# Imperial College London

# reporter

ISSUE 300 ▶ 17 FEBRUARY 2017

Sharing stories of Imperial's community



# Marking a milestone

Looking back at 300 issues of Reporter --- CENTRE PAGES



GROUND
BREAKING
Work starts
on pioneering
White City
research hub
PAGE 3



Showcasing the College's community and the talent within it



TAKING FLIGHT
Student
Drone Society
launches
PAGE 13



EDITOR'S CORNER

# 300, not out

This issue marks the 300th edition of Reporter and we've taken the opportunity to celebrate some highlights from the newspaper, covering more than 20 years. I really enjoyed compiling it and I hope you enjoy browsing it (pages 8-11). It's remarkable how much the College has changed - but it's also interesting to note, particularly at this turbulent time in world affairs, that one constant has been the international heart of the institution. Many Reporter regular 'stars' were/are staff members born overseas, who leave a lasting legacy at Imperial – Julia Polak (Argentina), Abdus Salam (Pakistan), Ara Darzi (Iraq), Colin Caro (South Africa) and of course our current President Alice Gast (USA). In a recent newspaper article Alice herself talks about how 'something happens when brilliant people move and cultures collide and collaborate,' (page 5). Now Imperial has officially cemented its place as the UK's most international university (page 2, opposite). But it's more than just bragging rights though, it's what makes us who we are.

ANDREW CZYZEWSKI, EDITOR

© Reporter is published every three weeks during term time in print and online, Contact Andrew Czyzewski: ⊠ reporter@imperial.ac.uk

# Imperial ranked as UK's most international university

Imperial is the UK's most international university for the second year in a row, says Times Higher Education.

The 2017 rating of the world's most international universities, places Imperial as 5th overall, up from 10th in 2016.

The new table takes considers the "international outlook" of institutions, including levels of international staff, students and research co-authors, as well as universities' international reputations.

ETH Zurich tops the global league table, followed by fellow Swiss institution École Polytechnique Fédérale de Lausanne, the University of Hong Kong and the National University of Singapore.

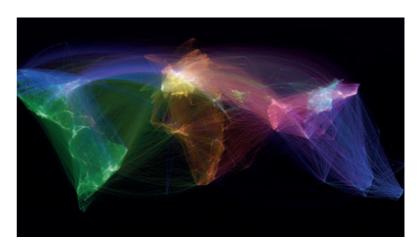
Imperial's President Professor Alice Gast, said: "Imperial's excellence arises from its talented

people who come from all over the world. There is something special about a global academic community where people from different cultures contribute diverse perspectives, new ideas, and fresh approaches to solving complex problems.

"Great discoveries arise when brilliant people absorb and learn things from the breadth of people they meet. We are proud to be the UK's most international university.

"At a time when international mobility is under threat, we will defend our values, celebrate our diversity, and forge new connections around the world." (Also, see page 5, Media Mentions)

-ANDREW SCHEUBER, COMMUNICATIONS



# **Disease mapping**

Scientists have been awarded £16m to create a detailed map of a tumour, which will allow researchers to explore new treatment options.

The project is one of the first to receive funding from Cancer Research UK's Grand Challenge award. The scheme aims to help overcome the biggest challenges facing cancer research in a global effort to beat cancer sooner.

Professor Zoltan Takats (Surgery and Cancer), part of the winning team, explained: "The project is aimed at the full molecular mapping of cancer – both in time and space. We want to understand the structural and functional changes in molecular architecture associated with cancer.

"The hope is this will identify vulnerabilities we can target with treatments. Imperial has a multi-faceted contribution to the project including technology, data interpretation and clinical background."

KATE WIGHTON, COMMUNICATIONS AND PUBLIC AFFAIRS



# Breaking new ground in visionary medical research

Imperial has started construction works for the Michael Uren Biomedical Engineering Research Hub at White City, which will help find solutions to some of the most pressing biomedical and healthcare problems of our time.



The launch of construction works for the new facility was marked with a groundbreaking ceremony at the White City Campus last month. The event was attended by Imperial alumnus Sir Michael Uren OBE and trustees of his foundation, whose £40 million gift has made the construction of the new hub possible.

Speaking at the milestone event, Sir Michael said: "Imperial is an inspirational

place. I was inspired when I joined in September 1940 and I am inspired here today.

"My vision is that in building this research centre a few miles from the City of London – which itself has become a financial centre of the world – investment will be watching and waiting for the research and inventions that will be developed here, which will trigger tomorrow's great companies."

Imperial President, Alice Gast added: "This is a day to celebrate a change in direction and a position of leadership in bringing engineering, medicine, science and technology together to address the healthcare challenges of this century. We owe this position of leadership to Sir Michael's vision, generosity and foresight."

Construction work for the Michael Uren Biomedical Engineering Research Hub is scheduled for completion in 2019. Research areas will include new technologies for the early detection; monitoring and treatment of cancers; the development of minimally invasive implants and regenerative medicine. (Also, see article right).

-JOHN-PAUL JONES, COMMUNICATIONS AND PUBLIC AFFAIRS



# Creating a 'global epicentre' of biomedical engineering

A new Imperial research facility harnessing biomedical engineering to address major healthcare challenges will receive £20m of government funding.

The investment by the Higher **Education Funding Council for** England (HEFCE) through the UK Research Partnership Investment Fund (UK RPIF) will support the development of a biomedical engineering hub at Imperial's new White City Campus.

The facility will bring together over 500 engineers, scientists and clinicians, collaborating to develop solutions to some of the world's most pressing biomedical and healthcare problems.

The biomedical engineering hub will be the first and largest facility to occupy the Michael Uren Biomedical Engineering Research Hub, a 14 storey research building made possible thanks to an unprecedented £40 million gift from Imperial alumnus Sir Michael Uren OBE and his

foundation (see left).

>> **NEWS**update

Due for completion in 2019, it will house a clinical facility side-by-side with multidisciplinary laboratories and offices for translational research initiatives, providing patients with access to the latest innovations in healthcare.

Imperial President Alice Gast said: "The Michael Uren Biomedical Engineering Research Hub is one of our remarkable multidisciplinary hubs at White City that address some of the world's big challenges. Its vision, ambition and potential is unrivalled. The facility, and its world-leading research, will be an epicentre of biomedical engineering innovation."

The co-directors of the multidisciplinary biomedical engineering hub are engineer Professor Anthony Bull and orthopaedic surgeon Professor Justin Cobb.

-DEBORAH EVANSON, COMMUNICATIONS

# Strategic thinking

A Government Minister came to Imperial on a fact-finding mission as part of a recent industrial strategy announcement. Lord Prior met Imperial's President Alice Gast and Professor Lord Ara Darzi, Director of the Institute of Global Health Innovation at the College, at the Hamlyn Centre. The Minister at the Department of Business. **Energy and Industrial Strategy** came to the College on one his first visits as part of the Government's consultation process on the Industrial Strategy Green paper, which was unveiled by Theresa May, UK Prime Minister, on 23 January 2017.



Lord Prior (left) with President Alice Gast and Professor Lord Ara Darzi

#### Innovation, evolved

Imperial Innovations Group plc, Imperial's commercialisation partner, changed its name to Touchstone Innovations plc last month. This coincides with the venture investment team moving to a new office in central London. The Technology Transfer office will retain the brand Imperial Innovations and its office at 52 Princes Gate, close to the academic community. Imperial Innovations will continue to provide dedicated service to Imperial, and the name change of the group as a whole will ensure clearer distinction between the services it provides.

#### **Measuring success**

Imperial has affirmed its commitment to the fair assessment of research achievements through the signing of an international declaration. The San Francisco Declaration on Research Assessment (DORA) means that Imperial will no longer consider journal-based metrics, such as journal impact factors, in decisions on the hiring and promotion of academic staff. It is intended to give researchers confidence that their work will be judged for what it is – not where it has been published - alongside their other contributions to College's educational and societal mission. The move follows Imperial's 2015 review on the Application and Consistency of Approach in the Use of Performance Metrics.

# Imperial celebrates the diversity of its community

The first ever Diverse@Imperial Week showcased the College's diverse community and the talent within it.

Starting on Monday 30 January, the week included a panel discussion on diversity and inclusion, and a lecture on how STEM-research can be more responsible and inclusive.

In addition, a photo and archive exhibition in the Main Entrance on the South Kensington Campus showcased staff and students stories, alongside information on the work of the Equality, Diversity & Inclusion Centre and the College's staff networks.

Professor Jeff Magee, Chair of the Equality and Diversity Committee and Dean of the Faculty of Engineering, said: "Our Imperial community is made up of dedicated people from all over the world, with different backgrounds, experiences and perspectives. That diversity is a great strength of our community - it is something we need to continue to celebrate and nurture."

Wednesday saw ITN journalist Nina Nannar chairing a panel of five members of Imperial staff from across the College for a discussion of what diversity and inclusion mean to them.

Dr Joao Cabral, Reader in Soft Matter in the Department of Chemical Engineering, spoke about the support he had received from Imperial as a new father, including shared parental leave and the Elsie Widdowson Fellowship scheme, for returning academic staff. Joao shared his experience of making a decision to be more visible as someone in a same-sex relationship despite not wanting this to be a defining feature of his professional life - in part out of a feeling

of responsibility towards his students.

