scientist*. A researcher at the University of Cardiff says a collision could have evaporated water on Venus's surface and led to its extreme greenhouse atmosphere. Dr Gareth Collins (Earth Science and Engineering) said: “The idea is amazingly simple. It's incredible that no one thought of it this way before.”



THE DAILY TELEGRAPH ▶ 20 FEBRUARY

Biologists uncover butterfly's 'toxic disguise'

A gene which allows the mocker swallowtail butterfly to emerge from its chrysalis with different possible wing patterns to ward off predators has been identified, reports *The Daily Telegraph*. Imperial and Natural History Museum researchers found that the ‘invected’ gene involved in early development is behind the allocation of different wing patterns. Professor Alfried Vogler (Biology) said the discovery could shed light on how evolutionary changes occur. He told *The Daily Telegraph*: “This could suggest the possibility of sudden leaps in evolution occurring in this species, which would be an incredibly exciting discovery—by studying the changes in gene sequences we will find out if this happened or not.”

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awards and honours

Swiss honour for Imperial heart expert

An Imperial College researcher was selected to give the opening address at the foundation of a new medical society in Switzerland. Professor Christopher Mathias (Neuroscience and Mental Health) spoke on 1 March at the first ever meeting of the Swiss Autonomic Society in Bern. Professor Mathias gave a lecture on a disorder known as the postural tachycardia syndrome, in which the heart rate becomes abnormally high when people stand upright. Postural tachycardia syndrome particularly affects young people and it causes palpitations, dizziness and sometimes fainting. Imperial College is one of the leading centres in the study of this recently recognised condition.



Medal rewards Life Sciences prof

Professor Tim Coulson has been awarded the Zoological Society of London's 2008 Scientific Medal, which recognises scientific merit in zoologists with under 15 years of postdoctoral experience. His success represents the fourth time an Imperial researcher has received this medal since 2000, with previous winners including Professors Austin Burt, Andy Purvis and Ian Owens (all Life Sciences).



Contributions to Italian science and education honoured

Professor Erol Gelenbe (Electrical and Electronic Engineering) has been awarded the honour of Grand Officer of the Star of Italian Solidarity (Grande Ufficiale dell'Ordine della Stella della Solidarietà Italiana), the highest rank of this class of honour, for his outstanding contributions to science and higher education in Italy. In 2005, he was named a Commander of the Order of Merit of the Italian Republic by the then President Carlo Azeglio Ciampi of Italy.



Imperial College Healthcare NHS Trust

NEWS



Director of Education appointed

Professor Charles Pusey (Medicine) has been appointed Director of Education for the Trust. He will be responsible for the development and implementation of strategy and policy concerning education for all professional staff within the Trust.

Clinical staff must be ‘bare below elbows’

All clinical staff must be ‘bare below the elbows’ when caring for patients, stipulates a new campaign at Charing Cross and Hammersmith sites. It follows guidance from the Department of Health that a ‘bare below the elbows’ policy will support more effective hand washing and help reduce the risk of infections.

Imperial research goes open access

Imperial's research is now available at the touch of a fingertip, thanks to the launch of the new digital repository, *Spiral*, an online system enabling open access to College research papers and other materials.

Spiral is the result of many months of planning by a team in the Library working closely with ICT, and managed by Fereshteh Afshari. She explained: "The online repository can be used immediately and it will allow all published papers to be stored here and to be accessed by people all over the world, raising the profile of Imperial College academics."

Research among other Russell Group universities has shown that depositing a paper in an institutional repository like *Spiral* increases the visibility of research on the web and can also increase citations which may in turn affect future research funding.

Encouraging academics and researchers to see *Spiral* as part of their research workflow, Fereshteh added: "We would like papers to be submitted as soon as they are accepted for publication. Papers available in repositories, like *Spiral*, will have higher readership and an increase in their citation rating."

Most funding bodies, including the BBRSC, MRC, NERC and the Wellcome Trust, now require publicly funded research to be made freely available to the public. Adding papers to *Spiral* is one way to meet this requirement, and the College has already placed 598 academic papers in the repository with full text access.

Professor John Wood, Principal of the Faculty of Engineering, said: "It is a must to be involved in this. It is an easy procedure for academics to upload their work and it will maximise their research and increase exposure. I hope this project will be a success and that it will become a mandatory process."

Most publishers allow research publications to be added to an institutional repository, either in the publisher's PDF format or the author's final version of the peer-reviewed manuscript. Here at Imperial, the *Spiral* team will ensure that the content of the repository is copyright-safe and that a link to the publisher's website is included.

