## Imperial College London

reporter

Sharing stories of Imperial's community

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# earning Curve

Introducing Professor Simone Buitendijk, Imperial's new Vice Provost for Education

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CLOSE TIES Imperial reaffirms its position as a European university PAGE 2



## Not giving in

How time flies. I started at Imperial just after the London Olympic and Paralympic games, and four years later Rio comes and goes. Imperial does not send out a squad of athletes like say Loughborough - but our involvements feel all the more special because of that. So it is with Dave Henson soldier, amputee, PhD candidate and now Paralympic medallist (page 13). I interviewed Dave in 2014, after he'd finished his master's at Imperial. He'd tasted success at the Invictus Games, but played down his Rio prospects. That he was able to make the team was a feat in itself; winning a bronze, just incredible. The manner he did it, with a surge at the finish, was fitting for someone who never gives in. Interestingly, dealing with setbacks and intractable problems is also essential in research. Don't be surprised if at some point we see Dave making breakthroughs in his field of prosthetics design when he returns to focus on his PhD.

ANDREW CZYZEWSKI, EDITOR

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

## Bolstering EU ties

Europe's science chief came to Imperial this month to discuss the College's extensive ties with the continent.

Carlos Moedas, EU Commissioner for Research, Science and Innovation, met with Imperial's senior leadership and researchers from across the College to discuss the future of European collaboration.



The visit took place less than three months after the EU referendum result, when Imperial's President and Provost made clear that Imperial will remain a European university, engaging with policymakers at all levels.

During the discussion, academics shared their experiences of European collaboration and funding programmes.

Professor Alice Gast, President of Imperial, said: "Bringing researchers and policymakers together is of critical importance, especially after the EU referendum result. We need pragmatic ideas about the future of European research – from funding to the movement of talent across the continent. Imperial is committed to being involved in that process."

Mr Moedas advised researchers not to shy away from EU funding bids and projects following the EU referendum result, saying that for the moment "nothing has changed". The UK government has guaranteed support for Horizon 2020 and other EU-funded research projects, even after Brexit.

-DEBORAH EVANSON, COMMUNICATIONS AND PUBLIC AFFAIRS

#### Funding pledge

The Treasury has guaranteed support for research projects funded by the European Union, even after the UK leaves the EU.

The Chancellor Philip Hammond confirmed in a statement that: "where UK organisations bid directly to the European Commission on a competitive basis for EU funding projects while we are still a member of the EU, for example universities participating in Horizon 2020, the Treasury will underwrite the payments of such awards, even when specific projects continue beyond the UK's departure from the EU."

Over the last decade, Imperial academics have produced more than 60,000 research papers in collaboration with peers from other European countries. Collaborations include Europe-wide projects to tackle meningitis and HIV, efforts to remove mobile phone roaming charges within the EU, and the development of next generation electronics.

#### **NICE move**

NICE International, an organisation that advises governments around the world on improving healthcare systems, will now be based at Imperial.

The team has moved to the Institute for Global Health Innovation at Imperial, where they will form the Global Health and Development team. From their new home at Imperial they will continue to lead their flagship programme funded by the Bill and Melinda Gates Foundation and Department for International Development, called the International Decisions Support Initiative.

NICE International was established as a not-for-profit offshoot of UK body the National



Institute for Health and Care Excellence (NICE). This analyses the efficacy and cost-effectiveness of medicines, devices and treatments, and then issues guidance to NHS professionals.

Professor the Lord Ara Darzi of Denham, Director of the Institute of Global Health Innovation, said the International Decisions Support Initiative will be a great asset to Imperial: "The move is a significant opportunity to build on the enormous global impact the team have fostered over the last eight years, and to drive this forward at Imperial. Placing the team's unique expertise within a worldclass academic setting will provide new avenues for collaboration and partnership with international funding bodies and governments."

-KATE WIGHTON, COMMUNICATIONS AND PUBLIC AFFAIRS

## Millions for biomedical research

In partnership with Imperial College Healthcare NHS Trust, Imperial has received £90 million for research to develop and improve treatments for patients.

The Biomedical Research Centre (BRC) award, from the National Institute for Health Research (NIHR), was announced on 14 September and will cover five years from April 2017. The NIHR is funded by the UK Department of Health.

The NIHR Imperial BRC was first established in 2007 and this new funding will allow the BRC to continue its world-class research into cancer, heart disease, brain sciences, immunology, infection, surgery and metabolic disorders.