Professor Shiranee Sriskandan, a clinical academic at the Hammersmith Campus, discussed the challenges she sees for her colleagues and students, with black and minority ethnic students under-represented in Imperial's School of Medicine.

Imperial's Vice-Provost (Education), Professor Simone Buitendijk, delivered a lecture on gendered research and inclusive innovation. Simone gave some examples of why this matters - and how serious the consequences can be than inclusivity.





# Plans for new student hall of residence

The newly purchased 1.8 acre site in North Acton has been earmarked for the development of a new hall of residence for Imperial undergraduates.

The site, subject to planning permission, will be home to a 700-bed development with completion targeted for September 2020. The development, situated on Wales Farm Road, is just a five minute walk from the College's

existing accommodation at Woodward Buildings.

The new hall will represent a substantial investment from the College in student experience, supporting its commitment to offer accommodation to all eligible first year undergraduates under the accommodation guarantee and offer much needed extra bed space due to the increase in student numbers.

The development builds on the College's growing presence in the area, adding to the existing Imperial student community of around 900 living in the College's Woodward Buildings.

Imperial's Provost, Professor James Stirling, said: "At Imperial, we are committed to enriching the wider student experience, as well as providing a world class educational experience. We know that students based in Woodward Buildings are enjoying the facilities on offer, and I'm pleased we will be able to offer that experience to more of our students in the future."

The College will work closely with students to develop the look and feel of the communal spaces for the new halls as the project develops.

-JON NARCROSS, COMMUNICATIONS AND PUBLIC AFFAIRS

# media mentions



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# Opening doors to innovation

CHEMISTRY WORLD ► 17.01.17

Chemical companies are increasingly using specialist investment arms to nurture new ideas, Chemistry World reports. Many chemical giants nurture their own corporate venture capital, or CVC, units, releasing them to prowl for new ideas and opportunities. "There's a realisation that to be competitive you need access to as many good ideas as you can get, no matter how many R&D people you have," says Professor David Gann, Vice President (Innovation) at Imperial. It is part of a wider trend, with the corporate share of venture capital investment rising from 7% in 1995 to around 20% today.

# What do MBA admissions directors want in applicants?

THE FINANCIAL TIMES ► 24.01.2017

Aspiring students applying to the world's top MBA programmes face a selection process that is rigorous, to say the least. Even before candidates contemplate the detailed online application forms, there is the graduate management admission test (GMAT) to contend with. Crystal Grant, head of admissions at Imperial College Business School in London, told the FT: "More candidates are also planning to launch entrepreneurial ventures or join start-ups immediately after their MBA rather than three to five years after."

# The devastation of early miscarriage

*DAILY MAIL* ► 22.01.17

First Minister of Scotland Nicola Sturgeon spoke only recently of her pain at losing a baby in early pregnancy in 2011. One in four pregnancies ends in miscarriage and 85 per cent happen within the first 12 weeks. Dr Jessica Farren (Surgery and Cancer), lead author of a new study into post-traumatic stress disorder (PTSD) after miscarriage, told the Daily Mail:

"We were surprised at the high number of women who experienced PTSD symptoms after early pregnancy loss. We have checks in place for postnatal depression, but we don't have anything for the trauma and depression following early pregnancy loss."

# How immigrants spark innovation

WORLD ECONOMIC FORUM ► 17.01.2017

Writing a piece on the World Economic Forum's website, Imperial's President Professor Alice Gast says that "something happens when brilliant people move and cultures collide and collaborate." She continues: "Hungarian-



born Dennis Gabor fled Germany for Britain, where he pioneered holography at Imperial - an achievement recognized with the Nobel Prize in Physics. Indeed, a remarkable number of the greatest scholars were once foreign students or postdocs. The key ingredient is not migration alone, but the ability to work with people from different backgrounds, cultures and nationalities. This is the spirit that drives the world's best universities and businesses."

# awards and honours



#### NATURAL SCIENCES

## **Seeing stars**

**Professor Michele Dougherty** has been awarded the Royal Astronomical Society Gold Medal - its top honour - for her work in space physics missions. Past winners of the Gold Medal include Albert Einstein, Edwin Hubble, Arthur Eddington and Stephen Hawking. Professor Dougherty

is the Principal Investigator for the magnetometer instrument on the Cassini mission to Saturn, which has spent the last 12 years studying the planet and its moons. She is also the only UK Principal Investigator for the upcoming JUpiter ICy moons Explorer (JUICE) mission to which will explore three of Jupiter's moons.

## COLLEGE

# Lasting legacy

Celebrations were held this month for three Imperial scholarship recipients, funded by the legacy of pioneering scientist, Dr Greta Stevenson. The bursaries of up to £7,500 each year are available to women at the College studying degrees in Physics, Chemistry,

Maths, Life Sciences and Geology, and are used to fund an international research placement with a leading female scientist at another institution. The recipients are: Sarah Thomas, a PhD student in the CDT on Controlled Quantum Dynamics; Viktoria Urland, a PhD student in the Department of Chemistry; and Janet Peet, an MRes student in the Department of Chemistry studying catalysis.



#### **ENGINEERING**

# Parliamentary privilege

Postgraduate student Erin Johnson has been awarded the Institute of Chemical Engineers (IChemE) Ashok Kumar Fellowship 2017. The Fellow has the opportunity to spend three months working at the Parliamentary Office for Science and Technology (POST), with a focus on producing a parliamentary briefing note for MP's on a relevant subject. The Fellowship was created following the sudden death of Ashok Kumar, a Fellow of IChemE and Labour Member of Parliament (MP) for Middlesbrough South and Cleveland East, UK, in 2010.

# **Bird services**

Research in the Amazon suggests that loss of birds through deforestation and ranching prevents the recovery of rainforests, due to birds' roles in the ecosystem.

>>> SCIENCEroundup

The researchers found that primary forests, made up of mature native trees, retain a wide range of bird species capable of providing healthy ecological interactions: controlling insect populations and dispersing the seeds of more than 90 per cent of rainforest tree species. This was true even when these forests had been disturbed by wild fires or selective logging, where only certain trees are removed.

Deforested areas like farmland, where many bird species have gone locally extinct, have dramatically reduced biodiversity services, as would be expected.

However, the researchers found that secondary forests, which had been previously cleared and now contain young trees, lacked many species of seed-dispersing and insect-eating birds found in primary forests, and this is likely to affect their ability to regenerate.

"The trees of a forest may look healthy, but if the animal species required for pollination or seed dispersal are gone, then looks are deceiving. The trees are also likely to disappear over time," Dr Tobias said.

"Our findings are a warning flag that we can't just look at a snapshot of forest health as it appears now we need to think about preserving the ecosystem processes that will allow forests to survive in the future."

Indeed, the study suggests that the rainforest's ability to regenerate can be preserved even within largely cleared areas, so long as patches of primary or disturbed forest survive.

-BRUNO MARTIN, SCHOOL OF PROFESSIONAL DEVELOPMENT



composition of bird communities from 330 study sites in the Brazilian Amazon, sampling more than 450 bird species. They also measured morphological traits, such as beak size, tail and wing shape, from specimens held in natural history museums in Brazil, the USA and the UK. Knowledge of such 'functional traits' can be used to infer the type of service a bird will provide in the ecosystem. For example, birds with big beaks and wings, like guans. are responsible for dispersing large seeds in the Amazon Rainforest. The loss of these birds in open agricultural areas or secondary forests makes it difficult for large-seeded tree species to regrow or survive there in the future. Other rainforest birds have adapted to a specialist insect diet. Where these go locally extinct, leaf-eating insects can become uncontrolled pests and prevent saplings from growing.



We can't just look at a snapshot of forest health as it appears now – we need to think about preserving the ecosystem processes that will allow forests to survive in the future."

# Avian invaders

Research reveals top factors in the spread of invasive bird species, providing scientists with a possible 'early warning system' for invasions.

Invasive species threaten global biodiversity by predating on, or outcompeting, native species and by carrying diseases. They can also cause serious economic damage, for example by devastating crops.

However, it is difficult to predict which species will become invasive after they are first introduced to a new area - which will establish self-sustaining populations that spread and which will die out.

Now, by investigating records of movement

for nearly 1,000 bird species from the years 1500-2000, a team including researchers from Imperial have uncovered key factors in their spread.

They found that human activities such as bird introductions and trade are the main determinants of how many alien bird species live in an area, but that alien species are most successful in areas already rich with native bird species.

Study co-author Dr David Orme (Life Sciences) said: "By looking at these factors, we can then identify current or future

> introductions of species that share the hallmarks of previous invasions, giving us an early warning system.

Once a species has become fully invasive they are incredibly hard and

expensive to control, let alone eradicate, so catching an invasion before it gets going is a major conservation win."

Relatively few bird species are invasive but they do have very serious impacts including the extinction of other species and three are listed by the International Union for the Conservation of Nature as being in the worst 100 invasive species. Those three are the Indian myna, the European starling and the red-vented bulbul.

Dr Orme said: "All three are aggressive competitors with other birds and mammals for nest spaces; the myna eats the young and eggs of other bird species; and the starling and bulbul are both serious agricultural pests. The starling in particular has been very widely invasive: in the US, it is thought to cause hundreds of millions of dollars a year of agricultural damage by eating fruit and grain crops and animal feed."

-HAYLEY DUNNING, COMMUNICATIONS AND PUBLIC AFFAIRS

"Scar tissue in the

needed to regulate

heart obstructs

electrical waves

the heartbeat.