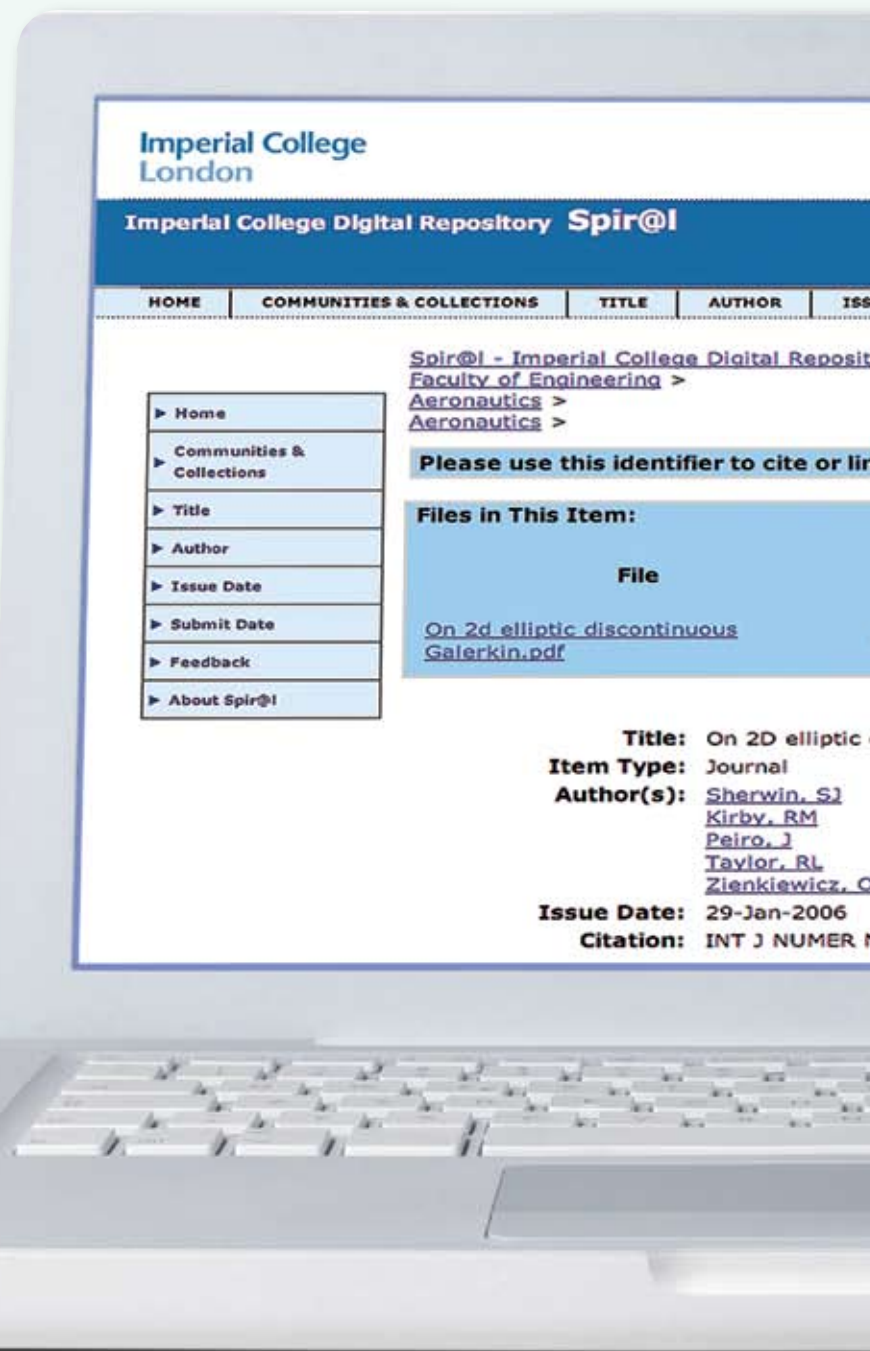
Papers can be uploaded in the digital repository through the staff publications system, Symplectic Publications, which holds a list of all Imperial authors' publications and can be accessed by all Imperial staff. All research available from *Spiral* will be automatically linked from the author's professional web page (PWP) where readers can learn more about the work and research interests of individual Imperial academics.

The repository articles will be available free of charge from search engines such as Google or more specialised searches like OpenDOAR repository search and OAster.

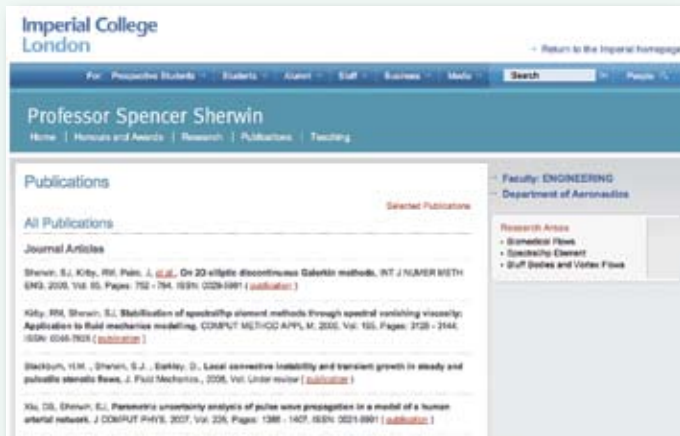
—BECKY MANNING, COMMUNICATIONS



"It is a must to be involved in this. It is an easy procedure for academics to upload their work and it will maximise their research and increase exposure."



Access *Spiral* online
To access *Spiral*, visit: <http://spiral.imperial.ac.uk>. To find out more about *Spiral* or to arrange a demonstration, contact the repository team at: spiral@imperial.ac.uk



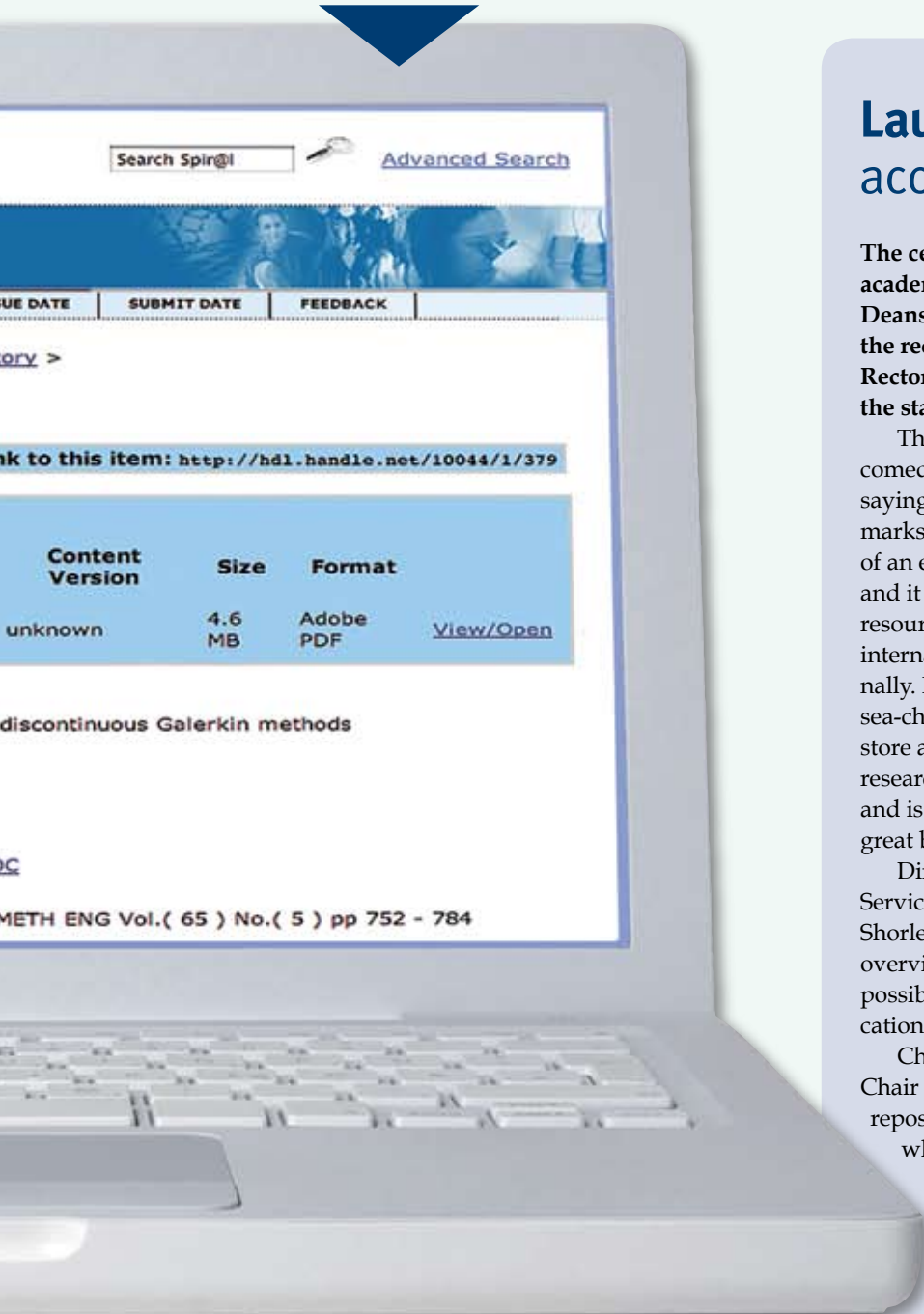
Dr Timothy Constandinou of the Institute of Biomedical Engineering currently has 18 pieces of research loaded onto *Spiral*. He says:

“I use this repository to ensure my research is widely accessible in the public domain. What is good about the system is that it takes into account publisher copyright issues

and this saves the author much hassle. This is something I wouldn't have time to look into otherwise, which would make me reluctant to simply upload publications via a personal or professional webpage.

At the moment there are a couple of bugs in the system, such as it not being able to tell that T.G. Constandinou and TG Constandinou are the same person, meaning that I'm currently listed separately under different names. However I'm confident this will be ironed out, and the system has an intuitive interface that makes it easy to use.