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'invisible'."

to render scar

tissue electrically

However, it may

# Spark of life

Scientists from Imperial have discovered that, contrary to previous understanding, heart scar tissue can conduct electricity following a heart attack.

These findings in mice, if confirmed in humans, would have major implications for heart attack survivors, and for patients with an irregular heartbeat known as atrial fibrillation.

An estimated 915,000 people in the UK today have had heart attacks, which deprive heart cells of oxygen, causing them to die and be replaced by scar tissue.

Scar tissue has important mechanical functions in maintaining the structure of damaged hearts, but when left untreated it effectively blocks the waves of electrical current needed for the heart to beat properly.

These waves of electricity roll in and out of the heart muscle - very much like waves on a beach.

Scar tissue acts like a boulder on the edge of the beach, blocking the waves.

However, Imperial researchers have now found electrical activity in certain areas of the damaged tissue. To do this, they developed a new technique to put fluorescent proteins into scar cells that 'light up' when

electrical waves are present.

Senior author Professor Peter Kohl (National Heart and Lung Institute) said: "This is a surprising but exciting finding, because we generally think of scar tissue as useless at best, and detrimental to normal organ function at worst. Of course, it is needed to provide mechanical strength, but scar tissue in the heart obstructs electrical waves needed to regulate the heartbeat. However, our research suggests that it may be possible to exploit them as passive conduits of electricity, which may allow us

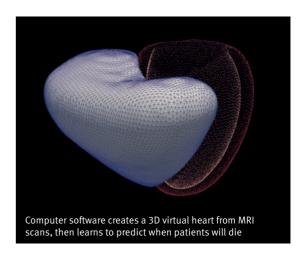
> to render scar tissue electrically 'invisible'."

In the study the researchers also uncovered tiny membrane tunnels, known as nanotubes, between scar tissue and healthy heart cells, which might explain the electrical connection between the scar and surviving heart muscle.

Professor Kohl said: "If one can learn to control the function of these tubes so that electrical coupling across scars can be increased, it would reduce 'boulder' effects on electrical wave conduction and have significant implications for rehabilitating patients after a heart attack."

-CAROLINE BROGAN, COMMUNICATIONS





>> SCIENCEroundup

# **Smart 3D hearts**

Machine-learning software has predicted death risk in people with serious heart disease faster and more accurately than current methods.

Until now, radiologists have relied on taking timeconsuming and often inaccurate measurements of heart function by hand to identify patients at greatest risk of deteriorating.

In the latest study, Imperial researchers looked at historical data from 250 patients with pulmonary hypertension, a condition that leads to heart failure if not treated appropriately. The type of treatment needed depends on predicting whether patients fall into high or low risk groups.

Using novel algorithms they analysed moving MRI images of each patient's heart to replicate the way over 30000 points in the heart contract during each beat. With this information, it created a 'virtual 3D heart' of each individual and automatically learned which features were the earliest predictors of heart failure and death.

Lead author Dr Declan O'Regan from the MRC London Institute of Medical Sciences (LMS) at Imperial said: "This is the first time computers have interpreted heart scans to accurately predict how long patients will live. It could transform the way doctors treat heart patients."

Co-author Dr Tim Dawes, of the LMS, who developed the algorithms that underpinned the software, said: "The computer performs the analysis in seconds and simultaneously interprets data from imaging, blood tests and other investigations without any human intervention. It could help doctors to give the right treatments to the right patients, at the right time.

The team now plan to test the software on patient data from a different hospital to the one in which it was developed, to verify the findings. The researchers say the technology can be used in the future on patients with other types of heart disease. The ultimate goal is to develop software to make predictions not only about survival, but also about which type of treatment will work best in each patient.

-CAROLINE BROGAN, COMMUNICATIONS AND PUBLIC AFFAIRS

# Marking a milestone



Everyone at Imperial is familiar with how quickly the College changes over a relatively short period of time it's in the Imperial DNA to constantly evolve in response to global forces. The Reporter newsletter has tried to cover some of this diverse, dynamic activity over 300 Issues, starting more than 20 years ago in 1995. In this first, two page spread – we look at the highlights as covered by Reporter, then on the second spread, some of the more personal stories.



1995

Formation of the new Imperial College School of Medicine from the merging of the Royal Postgraduate Medical School (RPMS), Charing Cross and Westminster Medical School and the previously announced merging of the National Heart and Lung Institute (St Mary's hospital merged in 1988 forming the Imperial College of Science, Technology and Medicine)

Imperial and Science Museum co-host BAYSDAY on 17 and 18 March attracting 6000 young people to the campus to learn about science and technology. Britain's first astronaut Helen Sharman launches the event. (Helen went on to become a full time member of Imperial staff exactly 20 years later in 2015 see issue 289)



9 November: Roger Makins, first Baron Sherfield, dies. He was chairman of Imperial's governors 1962-74

Imperial Nobel Laureate

Abdus Salam dies (see stories overleaf)

An Imperial student

team win University Challenge for the first time ever

Special issue

The Queen opened

Sir Alexander Fleming Building on 21 October

around 750 guests

1996



1999



New College website launched in the first effort to centralize the College's web presence (for a comprehensive look at how the College's website evolved see issue 272)

1997



Celebrating 50 years of Silwood Park research and education

1998



Student Kahae Han, wins BBC young musician

of the year award. She is

on a joint physics with

music degree

Medical students will follow a new curriculum which will take advantage of the strength of science, engineering and management departments on the South Kensington campus. We can expect some medical options for scientists and engineers too."

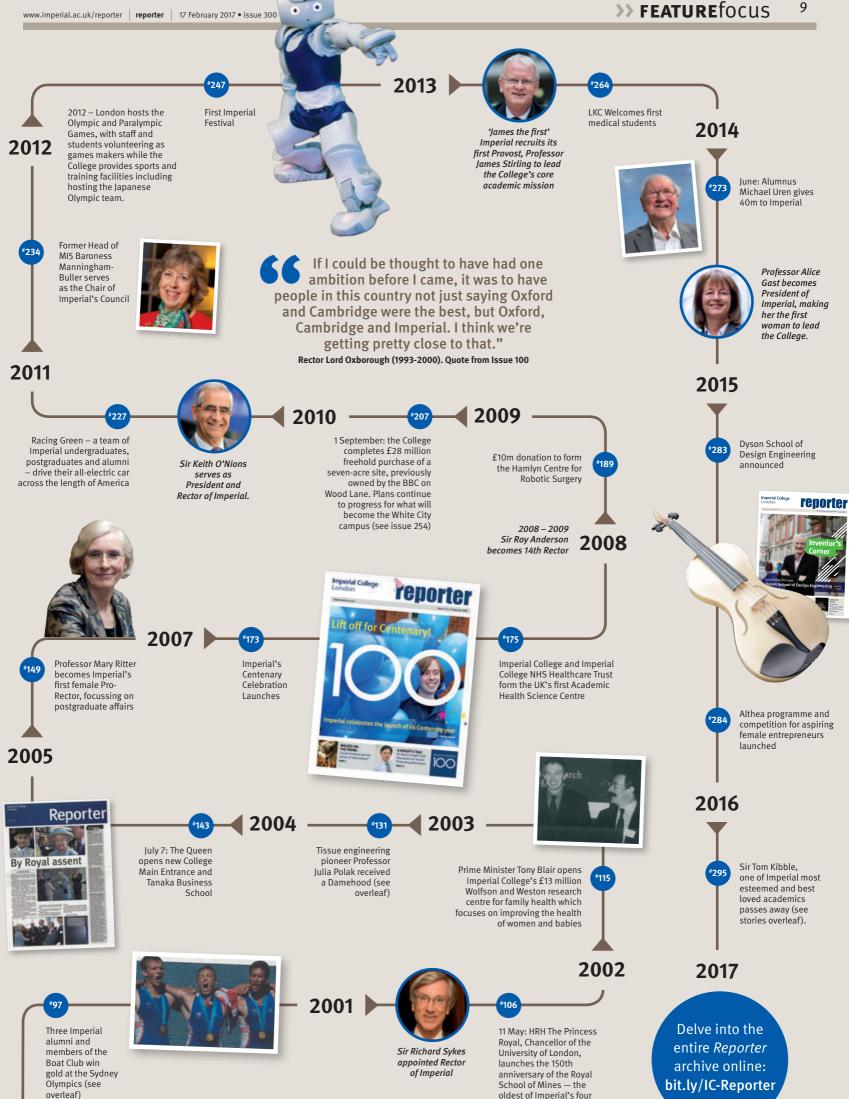
> Imperial Deputy Managing Director, Rodney Eastwood. Quote from Issue

2000



The College is one of six establishments in the country to win an award from the Athena Project to help improve the access, participation and promotion of women in science, engineering and technology in higher education





constituent colleges

# The people of Reporter

We take a look at some of the surprising, funny and poignant stories from 300 issues of Reporter



# Going global

For more than 60 years, intrepid Imperial students have set out to every corner of the globe on unique and daring expeditions combining adventure with research supported by the College's Exploration Board. Reporter has followed the exploits of these students, whether navigating the high peaks of Nepal (Issue 75), tracking the

> frozen tundra of Greenland (Issue 142) or cycling across the silk road route (Issue 288).