I believe in open access to my research and will certainly continue to use *Spiral*.”



Launch event celebrates wider access to College research

The celebratory launch event for *Spiral* took place on 3 March, giving academics an opportunity to meet the team behind the initiative. Deans, Faculty Principals and Heads of Departments gathered for the reception. Hosting the event was Professor Mary Ritter, Pro Rector for International Affairs, who championed the project from the start.

The Rector welcomed the new service, saying: “This event marks the beginning of an exciting journey and it will be a great resource for people internally and externally. It represents a sea-change in how we store and share our research materials, and is set to bring great benefits.”

Director of Library Services Deborah Shorley gave an

overview of the project. She said: “*Spiral* makes open access a real possibility for researchers across the College and will make their publications more internationally visible and accessible than ever before.”

Chris Hankin, Deputy Principal of the Faculty of Engineering and Chair of the *Spiral* Quality Assurance Board, commented: “The digital repository will provide a coherent collection of all research published which will increase the visibility of the work we do and will increase the citations of our work.”

— NAOMI WESTON, COMMUNICATIONS



Spiral launch event host Professor Mary Ritter, Pro Rector for International Affairs, with Rector Sir Richard Sykes

Students sample consultancy life

Leading environmental companies visited Imperial in February to introduce MSc students to working for a consultancy firm.

Aimed at students on the MSc in Environmental Technology course but open to all, the event highlighted different companies, their graduate recruitment schemes, employment opportunities and potential MSc thesis collaborations.

Karen MacDonald, Lecturer in Environmental Law, organised the event. She explained: "Bringing leading international consultancies to MSc candidates here is the perfect way to maintain and enhance high employment rates for our graduates. The anticipation and enthusiasm in our students' faces makes it so worthwhile."

The afternoon involved a series of presentations by the visiting companies on subjects such as sustainable energy consulting, working with contaminated land, the carbon agenda and energy policy.

Tim Barber, an MSc student specialising in energy policy, said: "This event has been a great opportunity to meet people first hand and find out about working in a consultancy."

Christopher Miller-Jones, Recruitment Manager for WSP Environment and Energy, who talked with Imperial students at the event, said: "The MSc in Environmental Technology is leading in this field. We are looking to recruit about 120 graduates this year, we hope many from Imperial. We want entrepreneurial students who can spot business opportunities."

"We want entrepreneurial students who can spot business opportunities."

The MSc in Environmental Technology has been running for 30 years and is delivered by the College's Centre for Environmental Policy. The world-renowned course aims to provide the highest standard of training for environmental experts, who will become leaders in their fields.

Companies at the event included ERM, Jacobs, Waterman Group, MWH, Arcadis, Scott Wilson, E4tech, WorleyParsons Komex, TEM, WSP Environment and Energy and AEA Technology.

—NAOMI WESTON, COMMUNICATIONS

New scheme boosts women in high level science

A new international career development scheme to increase the number of women in high level scientific positions held its first event on 20 February.

The TANDEMplus scheme, designed by the IDEA League, brings together 16 female research staff, comprising four from each partner institution. The programme focuses on mentoring, training and networking. Each female scientist is paired with a mentor who is best placed to provide career guidance.

Kim Everitt, Deputy Director of Human Resources and a member of the IDEA League Equality Group, explained: "Mentoring is a key element and provides useful support to enable our high potential participants to reach their career goals. It has proved to be invaluable for female scientists in particular."

The first meeting in Aachen gave researchers the opportunity to identify and clarify their personal career aims. Practical skills such as interviewing techniques were also developed.



The four female academics from Imperial selected for TANDEMplus are Dr Felicity Gavins (pictured, left, with Dr Lenka van Sint Fiet from ETH Zürich) and Dr Alice Egerton (both Neuroscience and Mental Health), Dr Lula Rosso (Clinical Sciences Centre) and Dr Samantha Sampson (Investigative Science).

Dr Rosso said: "The TANDEMplus programme offers not only an opportunity to network and develop a career plan according to our personal aspirations, but also a very practical mentoring scheme."

Dr Sampson added: "One of the most striking things about the first meeting was that, although the participants are from quite diverse fields and institutions, we have many shared experiences."

—NAOMI WESTON, COMMUNICATIONS

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

All the Thrills of Varsity 2008

The big clash between Imperial College and Imperial Medicals took place on 27 February. With nine different sports, 23 matches and 46 teams, Varsity 2008 was packed with fierce competition.

Harlington Sports Ground hosted hockey, football, lacrosse and rugby matches, while at Ethos, netball, basketball, badminton, squash and waterpolo matches got underway. The day culminated in the J.P.R. Williams Cup match at Richmond Athletic Association Ground between Imperial College and Imperial Medicals Rugby 1st XV teams attracting over 1,000 spectators.

The game was the closest contest yet, with both sides playing to their limits in their efforts to win the Cup. The score went up evenly on both sides throughout the game and the match eventually ended with a tie at 19-all. It continued to extra time, during which the Medics scored three more points from a penalty, making them the champions for the sixth time in the history of this Varsity competition.

Rector Sir Richard Sykes and Chief Operating Officer Dr Martin Knight awarded medals to both sides, and match officials and J.P.R. Williams himself presented the J.P.R. Williams Cup. Man of the Match went to Imperial College number two Alexander Johnstone.

Overall, the Imperial College sides were the clear winners, beating their medical counterparts by 14.5 points to 8.5.

Neil Mosley, Head of Sport Imperial, said: "Varsity is the most exciting day in the Imperial sporting calendar. We have had a wide range of different sports going on making it bigger than ever this year."

The event also helped to raise £5,000 for Developing Excellence – Imperial's sports scholarship scheme.

—LEENA BHARADIA, SPORT IMPERIAL

► To see some of the Varsity highlights, click on: <http://ichelix1.cc.ic.ac.uk/ramgen/mediaspool/news/varsity08.rv>



The basketball team take time out during a training session

a word with...

Julia Buckingham



Professor Julia Buckingham was appointed Pro Rector for Education in October 2007. Reporter's Wendy Raeside finds out how she is championing education at Imperial.

What does your new role involve?

My remit includes overseeing the College's educational strategy and quality assurance. Unlike my predecessor, Professor Rees Rawlings, I am responsible for both undergraduate and postgraduate education. In addition, I am responsible for humanities, and for music and visual art.

What has been your priority in the first few months?

It's very early days and it's been a steep learning curve for me. However, one of my prime responsibilities is to agree Imperial's educational objectives over the next few years. I chair the College's Strategic Education Committee and, in the New Year, we had an away day to discuss a whole range of issues – from attracting and selecting the most able students to building the College's educational portfolio.

What's your background?

My first degree at Sheffield was in Zoology with a strong endocrinology focus. From university, I moved to Glaxo but soon realised that my interest was in academic rather than applied research. I studied for a PhD in pharmacology at the Royal Free Hospital and stayed there to take up my first academic post as Senior Lecturer in Pharmacology and develop my research in endocrine pharmacology.

In 1987, I was appointed to the Chair in Pharmacology at Charing Cross and Westminster Medical School and tasked with developing research in a very teaching-focused department, which was an exciting challenge. In 1997, another great opportunity arose for me when the west London medical schools merged and became part

of Imperial. I became Head of the Department of Neuroendocrinology and soon afterwards I moved my research laboratory to Hammersmith to work alongside the expert endocrinologists there. Shortly afterwards, I was elected a College Dean which I felt was an extremely privileged position – being intimately involved in the heart of the College, yet independent of its management structure.

In 2003, I became Head of the Division of Neuroscience and Mental Health where I stayed until my Pro Rector appointment.

Have you always been interested in education?

Yes. My career has always involved both research and education which, in my view, are complementary. Our teaching at Imperial is research-led and our students are exposed to cutting edge material delivered by people who are at the forefront of their fields – what could be more exciting or challenging as a student? But teaching can also bring benefits to research and I have often had my best research ideas when 'thinking outside the box' and preparing for teaching. I have also been interested in education in a broader sense for some time. I am a school governor; until recently, I was President of the British Pharmacological Society, which has a key role in shaping pharmacological education in the UK; and I am currently General Secretary of the Society for Endocrinology, which again has an important educational remit.

What are you most proud of in your career?

That is always a difficult question to answer. I am very, very proud of my PhD students and it has given me much pleasure to see them doing well in their careers. I am also proud of my involvement in the learned

societies, which I think are often undervalued in their support for research and encouraging young people into science.

What are your interests outside work?

Music is my passion and I'm hugely impressed by the musical ability of our students. Before Christmas, I went to an amazing performance of Handel's *Messiah* by the College choir and orchestra. I also love skiing and sailing, for which London isn't the ideal base!



What does the future hold?

My new role is very exciting and I'm really enjoying it. Over the next few years, I hope to ensure that Imperial continues to attract the very best students and to provide them with an education that is second to none and prepares them to become leaders in whatever career they choose to follow. My research will also continue to be important with my team at Hammersmith, where we are working on the neurobiology of stress hormones.

❖❖❖ **Is there someone you'd like to see Reporter have a word with?**

Contact the editor at reporter@imperial.ac.uk, or call ext. 46699.

Annual Diversity Lecture addresses equality, diversity and commonality

Journalist Yasmin Alibhai-Brown discussed the balance between equality, diversity and commonality in this year's annual Diversity Lecture, held on 26 February.

Tackling the subject, she said:

"If we want to change society and make it more at ease with itself, equality and commonality have to take precedent over certain sorts of diversity.

"We live in a world of niches. The ideal I strive to promote is that we need to have a connection with others, whatever their background, and that has to surmount all other differences."