One story that stands out from the records though is that of alumnus explorer Andreas Mogensen. As a student, Andreas went out on two trips to South America. The first one, called Netspedition (Issue 34), involved canoeing to inaccessible areas of the Venezuelan Amazon to document butterfly biodiversity, sending regular digital reports and photographs via satellite phone to be uploaded to the embryonic internet.

In 2015 Andreas happened to be reading Reporter, which included the latest student expeditions, and got in touch to say that the Exploration Board had been the catalyst for his career

in exploration and that he was now an astronaut for the European Space Agency, due to launch to the International Space Station for his first mission in a few months' time. Reporter of course interviewed him before his big day (Issue 288, p10). Asked by Reporter what makes a good explorer Andreas said: "Curiosity, a sense of wonderment at the beauty of our world, and a desire to explore and discover not only our surroundings but also our own mental and physical limits."





# **Extracurricular**

While the College is mostly know for science, engineering, medicine and business, sport has long played an important role in galvanising the community. The archetype for the sporting academic is perhaps Sir Roger Bannister, St Mary's alumnus and miracle mile runner who featured in Reporter, for example when he opened the £250,000 Sir Roger Bannister Lecture Theatre (Issue 139). The Imperial College Boat Club at Putney has long been part of College life for many student rowers. A high point for the club came when three alumni - Simon Dennis, Louis Attrill and Luka Grub - secured gold at the Sydney Olympic Games in 2000 (Issue 97). Imperial took another Olympic podium 16 years later at the Rio games, this time in the women's eight with alumnus Mel Wilson and fellow boat club rower Zoe Lee taking silver. Paralympian and PhD student Dave Henson also secured silver in the T42 200m. Many staff and students also did their bit as 'Games Makers' for the London 2012 Olympics.

# Long service

state of the art facilities (see Issue 285 for a comprehensive look at how the estate has changed). But what stays the same is a dedicated body of staff – many of whom

(**Issue 292**). Just as impressive

exactly 50 years of continuous service to the College (Issue 161), having started working in working at Imperial John also gave 23 years · - for which he was awarded an MBE. The defence classes to staff in the department.

after 48 years of service, most of them spent living on onsite at Harlington (**Issue 267, p14**). Mick

Trevor Beek, a technician in Physics marked 50 years of continuous service in 2015 and is still going strong (issue 287). Trevor has

Perhaps the most colourful quote from released by now." (Issue 117)

# **Reading list**

Many members of the Imperial community are frequently published authors through the journals in which they disseminate their research and ideas. But some have also achieved more mainstream literary success. No doubt the most famous of these is Royal College of Science alumnus Herbert George (HG) Wells, the father of modern science-fiction

and author of War of the Worlds (Issue 22). His legacy was celebrated recently when a student on Imperial's Horizons humanities module won the HG Wells Short Story Competition (Issue 292).

Professor Larry Hench, an Imperial biomaterials pioneer, found great success with his series of children's books featuring Boing-Boing the Bionic Cat, aimed at inspiring young readers about science and engineering. Professor Hench told Reporter in Issue 89:

"My grandson, Danny, was partially allergic to cat fur and I dreamed up the cat as a story to cheer him up."

Professor Hench's close collaborator Dame Professor Julia Polak also found some literary fame, when her remarkable story was

> immortalised in the novel Intensive Care (Issue 105). In 1995 Julia fell ill with the very disease she had been studying. She required a lung transplant, which was performed by colleague and

friend, Imperial surgeon Sir Magdi Yacoub. She went on to co-found the Imperial College Tissue Engineering

and Regenerative Medicine Centre.

>> FEATURE focus

Another poignant story was that of Professor F.J. 'Felix' Weinberg FRS. Born in Czechoslovakia in 1928, he survived internment in the Nazi concentration camps as a boy, then moved to England aged 12. He excelled at school and eventually became a Distinguished Research Fellow at Imperial in combustion physics. It was painful to write his memoirs, but he finally started it in his eighties finishing Boy 30529: A Memoir just before he passed away.

He writes: "I had a very happy childhood. It came to an end too soon and too abruptly, thanks to Adolf Hitler, but I believe that it is the early years that count." (Issue 158, 256).





# **Lasting legacies**

An important part of Reporter has always been to mark the passing of members of the community – both to celebrate their achievements and allow their friends and colleagues at the College a chance to mourn and remember them.

Although difficult to pick out particular figures, the tribute to Nobel laureate Professor Abdus Salam stands out. One of the foremost theoretical physicists of his generation, Salam was the first Muslim to win a Nobel Prize. The tribute to him in Issue 36 of Reporter was by one of his mentees, Professor Sir Tom Kibble, who wrote: "Salam has a secure place among the great men of science. He was a most stimulating colleague, a man of humanity and passion, with many friends and admirers, and some detractors, not least in his own country."

Sadly Sir Tom himself passed away in 2016, having made just as enormous impact on the field of theoretical physics as his mentor Salam. His obituary was published in Issue 295 of Reporter and online

> - where scores of his friends and former students posted their own tributes to his vision, humility and kindness. Among them was Imperial alumnus Professor Neil Turok, Director of Perimeter Institute for Theoretical Physics. "It is heartbreaking to hear of Tom's demise. His unique and acute intelligence, wisdom and generosity set the very highest example to all of us fortunate to know him. He was a true giant of science and of

> > humanity. We miss him sorely."

Delve into the entire Reporter archive online: bit.ly/IC-Reporter

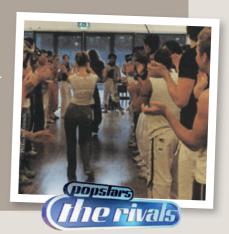




# And finally...

Bond films since very young. "Surgeons and spies are alike as

Building (Issue 154). Perhaps fortunately, that didn't include to the producers, *Pop Stars*, an early version of the popular (Issue 121).



# Pure and simple

A PhD student from Imperial has shared his knowledge of ceramics with a charity to help improve the way water is purified in Uganda.

In the country, over ten million people lack access to a clean water source. The charity 'Spouts of Water' manufacture and distribute Purifaaya ceramic water filters using local materials, providing an affordable and easy-to-use solution for Ugandans to purify their water.

Wirat Lerdprom, a postgraduate student from the Department of Materials, travelled to Uganda



last month aiming to make a more efficient production process for manufacturing water filters developed by the charity.

Using his knowledge of ceramics, Lerdprom gave expert advice to the local workforce on how to improve the production process of the water filters.

His expertise helped to enhance the preparation of the raw materials, including the mixing and drying process of the ceramics, and improved the firing efficiency of ceramic whilst in the kiln. Since his first visit, the factory has increased the production yield of water filters from 55 per cent to 86 per cent the best in their production since they started operating.

"This is an amazing feeling for me, as I know it's so difficult to find water there," Wirat said. "When I was in Uganda, I had no water or power, so it's great to know that more people can now have clean water to drink thanks to my knowledge."

Lerdprom's visit to Uganda was in response to a request from Kathy Ku, co-founder of the Spouts



of Water who had reached out via the Royal Academy of Engineering.

Kathy Ku, the co-founder of Spouts, worked alongside Wirat in Uganda. Ku said: "Wirat was able to help make improvements and find solutions for problems we'd been struggling with for years."

"Having his expertise come to our site, bringing both industry and academic know-how, was invaluable; we look forward to continuing our partnership with Wirat to help provide clean drinking water across Uganda."

TORI BLAKEMAN FOR COMMUNICATIONS AND PUBLIC AFFAIRS



The Purifaaya ceramic water filters produced by Spouts use both physical filtration and chemical disinfection methods. Tiny holes within the clay only allow water molecules to pass through, leaving larger harmful dirt and bacteria trapped in the filter. A thin layer of silver nitrate is also infused within the filter to enhance bacteria removal.



# A toy story

Christmas may seem like a distant memory, but gift choices for children might have an impact on their later career choices. That's the thinking behind a new gender-neutral STEM Toy initiative pioneered by Imperial researchers.

"Although not explicitly stated, when we step inside a toy store the separation of products aimed at boys, and those aimed at girls, is all but apparent," said Dr Andrea Alenda Gonzalez, a former research fellow at the Centre for Bioinspired Technology at the College.

"The pink items are always separate from the items without pink, and when trying to find the products related to science, technology, engineering, and mathematics, they're more often than not regarded as suitable 'for boys and not for girls'."

This gender biasing in STEM toys is reflected in the reality that only 13% of STEM professionals in the UK are women. With the



understanding that a child's interests are a product of their environment, Dr Alenda has pioneered the Science Toy Award to highlight how influential environment can be on the motivations, interests and future career choices of young children.

The organisers, many of whom are from Imperial, hope that encouraging gender-neutral and accessible STEM toys through the awards will increase their presence in the market.

Ultimately, they hope that this will reduce the gender biasing and lack of diversity in the professional STEM sector in the future.

The award praises those manufacturers that promote curiosity and encourage exploration in STEM through inclusive, open-ended, gender-neutral toys. Toy manufacturers from across the world competed for the award back in November, with 'Code Master' - a programming logic game that does not require a computer taking

first place. Among other retailers, the winning and finalist toys can now be purchased in the Science Museum shop.

For the 2017 award, Imperial plans to take a more leading role, developing the awards further by collaborating with outreach at the college.