Giving an example of improved commonality, she added: "In the UK we have the highest rate of mixed race relationships in the world."

Ms Alibhai-Brown has written for *The Guardian*, *The Observer*, *The New York Times*, the *Daily Mail* and is a columnist on *The Independent* and *Evening Standard*. From 1996 to

2001, she was a research fellow at the Institute for Public Policy Research. She is also a senior fellow at the Foreign Policy Centre and advises institutions on race matters.

Sir Richard Sykes, Rector, chaired the lecture, organised by the College's Equality and Diversity Unit which aims to embed equality and diversity issues into College activities. He introduced Ms Alibhai-Brown by saying: "Yasmin Alibhai-Brown is something of a unique voice in the UK media. She describes herself as a modern

British Muslim woman, and writes thoughtfully and honestly about each of those identities. She is able to describe different cultures and communities to each other and also, just as importantly, to themselves."

— NAOMI WESTON, COMMUNICATIONS

► To watch the Realplayer stream of the Diversity lecture, click on: <http://ichelix1.cc.ic.ac.uk/ramgen/mediaspool/events/diversity2008.rv>



Staff development news Making the most of Development Centres

The Staff Development Unit offers short workshops known as Development Centres to groups of staff who wish to explore their performance and abilities. Participants also receive assistance with a supported development programme designed to nurture career success.

Twelve staff recently benefited from a Development Centre open to female academics below professorial level, which incorporated an afternoon introductory session, followed a week later by a two-day residential training. In preparation, delegates had to complete the Myers Briggs Type Indicator test, which characterises aspects of personality based on preferences, and ask 10 work colleagues to appraise them. During the Centre, they discovered their impact on others, their particular strengths and how to build on this profile for future success.

Steve Rathborn, Staff Development Advisor, said: "Our Centres aim to integrate delegates and ensure high levels of support. Participants are encouraged to experiment with new ways of working and plan for continued development."

Explaining how staff can get involved, Steve added: "Centres work well when comprised of a relatively homogenous group. Core themes emerge and engage all participants. More such Centres are planned, and if you are interested contact the Staff Development Unit to find out more."

► Visit the Staff Development Unit website at: www.imperial.ac.uk/staffdevelopment

Early Years places available

The College's Early Years Education Centre (EYEC) at the South Kensington Campus is accepting applications for places.

EYEC caters for children from as young as six months to the age of five. Its facilities, which have been rated excellent for nursery education by OFSTED, include four baby rooms and a large outside space with a play area and access to Prince's Gardens.

Lizanne de-Vignes, a senior staff member at EYEC, described some of the activities on offer: "We had an art exhibition last year where we displayed all the children's work and then let them show their parents what they had achieved. We also take them on day trips and even have our own graduation ceremony."

As well as providing a fun and relaxed place for children to spend the day, EYEC focuses on their development and progress. Teresa Moloney, Centre Manager, explained: "Our work with



three to five-year-olds is about preparing the children for school and we are happy to give parents advice and guidance on a range of child-related issues, as well as advice on children starting school."



EYEC, which was established over 30 years ago, is an important support service for staff at Imperial. Chris Gosling, Director of Human Resources, comments: "The recruitment and retention of stellar academic staff in particular is crucial to our vision of Imperial, and EYEC provides a much-needed resource for those with the demands of a busy career and family life. Our OFSTED reports are glowing and parental feedback is extremely positive. Even more importantly, our young customers love it."

— BECKY MANNING, COMMUNICATIONS

► To find out more about the Early Years Education Centre, contact t.moloney@imperial.ac.uk or visit www.imperial.ac.uk/eyec

welcome new starters

Miss Laura Allen, Library Services
 Dr Gabriel Almeida, Investigative Science
 Mr Arkadiusz Andrzejewski, Sport and Leisure Services
 Mr Dylan Banks, Institute of Biomedical Engineering
 Miss Halin Bareke, SORA
 Dr Sandy Beare, SORA
 Dr Marko Boehm, Biology
 Miss Maria Boni, Catering Services
 Dr Carla Burrows, SORA
 Mr Max Cai, Computing
 Ms Fabiana Cataldo, Catering Services
 Mr Elhadji Cisse, Catering Services
 Dr Mika Cohen, Computing
 Mr Ben Cottam, Chemistry
 Mr Philip Croucher, Student Residences
 Ms Mayara De Silva, Catering Services
 Miss Virginie Doceul, Investigative Science
 Dr Guangbin Dou, EEE
 Mr Tony Duggan, Development and Corporate Affairs
 Mr Richard Edgington, Development and Corporate Affairs
 Dr Mariet Elemans, Investigative Science
 Dr Brian Ferguson, Investigative Science
 Miss Gillian Forsyth, Business School
 Miss Aleksandra Gwozdz, Catering Services
 Dr Saira Hameed, Investigative Science
 Ms Adrianna Harezlak, Sport and Leisure Services
 Mr James Harker, NHLI
 Mr Peter Higgs, Mechanical Engineering
 Miss Joanna Hockenhill, Investigative Science
 Dr Ella Johnson, NHLI
 Ms Eleanor Jubb, Faculty of Engineering
 Dr Harsha Kariyawasam, NHLI
 Mr Okanya Kokas, Chemistry
 Dr Fabrice Laval, SORA
 Mr Karim Lekadir, Computing
 Mr Peter Levermore, Physics