If you would like to find out more about the Science Toy Award, visit sciencetovaward.org

—TORI BLAKEMAN FOR COMMUNICATIONS AND PUBLIC AFFAIRS



# Rocket man alumnus aims to blast off

Recent mechanical engineering graduate Parikshat Singh is trying to turn an idea born during his studies into a company that will revolutionise how rockets are designed.



# What's your company called and what do you do?

We're called The Rocket Company, and our team includes another MEng graduate, Patrick Moniz. We make small, low cost rockets and put them into space. Our unique selling proposition is a development process which is about 20 times more costeffective than any previous commercial program. Traditionally, rockets cost millions to manufacture and build, but billions to develop. We can do it considerably cheaper.

#### How does it work?

We're still operating in stealth mode, but what we can tell you is that we're re-building the entire process at the core of engineering development from the ground up. Although minor improvements have been made over time, the fundamental development framework has remained unchanged since the 1960s. Our technology is providing a much-needed overhaul. If we're right, we'll have the opportunity to bring about a change in space exploration.

# How and when did you start the company?

I had a different idea for the company when I was a second year student, and I wanted to test it out. I worked on it separately from my actual thesis, for about a year or two. We formalised it fairly recently and now we've got a team of four, three of which are mechanical engineers from Imperial, working on it full-time.

# How was developing this company connected to your studies, and how did the College support you?

I couldn't do this without an engineering degree, fundamentally. In addition to that, I could reach out to supervisors quite early on and say: "I'm interested in this area, but I'm not able to work on it." And in those discussions we created projects which allowed me to explore the area, to learn about rocket propulsion and rocket design. Without that, I wouldn't have the tools or the skills to do what I'm doing now.

# What would you say to other engineering students who want to become entrepreneurs?

I never wanted to be an entrepreneur, I still don't think I am, although once we get funded, I might be. I just really wanted to work in rocket propulsion. So my advice would be to find an area that you're very passionate about, and to make sure you work really hard on it. Oh, and don't be afraid to take risks! The core members of the team turned down fully-funded PhDs at Oxford and Cambridge and industry offers, and one of us quit his job and got on a one-way flight to London to make this happen.

-NADIA BARBU, MECHANICAL ENGINEERING





# **Drone Society launches** at Imperial

The new student-led society will offer students the chance to engage in the latest developments in drone technology.

Following its launch this month, Imperial's DroneSoc seeks to be London's leading hotspot for drone enthusiasts. The society will host regular seminars, courses, and competitions for both students and the public, building on Imperial's world leading research in this area and the work of the Aerial Robotic Laboratory.

DroneSoc also used the event to launch their 'Quadbasics' programme, a structured course allowing Imperial students to build their own drone using 3D printed parts.

Taking place at Imperial's South Kensington Campus, the launch event featured demonstrations of a number of commercial drones in the specially erected 'flight arena'.

Gerald Low a student from the Department of Aeronautics and one of the founders of DroneSoc said: "We had over 200 people at the event – it was great to see such a large and enthusiastic audience. The speakers all offered different perspectives into the issues around drones which was really interesting to hear.

"We decided to start the society as there wasn't really a space for drone enthusiasts at the College. By bringing everyone together we're hoping to offer opportunities to learn new skills, meet experts from drone related industries as well as have some fun with the devices at our weekly flying sessions."

The event also brought together leaders in the unmanned aerial system field from academia, industry and aerospace regulators.

-JON NARCROSS, COMMUNICATIONS AND PUBLIC AFFAIRS

You can find more about Imperial's Drone Society, including upcoming events on their website: icdronesoc.com



Staff featured in this column have given many years of service to the College. Staff listed celebrate

anniversaries during the period 1 January - 31 January 2017. The data are supplied by HR and correct at the time of going to press.

# 20 years

- Christina Balogun, Technical Analyst, ICT
- Dr Lara Cathcart, Associate Professor of Finance, Business School
- Professor Kim Christensen, Professor of Theoretical Physics, Department of **Physics**
- Dr Gary lames Hampson, Reader in Sedimentary Geology, Department of Earth Science and Engineering
- Ms Virginia Harris, Executive Assistant to the Vice President (Innovation), College Headquarters
- Mrs Claire Hunt, Option Convenor, Centre for Environmental Policy
- Dr Tami Kramer, Senior Clinical Research Fellow, Department of Medicine
- Dr Robert Law, Reader in Chemical and Biological Materials, Department of Chemistry
- Dr Tanya Tolmachova, Research Fellow, National Heart and Lung Institute

#### 30 years

- Mr Stephen Cussell, Senior Laboratory/ Mechanical Engineering Technician, **Department of Physics**
- Mr Harminder Flora, Research Officer, Mechanical Engineering
- Professor Charles Godfray, Honorary Principal Research Fellow, Department of Life Sciences (Silwood Park)

#### 40 years

- Mrs Fiona May, Senior Laboratory Technician, Department of Life Sciences
- Dr Susana Ortiz, Senior Research Fellow, Department of Chemical Engineering
- Mr Roger Pownall, Support Services Manager, Catering Services

#### 50 years

- Martin George Gill, Technician, Department of Earth Science and Engineering
- Emeritus Professor Henricus Michels, Senior Research Fellow, Department of Chemical Engineering
- Dr Mike Rampling, Honorary Senior Lecturer, Department of Bioengineering

# obituaries



Dr Tim Heymann, Reader at Imperial College Business School, passed away on 18 October 2016 aged 55. His friends and colleagues in the School, Professor Carol Propper and Dr Benita Cox, pay tribute.

"To say that Tim was a polymath would be an understatement. He was a distinguished doctor committed to clinical work and also held an MBA, with distinction, from INSEAD. His day-job was senior consultant gastroenterologist at the Kingston Hospital where he was responsible for a string of innovations in clinical and patient care. Somehow he also found time to be a Reader at Imperial College Business School, he where he had a major input into both the Intercalated BSc

and the MSc in International Health Management.

In a world where egos can be very fragile, Tim was the exception. He was a modest, funny, clever and gracious person who had time for everyone. Despite his many achievements he never boasted, was always supportive to colleagues and students, executed great ideas and used a quiet, but deadly accurate, wit to expose silliness and pomposity.

On learning of Tim's passing, one medical student said: "Tim was a great teacher and a wonderfully inspiring person who will be missed by so many. His memory will live on in all of us whose lives he impacted, especially as we apply his teachings and values in our own lives and careers to hopefully benefit society and help others."

Indeed there isn't a person in the Business School who is not touched by Tim's death. We miss him dearly - his love for life and his wonderful insights. Our thoughts are with wife Amanda and his children.

Finally, Tim and Amanda set up a memorial fund to provide travel bursaries to medical students. He always enjoyed travelling, and knew that those trips made whilst a student can really broaden one's perspective. The link is below for those who wish to donate."

bit.ly/Heymann-fund

# obituaries



#### GEOFF GREEN

Geoff Green, Chief Technician for the Undergraduate Teaching Laboratories, died 20 December 2016, aged 63. His colleague Harry Vine, Departmental Services Manager, pays tribute.

"Geoff initially trained as a teaching technician at the British Food Manufacturing Industries Research Association and came to Imperial College in 1978 via City University where he had worked for a short time on strain gauge technology.

Geoff always had a wide interest in the arts

and media and enjoyed a three-year career break from College to study and gain a BA in Art.

Since returning to Imperial in 1985 as Chief Technician for the Undergraduate Teaching Laboratories, Geoff supervised the staff and an increasingly diverse experimental environment for the growing numbers of Physics students.

The teaching laboratories were maintained as a pleasant working and functional environment under Geoff's direction. His comprehensive technical knowledge of experimental techniques and equipment was deployed to the lasting benefit of those he helped, taught and worked with. Whenever problems arose in the teaching labs Geoff could be relied upon as a source of calm and reflective resolution.

For students Geoff was an excellent and engaging instructor with an informal but in-depth and able teaching style. He was greatly respected by both students and staff.

Geoff is sadly missed by his colleagues and the Department. Our thoughts are with Geoff's family."

Clinical Sciences

Mrs Farah Dahalan, Institute of

Environmental Engineering

Mr Francesco De Virgiliis, Medicine

Miss Lisa Del Bel Belluz, Surgery

Miss Sian Devlin, Education Office

Miss Jasdeep Dhanda, Business

Mr Daniel Dickens, Surgery and

Mr John Dinnewell, ICU

Mr Felix Dransfield, Medicine

Dr Shirley Echendu, Mechanical

Mr Martin Eden, Public Health

Dr David Eldred-Evans, Surgery and

Ms Nadine Engineer, Public Health

Dr Oscar Fajardo, Chemistry

Miss Labhaoise Farrell, Faculty of

Miss Esther Fatoba, EYEC

Miss Cindy Feng, Estates Division

Dr Sarah Filippi, Public Health

Mr Henry Firth, Student Recruitment

Miss Alex Fisher, Central Secretariat

Miss Clara Fitzsimons, Public Health

Miss Berta Font Cunill, Medicine

Dr Penny Fletcher, Advancement

Mr Robert Furniss, Life Sciences

Mr Mohamed Gad, Surgery and

Dr Alex Geringer-Sameth, Physics

Miss Debbie Gilpin, Surgery and

Professor Mark Girolami,

Dr Antonia Godoy Lorite,

Dr Simon Good, Physics

Dr Stephen Green, Design

Miss Caroline Golden,

Bioengineering

Mathematics

Mathematics

Engineering

Cancer

Mrs Ladan Ghiami, Education Office

Miss Natasa Giallourou, Surgery and

Dr Aisha Gloudon, Public Health

Mr Marc Goldfinger, Medicine

Mr Farrel Gray, Chemical Engineering

Dr Sam Greenbury, Mathematics

Miss Bryony Greenfield, Central

Dr Paul Fossati, Materials

Dr Sara Filippini, Mathematics

Mr Moses Fawehinmi, Business

Miss Aleksandra Fedosyuk,

Mr Pedro Esperanca Grilo, Public

Miss Kate Farrar, Registry

Medicine Centre

Chemistry

Miss Sophie Damy, Civil and

Dr Timothy Dawes, NHLI

Dr Tisham De, Medicine

Ms Sabine Dziemian,

Bioengineering

Engineering

Health

and Cancer

Cancer



# Welcome

# new starters

Miss Louise Abela, Public Health Mr Christopher Adams, Sport and Ms Alma Ademovic Tahirovic, EEE

Dr Jonathan Afoke, NHLI Dr Joseph Ahn, Mechanical Engineering

Mrs Waheeda Ajmeri, Physics Mr James Alden, Centre for Environmental Policy

Dr Mark Anderson, School of Professional Development Professor Thomas Anthopoulos, Physics

Dr Hulya Arguz, Mathematics Miss Yana Armenova, EYEC Dr Kristoffer Baek, Medicine Dr Jingwen Bai, Computing Dr Andrew Ballantyne, Materials

Mr Rhys Barnett, Physics Mr Jeffrey Barrie, Mechanical Engineering

Dr Cheryl Battersby, Medicine Dr Efstratios Batzelis, EEE Mr Lucas Baumard, Medicine Mr Weston Baxter, Design

Engineering Dr Esteban Beckwith, Life Sciences Mrs Katherine Bellenie, Computing

Mr Michael Benson, Civil and **Environmental Engineering** Dr Alex Berry, Faculty of Engineering

Ms Leena Bhaw, Medicine Mr Jack Blackburn, Medicine

Dr Chloe Bloom, NHLI Dr Aurelien Boillat, Medicine Dr Lukasz Boryn, Surgery and Cancer

Dr Eirina Bourtsoulatze, EEE Dr Reuben Brambleby, Civil and

Environmental Engineering Dr Jonathan Breton, Surgery and

Mr Mark Bruggemann, Civil and Environmental Engineering Ms Edita Bulovaite, Medicine Mr Tom Bultreys, ESE

Professor Mark Burgman, Centre for Environmental Policy

Miss Claire Byrne, Medicine Mr Ozan Cakir, Faculty of Natural

Dr Elena Calzolari, Medicine Mrs Ulla Cameron, Education Office Mr Alberto Carceles Peiro, Centre for Environmental Policy Miss Sheena Cardoso, HR Miss Margarita Cariolou, Public

Dr Jake Carson, Mathematics

Miss Kimberley Chadwick, Sport and

Mrs Nozuko Chanetsa, NHLI Dr Michele Chiappi, NHLI Mr Athanasios Christodoulias, Mechanical Engineering Ms Deniz Cizmeci, Medicine Miss Debbie Clarke, Registry Miss Leah Colthurst, Public Health Professor Francesca Cordeiro, Surgery and Cancer Miss Joyceline Cuenco, Medicine

Mechanical Engineering

Mr Marco Da Costa Alves,

Miss Fatou Gueye, Surgery and Dr Liya Guo, Materials Miss Ishwori Gurung, Medicine Professor Geoffrey Hall, Physics Miss Nicola Halse, School of Professional Development Ms Jane Henderson, Finance

Dr Nicolas Herzig, Design

Engineering

Ms Karen Hoang, Medicine Ms Alexandra Hogan, Public Health Mr Thomas Hone, Public Health Ms Iqfa Hudda, Faculty of Medicine Centre

Miss Emily Hue, Faculty of Medicine

Miss Roxana Hughes, Faculty of Medicine Centre Mr Christopher Hunt, Physics Dr Shahriar Islam, Medicine

Mr Carles Izquierdo Wilson, Catering

Mr Samuel Jackson, ESE Dr Farahnaz Jamil, Public Health Mr Zhiwei Jiang, Chemical

Dr Milan Kabac, Computing Dr Shabnam Kadir, Bioengineering Mr Sokratis Kartakis, Computing Dr Brendan Kettle, Physics

Miss Sarah Khaled, Surgery and Mr Christopher Khan, Estates Division

Dr Daniel King, Materials Mr Ermis Koutsos, EEE

Dr Teodor Krastev, Physics Mr Andres Kricka Garrido, Medicine Dr Merih Kucukler, Civil and Environmental Engineering

Mr Navjot Kukreja, ESE Ms Nathalie Lambie, Medicine Ms Pinky Langat, Medicine Miss Mide Lawal, Business School

Mr Phillip Lawton, Surgery and Cancer Dr Paul Lewis, Computing Dr Xin Li. Medicine

Miss Joy Liao, Medicine Ms Chin-Hsuan Lin, Bioengineering Mr Xiaoyu Liu, Public Health Dr Ben Livshits, Computing

Miss Eva Long, EYEC Dr Carlos Lopez Garcia, NHLI Dr Maria Lopez Jimenez, Surgery and Cancer

Mr Jianlin Luan, Civil and **Environmental Engineering** Dr Mohammad Mahmud, Medicine Dr Daisy Mak, Physics

Dr Amit Mandal, NHLI Ms Georgina Mann, Public Health Dr Andrea Massaia, NHLI Dr Alison McKinlay, Public Health

Mr Kevin McRae-McKee, Public Health Mr Lorenzo Mencattelli, Aeronautics Dr Catherine Menon, Enterprise Mr Mohammed Miah, Faculty of

Mr Rishi Mistry, Physics Medicine Centre Dr Philip Molyneaux, NHLL Ms A.Isabel Morais Neto, Materials

Mr Angus Morrison, ESE Mr Asher Mullokandov, Mathematics Miss Katherine Murphy, ESE Dr Thrishantha Nanayakkara, Design

Dr Anca Nastase, NHLI Mrs Daiva Naudziuniene, Computing Miss Roza Nikolopoulou, Bioengineering

Mrs Charlotte O'Brien, Medicine Ms Joan O'Brien, EEE Miss Megan O'Driscoll, Medicine Dr Edward O'Dwyer, Chemical Engineering

Mr John O'Neill, Business School Mr Alessandro Orchini, Mechanical Engineering

Mr Konstantinos Pagkalis, Mechanical Engineering Dr Aditya Paranjape, Aeronautics Mr Cristian Parisi, Bioengineering Dr Thomas Pasvol, Medicine Mr Sharad Patel, Bioengineering Dr Jonathan Paul, Civil and Environmental Engineering Ms Ivana Pennisi, Life Sciences Dr Salvador Perez Montero, NHLI Mr Scott Peters, Life Sciences

Dr Jonathan Pham, Public Health Ms Carmen Picon Munoz, Medicine Miss Elena Psyllou, Civil and **Environmental Engineering** Dr Lan Qie, Life Sciences (Silwood

Park)

Miss Egle Rackauskaite, Mechanical Engineering

Professor Rino Rappuoli, Medicine Dr Nicholas Raske, Aeronautics Miss Carme Ripoll Fiol, Medicine Dr Terhi Riutta, Life Sciences (Silwood Park)

Mr Matthew Robinson, Strategic Planning

Dr Lassi Roininen, Mathematics Dr Nicolas Rojas Libreros, Design Engineering

Dr Sara Romeo, Institute of Clinical

Mr Florian Rossmann, Life Sciences Dr Fiona Rowan, Chemistry Miss Saadia Sajid, Central Secretariat Dr Susanna Sakonidou, Medicine

Dr Grzegorz Sarek, Medicine Mr Vishnu Satheesh Kumar Nair, Civil and Environmental Engineering Miss Victoria Scott, Medicine Mr Daniel Scott, Chemistry

Dr Christopher Seez, Physics Mrs Nadia Segade, Business School Mr Gary Senior, Aeronautics

Dr Amy Seakins, College

Dr Munazza Shahid, Chemistry Dr Yuri Shitov, Physics Mr Robert Siddall, Aeronautics Dr Akela Silverton, ESE

Ms Katerina Skalicka, NHLI Mr Neil Slaven, Surgery and Cancer Mr Wayne Smith, Surgery and Cancer

Ms Jessica Smith, NHLI Ms Riitta Soininen, Public Health Mr Anuj Sood, Medicine

Mr Nicholas Spence, ICU Dr Jason Stafford, Chemical Engineering

Dr Brigitta Stockinger, NHLI Ms Emma Stubbe, Student Recruitment and Outreach Dr Savitar Sundaresan, Business

Dr Piyada Supasa, Medicine Mr Ankit Surti, Mechanical Engineering

Dr Bogachan Tahirbegi, Chemistry Miss Jennifer Taing, Public Health Dr Kirk Taylor, NHLI