Dr Christian Liebig, NHLI
 Miss Anna Lundblad, Catering Services
 Mr Stephen McGinn, Catering Services
 Ms Cheryl McLaren, EYEC
 Mr Olivier Moncorge, Investigative Science
 Miss Claudia Muscat, Catering Services
 Dr Valeria Musi, SORA
 Mr Azhar Nawaz, ICT
 Dr Tony Nolan, Cell and Molecular Biology
 Dr Anna Ochocka, SORA
 Miss Hilal Paksoy, Mechanical Engineering
 Miss Anam Parand, SORA
 Ms Sarrah Peerbux, Library Services
 Mrs Melanie Peter, Registry
 Miss Samantha Phillips, Faculty of Medicine
 Mr Dominic Pollard, Business School
 Mrs Magdalena Pytel, EYEC
 Mrs Hernandez Rebecca, Medicine
 Dr Emma Redfern, SORA

Dr Alice Shia, NHLI
 Mr Paulo Silva, Catering Services
 Mrs Megan Swanepoel, Catering Services
 Dr Tim Szeto, Investigative Science
 Dr Kyoko Takatsu, Clinical Sciences
 Dr Roger Tatoud, Investigative Science
 Professor Gerry Thomas, Investigative Science
 Miss Jenny Thomas, Faculty of Natural Sciences
 Mr Anil Thotakura, Investigative Science
 Mr Ronald Toolitt, Catering Services
 Miss Claire Tuson, NHLI
 Mr Zoltan Varga, Catering Services
 Ms Yesica Vargas Acosta, Catering Services
 Ms Geraldine Vaughan, NMH
 Dr Monica Vazquez Acosta, Physics
 Dr Xiangjun Wang, Physics
 Ms Irina Zalivina, NHLI
 Miss TingTing Zeng, Business School

Dr Karla Kane, ESE
 Mr Chandrashekhar Kulkarni, Chemistry
 Dr Robert Landis, NHLI
 Miss Gemma Lawson, Registry
 Mr Richard Lupo, Civil and Environmental Engineering
 Professor Patrick Maxwell, Medicine (5 years)
 Dr Wayne Mitchell, Investigative Science
 Miss Janet Nicholas, Medicine (8 years)
 Dr Dimitrios Papadopoulos, NMH
 Ms Chandra Ramakrishnan, Cell and Molecular Biology
 Dr Davide Rizzo, Physics
 Mr Pete Rodwell, Imperial College Union
 Dr Livio Ruffine, Chemical Engineering
 Dr Belinda Sharpe, Biology
 Dr Maria Smolinska-Bylanska, Kennedy Institute
 Dr Maciej Szreter, Computing
 Miss Claire Thompson, Finance
 Mr Floyd Thompson, EYEC
 Dr John Tregoning, NHLI
 Dr Steven Wilkins, Mechanical Engineering
 Ms Bibian Wong, Estates
 Ms Nicola Wright, Library Services
 Miss Sarah Wythe, NHLI (5 years)

► **Dr Marko Boehm** has returned to Imperial as a postdoc working with Professor Peter Nixon in the Division of Biology. Dr Boehm previously completed a PhD at the College and spent a year in Germany writing his thesis. In his new role he is researching photosynthesis, focusing on a molecular repair mechanism that operates under certain stress conditions. He also hopes to investigate the generation of biohydrogen from algae. He says: "I am fascinated by the diverse means that nature has in stock to potentially solve the energy problems that we as humankind will soon be facing."



Dr Ida Ricciardelli, Medicine
 Dr Michael Roberts, Chemical Engineering
 Mr Bharath Rudraraju, SORA
 Dr David Saliba, Kennedy Institute
 Miss Madhuri Salker, SORA
 Dr Sergey Saprykin, Chemical Engineering
 Mr Simone Scilabra, Kennedy Institute
 Ms Elham Shamsaei, Clinical Sciences
 Dr Vikas Sharma, Clinical Sciences

farewell moving on

Mr Syed Ali, Computing
 Mr Gebreselassie Asefa, Biology (5 years)
 Mr Steve Ashton, Imperial College Union
 Dr Ravi Barod, Medicine
 Dr James Berry, ESE
 Dr Kate Bishop, Business School
 Ms Lisa Broadhead, Investigative Science
 Mr Ian Brown, Biology (16 years)
 Dr Chun-ye Cheng, Chemical Engineering
 Dr Gabriel Criado, Kennedy Institute
 Mr Carlos De Araujo, IC Student Union
 Ms Alison Dyer, SORA
 Ms Juan Feng, NHLI
 Miss Jayde Flynn, NMH
 Dr Daniel Gale, Medicine
 Dr Davide Garcia Alvarez, Physics
 Ms Julia Garthwaite, Library Services (7 years)
 Dr Johanna Gascoigne-Owens, Faculty of Natural Sciences
 Miss Sarah Harten, Medicine
 Dr Herranz Herranz Rabanal, Chemistry
 Miss Samantha Holland, NHLI
 Mr Manu Joshi, Physics

retirements

Mr Tony Allen, Civil and Environmental Engineering (7 years)
 Mr Kenneth Mitchell, Civil and Environmental Engineering (28 years)
 Mrs Cathy Timson, NHLI