Miss Renay Taylor, Faculty of Medicine Centre

Miss Elizabeth Telford, Life Sciences (Silwood Park) Dr Ina Theofel, Institute of Clinical Sciences Ms Ute Thiermann, Centre for MS Ute Tineting...., Environmental Policy Ms Hafwen Thomas, NHLI Ms Patricia Thrue, ICU Mr Bension Tilley, Medicine Dr Carlos Torres Vitolas, Public Dr Vicky Tsipouri, Surgery and Ms Anna Turvey, Advancement Mr Marijn van Cappelle, ESE Dr Morteza Varasteh, EEE Dr Martha Vardaki, Chemical Engineering Mr Febin Varghese, Life Sciences Dr Claire Vassie, Faculty of Medicine Amita Verma, Life Sciences

Mr Arthur Wadsworth, Faculty of Natural Sciences Mr Jonathan Wagner, Chemical Engineering

Dr Dong Wang, Mechanical Engineering

Dr Kehuan Wang, Mechanical Engineering Ms Wiaam Wanis, Registry

Dr Nicholas Wardle, Physics Dr James Webbe, Medicine Mrs Michelle West, NHLI

Ms Clare Whelan, Student Recruitment and Outreach Dr Luke Wilkinson, Chemistry Mr Matthew Wilks, Student

Recruitment and Outreach Miss Katharina Wilmes, Bioengineering

Dr Kathrin Witmer, Life Sciences Ms Amanda Wolthuizen. Communications and Public Affairs Mr Joseph Worsfold, Computing Dr Bernice Wright, Life Sciences

Mr Dong Yang, Mechanical Engineering Miss Megan Young, Medicine

Dr Wenbo Zhan, Mechanical Engineering Dr Fangni Zhang, Civil and Environmental Engineering

Dr Mimi Zhang, Business School

This data is supplied by HR and covers staff joining the College during the period 16 December 2016 -6 February 2017. This data was correct at the time of going to press. For Moving On, visit the online supplement at www.imperial.ac.uk/ reporter

☑ Please send your images and/or comments about new starters, leavers and retirees to the Editor at reporter@imperial.ac.uk

The Editor reserves the right to edit or amend these as necessary.



# **Farewell**

# moving on

Mr Abdulshakur Abdullah, Public Health Dr Rochan Agha-Jaffar, Medicine Mr Asif Akram, Public Health Dr Pablo Albella Echave, Physics Dr Khalid Alhaj Abdalla, Civil and Environmental Engineering Ms Kritibha Amatya, Public Health Dr Nicholas Andreas, Medicine Mr Ivan Andrew, Institute of Clinical Sciences (7 years) Mr Luca Annecchino, Bioengineering Professor Thomas Anthopoulos, Physics (10 years) Mr Epameinondas Antonakos, Computing Mr Jon Arntzen, ICT (16 years) Ms Ambreen Ashraf, Medicine (10 years) Dr Alison Atrey, NHLI Mr Vitali Avagyan, Business School Dr Deren Barsakcioglu, EEE Mr Geraint Barton, Surgery and Cancer (11 years) Ms Kulbir Basra, Faculty of Medicine Dr Robin Basu Roy, Medicine Dr Christian Baumgartner, Computing Miss Laura Baynton, NHLI Dr Philip Bergin, Medicine (10 years) Mr Luke Bevan, Grantham Institute Dr Gaurav Bhutani, ESE Ms Rowena Boddington, Business School Miss Ellen Bowler, Life Sciences (Silwood Park) Mr Alex Brabin, Estates Division Dr Andrew Bradley, Life Sciences (Silwood Park) Mrs Laura Braidford, Surgery and Cancer Miss Danielle Bream, Public Health Dr Nicholas Bristowe, Materials Dr Diordie Bruiic, Mechanical Engineering (24 years) Dr Rajpal Burmi, Surgery and Cancer (5 years) Dr Alessandro Cabboi, Mechanical Engineering Mr Feipeng Cai, Computing Mr Luke Caldwell, Physics Dr Gianluca Campanella, Public Health Mrs Meriel Cartwright, Medicine Ms Kelsey Case, Public Health (9 years) Mr Jack Catling, ICT (6 years) Dr Bonnie Chaban, Life Sciences Miss Yik Chan, Life Sciences (Silwood Park) Dr Jason Chang, Bioengineering Ms Irene Chang, Public Health Dr Mohammad Chaudhary, Physics Dr Michele Chiappi, NHLI Ms Heather Chisholm, ICT (8 years) Ms Valentina Cisnetto, Life Sciences Mrs Anne Clarke, EYEC (8 years) Dr Adam Coleman, Medicine Mr John Conway, Faculty of Natural Sciences (9 years)

Mr Massimiliano Cosso, Medicine

Mr Pedro Costa del Amo, Medicine Dr David Cox, Public Health Dr Mitchell Cuddihy, Materials Mr Grant Danskine, Sport and Leisure (14 years) Dr Shikta Das, Public Health Dr Gourab Datta, Medicine Ms Jennifer Davies, HR Mr Alexandre De Figueiredo, Mathematics Mr Alexander de Giorgio, Surgery and Cancer Mrs Yiovanna Derpsch, Public Health Mr Justin Devito, Chemistry Dr Evgeniy Donchev, Materials Ms Helen Drummond, Central Ms Maria Ellis, ICT Dr Hendrik Faber, Physics Ms Verity Farnham, Public Health Dr Marta Farras Mane, Surgery and Cancer Dr Veronica Ferrandiz, Civil and Environmental Engineering Dr Ioannis Filippis, Life Sciences (7 years) Ms Jasmine Finer, Physics Mr Tobias Fischer, EEE Mr Stephen Ford, Faculty of Medicine Dr Jennifer Furman, NHLI Professor Douglas Gale, Business Dr Vanessa Garcia Larsen, NHLI (9 years) Dr Esther Garcia Tunon Blanca, Materials Dr Ling Ge, College Headquarters (7 years) . . . . . . . . . . . . Dr Olivia Geraghty, Medicine Miss Lydia Gladstone, Faculty of Medicine Centre Dr Lisa Goers, Life Sciences Dr Daniel Gonzalez Carter, Materials Miss Katrin Gotsch, Institute of Clinical Sciences Dr Katerina Goudevenou, Medicine (6 years) Miss Leonie Gough, Life Sciences (Silwood Park) Ms Louise Greathead, Medicine Mr James Griffin, Faculty of Medicine Miss Jiaping Gu, Civil and Environmental Engineering Mr Ramesh Gurajala, ICT Dr Pilar Gutierrez Escribano, Institute of Clinical Sciences Ms Sarah Guy, Bioengineering (5 years) Mr Arran Hamlet, Public Health Mr David Hayes, Finance (42 years) Mr Cai Heath, Public Health Emeritus Professor Richard Hillier, Aeronautics (6 years) Dr Tom Hills, Chemical Engineering Miss Rosi Hirst, Public Health Mr David Holton, Security Services Dr Matthew Horton, Materials Dr Mokter Hossain, Surgery and Cancer Dr Sile Hu, Computing

Dr Michael Hurley, Public Health

Dr Shareen Jaiiee, Institute of Clinical

Sciences

Miss Emma Jameson, Advancement

Mr Kevin Ilett, Faculty of Medicine

Dr Pooyan Jamshidi Dermani, Computing Dr Andrew Jenkins, Chemistry Dr Jing Ji, Chemical Engineering Dr Jingjing Jia, Chemistry Mrs Carol Iovanovic, Finance (7 years) Mr Charalambos Kallepitis, Materials Miss Mohini Kalyan, Medicine Mr Christopher Kaye, Finance Dr Zoltan Kekecs, Surgery and Cancer Dr Tanika Kelay, Surgery and Cancer Mr Daniel Kelly, Computing Dr Dongyoon Khim, Physics Dr James Kimber, Chemical Engineering Mrs Peta-Ann King, Faculty of Medicine Centre Mr Savvas Kleanthous, Faculty of Medicine Centre Ms Lisa Koch, Computing Mr Panagiotis Kouvaros, Computing Dr Vratislav Krupar, Physics Dr Jean-Baptiste Lagrange, Physics Dr Rebecca Lane, Physics Professor David Lane, Medicine (37 years) Mr Chaipat Lapinee, Chemistry Mr Christoph Larndorfer, Physics Mr Zuwei Li, Computing Mr Zukang Liao, Computing Dr Yen-Hung Lin, Physics Mr James Lindsay, ICU Dr Harpreet Lota, Institute of Clinical Sciences Dr Fiona Lucas, Surgery and Cancer Dr Pradeep Luther, NHLI Miss Anna MacLeod, Medicine (6 years) Professor Tony Magee, NHLI (15 years) Ms Yasmina Mallam Hassam. Business School Mr Wing Man, ICT Mr Jose Marcano Belisario, Public Health (5 years)

Dr Patrizia Marchetti, Chemical Engineering Dr Severine Marechal, Civil and Environmental Engineering Dr Jonathan Marshall, Mathematics Mr Matt Martys, Education Office Ms Antonina Marvliv, Finance (13 years) Ms Ryanne Matthias, Faculty of Medicine Centre Dr Linda McDonald, Medicine Mr Michael Mchugh, Public Health Mr Robert McKiernan, Medicine Dr Timothy Mcmanus Jr, ESE Dr Evgenia Mechleri, Centre for Environmental Policy Dr Maryam Mehrabi, Surgery and Cancer (9 years) Miss Prisca Merz, International Relations Office Dr Andrew Messer, NHLI (13 years) Professor Charles Michel, Bioengineering (16 years) Dr Marco Mion, Public Health Mr Joan Miro Blanch, Medicine Dr Shivani Misra, Medicine Dr Iman Mohagheghian, Mechanical Engineering Dr Matthew Moore, Mathematics Mr Will Mueller, Public Health Dr Bagus Muljadi, ESE Mr John Murray-Bruce, EEE