This data is supplied by HR and covers the period 17 Feb–5 March. 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 at reporter@imperial.ac.uk who reserves the right to edit or amend these as necessary.

moving in. moving on.



Take note

Open all hours

The Central Library is now open 24 hours a day to cater for student demand during the busy summer term. Continuous access to collections, PCs and study space is always popular in the run-up to end-of-year examinations. For full details of opening hours for South Kensington and other campus libraries go to: www.imperial.ac.uk/library

celebrating long service

20 years

John Dear • Reader, Mechanical Engineering
Simon Mann • Senior Technician, Chemistry

Staff featured will be celebrating anniversaries during the period of 8 March–6 April. Data is supplied by HR and is correct at the time of going to press.

what's on

14 MARCH 13.30–17.30

Inventors Workshop and Imperial Innovators of the Year Competition

Launch event

Flowers Building

Registration in advance: email innovate@imperial.ac.uk

14 MARCH 20.00

Imperial College Choir Spring Concert

Carmina Burana (Orff)
and Songs and Cries of London Town (Chilcott)

Great Hall, Level 2
Sherfield Building

Tickets to be purchased in advance: email icchoir@imperial.ac.uk



18 MARCH 18.30

The 2008 Science Challenge: Grand Final

IMAX Theatre, Science Museum, Exhibition Road

For further details: email daniel.burrows@imperial.ac.uk

31 MARCH 17.30–18.30

Lies, damn lies and morphology: unravelling parasitic wasp evolution

Professor Donald Quicke,
Department of Life Sciences

Inaugural Lecture

Lecture Theatre G34,
Sir Alexander Fleming Building

Registration in advance: email amy.thompson@imperial.ac.uk



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

2 APRIL 17.30–18.30

Noise, uncertainty and ignorance in biology

Professor Michael Stumpf,
Chair in Theoretical Systems

Inaugural Lecture

Clore Lecture Theatre, Huxley Building

Registration in advance: email amy.thompson@imperial.ac.uk

3 APRIL 17.30–18.30

Colorectal Neoplasia: what we know and don't know about genes and environment

Professor John Potter, Fred Hutchinson Cancer Research Center

Clore Lecture Theatre, Huxley Building

Registration in advance: email events@imperial.ac.uk

7 APRIL 17.30–18.30

Structure determination of membrane proteins: actual state, history and methods

Professor Hartmut Michel, Nobel laureate,
Max Planck Institute of Biophysics

Nobel Conversations: discovering the unexpected lecture series

Lecture Theatre G16,
Sir Alexander Fleming Building

Registration in advance: email events@imperial.ac.uk

7 APRIL 18.30–21.00

2008 Annual Alumni Lecture: Collaboration without borders

Professor John Wood, Principal of the Faculty of Engineering

2008 Annual Alumni Lecture

South Kensington Campus

Tickets to be purchased in advance: email alumni@imperial.ac.uk



classifieds

Holiday apartment in the Western Cape, South Africa

Two double bedrooms, balcony and pool in complex. Ideal location for touring. 20 minutes from the airport, 35 minutes from Cape Town. £200 per week. Contact Teresa Wadeson: t.wadeson@imperial.ac.uk

To place a classified Reporter includes a regular classifieds section. Please submit no more than 50 words to the Editor by email at reporter@imperial.ac.uk for a chance for your advertisement to appear. The Editor reserves the right to edit advertisements as necessary.

volunteering

Step out for the Pirate Club

Project:	Sponsored walk participants
Project ID:	2002
Organisation:	Pirate Club
Time:	24 May 10.30–16.00
Location:	Start near Tottenham Hale and finish near Camden Town tube)

Volunteers are needed to join the Pirate Club on a sponsored walk of around 12 miles, along the canal towpath from Tottenham Hale to their Pirate Castle near Camden Lock. This is to raise money and the profile of the Pirate Club, a community boating project which promotes activities and training for young people. There will be optional Pirate Fancy Dress, and a venue at the end of the day for everyone to have something to eat and celebrate completing the walk. Taking part in this event will be good exercise and you will meet lots of different people. You will also have the satisfaction of having helped to raise money for a good cause.



For more information

To take part in a scheme or to hear more about volunteering in general, contact 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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