Dr Pratheeban Nambyiah, Institute of Clinical Sciences Dr Wilten Nicola, Bioengineering Miss Rocio Nogueira, Public Health Dr Ashley Nordsletten, Public Health Miss Tola Oshitelu, Medicine Mr Ilias Pagkalos, NHLI Mrs Sharon Palmer, Faculty of Medicine Centre Dr Michael Panagopulos, Chemical Engineering Miss Alexandra Paterson, Physics Dr Varun Pathak, Medicine Mr Francis Peel, Public Health Dr Teresa Peiro-Salvador, NHLI Miss Clare Pengelley, Public Health Dr Maxime Petit, EEE Mrs Debbie Phillips, Library (14 years) Mr Paul Poudevigne-Durance, Medicine Dr Raquel Prado Garcia, Chemistry Mr Aaron Prendergast, Surgery and Dr Erica Pufall, Public Health Miss Laura Pugh, Business School Dr Andreas Pusch, Physics Miss Deveena Raithatha, ICT (11 years) Dr Kumara Ramaswamy, Mechanical Engineering (7 years) Mr Simon Rawstron, Public Health Dr Melanie Rees-Roberts, NHLI (5 years) Ms Hazel Ridgers, Medicine Miss Miriam Ries, Medicine Dr Cesare Robotti, Business School Dr Sara Rosas Martins, Life Sciences Dr Agnieszka Rutkowska, Chemistry Mr Christos Sagonas, Computing Mr Juan Sanchez Nieto, NHLI Mr Eric Schaanning, Mathematics Dr Sabrina Schlesinger, Public Health Mr Michael Schmutzer, Life Sciences (Silwood Park) Mr Boris Serafimov, Public Health Ms Laura Sharpe, Medicine Dr Zhiyuan Shi, EEE Dr Nour Shublaq, EEE Dr Aaron Sim, Life Sciences Dr Way Sim, Civil and Environmental Engineering (5 years) Ms Irene Simmonds, Surgery and Cancer Dr Charanjit Singh, NHLI Miss Joanne Siwoniku, Faculty of Medicine Centre Dr Kate Skinner, Surgery and Cancer Dr Natalia Smoktunowicz, NHLI Ms Stephanie Somerville, Surgery and Cancer Dr Irina Spulber, Computing Mr Mark Stewart, Surgery and Cancer Dr Jean-Philippe St-Pierre, Materials Mr Andrew Styles, Finance Dr Vani Subbarao, Medicine Dr Sandeep Sundriyal, Chemistry Miss Jennifer Taing, Public Health Dr Pamela Tempone, ESE Dr Carolina Thieleke Da Silva Macedo

Matos, NHLI

Dr Joanne Tonkin, NHLI

Mr Costa Toulis, Finance

Dr Gabrielle Thomas, Physics

(5 years)

Ms Zoe Townsend, Chemical Engineering Dr Fu-Min Tseng, Surgery and Cancer Dr Antonios Tsitos, Civil and Environmental Engineering Miss Foteini Tzakoniati, Chemistry Ms Chiamaka Ukegbu, Life Sciences (5 years) Dr Jonathan Underwood, Medicine Mr Alessandro Vandini, Computing Dr Gregory Verdon, Life Sciences Dr Petr Vikhorev, NHLI (7 years) Miss Julie Voce, ICT (9 years) Dr Vladislav Vysotskiy, Mathematics Mr Kamal Wahab, Public Health Dr Martin Walker, Public Health (6 years) Dr Chuan Wang, Medicine Dr Petra Wark, Public Health (7 years) Dr Cameron Weber, Chemistry Miss Katie Weeks, Advancement (6 years) Dr Gudrun Weiss, NHLI Ms Olivia Wiafe, Estates Division Miss Abigail Wighton, EYEC (6 years) Mrs Sarah Wilkins, Faculty of Medicine Centre (9 years) Dr Benjamin Williams, Mechanical Engineering ..... Miss Carol Wooding, Institute of Clinical Sciences (5 years) Dr Robert Woodward, Physics Dr Alexander Wray, Chemical Engineering Dr Linus Wulff, Physics Dr Zhihua Xie, Chemical Engineering Ms Celine Yan, Medicine Mr Yangshen Yang, Business School Dr Justin Yeoman, Life Sciences (5 years) Dr Ling-Shan Yu, EEE Dr Weiren Yu, Computing Dr Sean Yuan, Public Health Dr Lazaros Zafeiriou, Computing Ms Sara Zakutansky, Life Sciences Dr Shou-Han Zhou, Bioengineering Mr Tomasz Zielinski, Sport and Leisure (5 years) Dr Giuseppe Zito, Bioengineering

# Death in service

Mr Geoffrey Green, Physics (31 years)

# Retirement

Mr Andy Cleeter, Security Services (19 years) Mr Nick Davies, ICT (37 years) Dr Parviz Habibi, Medicine (24 years) Mrs Patrizia John, ICT (9 years) Professor David Lane, Medicine Dr Ming-Shi Li, Medicine (16 years) Professor Tony Magee, NHLI (15 years) Professor Steve Marston, NHLI (35 years) Dr Jenny Steel, Surgery and Cancer (17 years) Dr Mark Stoll, Medicine (18 years) Mr Kim Winter, Estates Division (18 years)



15 MARCH, 17.30

# Caring for the critically ill: helping rebuild lives?

Survival rates of intensive care patients have increased markedly over the last few decades due to advances in critical care medicine, processes of care and organ support technologies. But what is the quality of life like for patients, during and after critical care treatment, and how can we

measure and improve this? Managing the longer-term impacts for intensive care patients and their families remains a major challenge. Hear about the history of intensive care medicine and how he longer-term impacts for intensive care patients is a current focus for research at Professor Stephen Brett's inaugural lecture



18 MARCH, 11.30

# Imperial Fringe: Science and Sport Day

It's a Sports Day with a difference, as Imperial joins Queen's Park Ranger's football club in W12 to welcome families to a free, fun-filled festival of science and sport. Visitors will get the chance to meet scientists and OPR footballers and discover the science of football and

the secrets behind sporting success. If you're not football-crazy there will still be lots on offer - as well as food, drink and music, there will be games and hands-on science activities for all ages including fastest shot competition, sports drink chemistry, wearable 'ski coaches', lung testing, racing cars and more!

# take **note**

#### Enterprise week

Staff are encouraged to participate in Enterprise Week 2017, a week of events to showcase the outcomes of enterprising student initiatives across the College led by Imperial Enterprise Lab. The Imperial College Advanced Hackspace will be exhibiting in the Main Entrance all week and staff can register or volunteer for two major events taking place as part of the week: the Althea-Imperial Final (21 March 2017) and the Venture Catalyst Challenge Final (23 March 2017).

20-24 March 2017 College Main Entrance

To find out more, contact Liz Choonara e.choonara@imperial.ac.uk



16 FEBRUARY, 17.30

#### The Future of Money

Celebrating the research behind our money, we are hosting a special discussion event with the Bank of England's chief cashier, Victoria Cleland.



#### **Data Science Challenges and Opportunities** in Translational Medicine

Join The Institute for Translational Medicine and Therapeutics Data Science Group for a workshop on data science in translational medicine

21 FEBRUARY, 18.00

# **Design Engineering February Lecture**

Hear from Professor Andree Woodcock, who will present learnings from leadership of EU transport projects



21 FEBRUARY, 10.00

#### Safety: a human perspective

Open to all, this seminar will explore different accidents which occurred at universities; subsequent lessons learnt and the human contributions and impact are examined

27 FEBRUARY, 10.30

#### Discussion and presentation with **BBSRC Interim Chief Executive**

Join an open discussion and presentation with Professor Melanie Welham, the Biotechnology and Biological Science Research Council's interim Chief Executive

28 FEBRUARY, 17.30

#### The Chemistry **Department at Imperial** College London: A History 1845-2000

Join the authors of a new book chartina the extraordinary history of Imperial's Department of Chemistry across over 150 years at this launch event.



01 MARCH, 12.00

#### AHSC Seminar Series 2017 - Reducing the Burden of Lung Cancer

Two experts will talk about how we can work towards reducing the burden of lung cancer through research and improved treatment methods.

06-10 MARCH, 09.00 Women@Imperial Week

Women@Imperial is an annual celebration of the achievements of Imperial's female staff and students. A special event will take place on 7 March.



06 MARCH, 16.30 **Private Housing Evening** 

Join the Student Hub for an exhibition and talk aimed at helping students find accommodationafter Halls



08 MARCH, 17.30

# **Department of Mechanical Engineering Research Showcase 2017**

Join Alan Begg FREng, ex Senior Vice President of Group Technology at SKF and Imperial Mechanical Engineers for an evening of talks and debates

08 MARCH, 16.00 How are the kids? Improving population child health and development

In his inaugural lecture Professor Mitch Blair will be describing how we can develop a system that optimises child health.



14 MARCH, 17.30

#### **Adventures in Alloys**

Join Professor David Dye for his inaugural lecture exploring advances in metallurgy, that have made cars more impact-resistant in crashes and developed 3D printable, high temperature cobalt/nickel superalloys for use in future jet engines



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