In addition, for the first time, the NIHR award to the Imperial BRC will fund research into gut health, with a focus on innovative approaches to disease that consider the microbiome.

Imperial's President Professor Alice Gast said: "We are proud to receive this BRC award as it shows how important our work is. Imperial researchers are at the leading edge of discoveries in healthcare, and developing them into new treatments for patients across the world."

The funded research will build on the close partnership between the College and Imperial College Healthcare NHS Trust as the founding



members of the first Academic Science Health Centre (AHSC), which aims to improve the quality of life of patients by taking research discoveries and translating them into new therapies as quickly as possible.

Imperial College Healthcare NHS Trust chief executive, Dr Tracey Batten said: "This is fantastic news for our AHSC and is a reflection of the outstanding research work undertaken by our staff across a wide range of specialties including cancer, cardiovascular and brain science, to name a few.

"Working together, the Trust and College have long been at the forefront of cutting edge research This funding will allow us to continue being a world leader in research and medical innovation."

-FRANCESCA DAVENPORT, COMMUNICATIONS AND PUBLIC AFFAIRS

#### Find out more about the BRC's work in this video: bit.ly/ImperialBRC

#### Gender balance

Imperial has become a member of the 30% Club, demonstrating its aspiration to achieve better gender balance across the organisation. The 30% Club is a global campaign which aims to create a better balance of men and women at all levels of organisations, with a particular focus on boards and governing bodies. It launched in the UK in 2010 with a goal of achieving a minimum of 30% women on FTSE-100 boards, and has since expanded its membership to include other organisations such as universities. Imperial's governing and executive body, Council, currently has a membership of

25% women.





#### **MOOCS** move

The Business School has launched its first series of MOOCs (Massive Open Online Courses) for people who are considering doing an MBA degree.

It will be the first time that Imperial is offering a free online taster of its MBA to students who have yet to meet its rigorous entry requirements.

The free courses are offered as part of a new agreement between Imperial and edX, a nonprofit online learning destination founded by Harvard and MIT that offers free courses to over 8 million learners around the world.

The new Essentials for MBA Success courses are targeted at people who are ready to start an MBA degree and want to identify any gaps in their knowledge before they undertake a full degree.

Dr David Lefevre, Director of the Edtech Lab at the Business School said: "We recognise the growing need for flexible learning programmes that cater for people's busy lifestyles. MBA programmes, and business education generally, can change lives and through the edX partnership we are enabling more people from all over the world to access our renowned world leading expertise in business education."

Each course features leading academic experts from the Business School and combines an active, social approach to learning with extensive multimedia.

Anant Agarwal, edX CEO and MIT Professor, said: "We are honoured to welcome Imperial College London to edX. With an expertise in research and teaching designed to tackle real world challenges in business, Imperial shares the edX mission to help learners everywhere gain the knowledge and skills needed to succeed in the evolving workplace."

The courses are now open for enrolment and will start on 17 October.

-LAURA SINGLETON, COMMUNICATIONS AND PUBLIC AFFAIRS

#### **Forging links**

Leaders of technological universities across the world gathered at Imperial this month to discuss collaboration, innovation and global challenges. The Global Alliance of Technological Universities, known as GlobalTech, is an international network of leading science and technology institutions. Founded in 2009, it aims to address global societal issues - such as climate change, population growth and food security - through science and technology. Imperial is a founding member of the Alliance, which counts institutions such as Caltech, NTU, and ETH Zurich among its members.

#### Leap forward

A new pilot training programme has been launched for managers working in the Finance, Operations and ICT group at Imperial. The 'LEAP' programme, 'Lead -Engage - Apply - Perform', is a five day programme for line managers focussed on how to optimise talent, communicate well. collaborate across teams and champion change. The training reflects Imperial Expectations; seven statements that shape the behaviour of all Imperial staff. Trainees will be supported by individual coaching, selfassessment, appraisals, as well as master classes.

#### Harnessing talent

The latest cohort of staff from Imperial's black, Asian and minority ethnic talent development programme gathered this month to celebrate their journey and share their experiences.

For the past four months staff have been taking part in the IMPACT programme, which includes specialised workshops and project work, as well as access to mentoring and networking opportunities. It aims to support staff who wish to further their careers at Imperial by developing and fine tuning both new and existing skills and talents.

We caught up with three members of this year's cohort following the programme's conclusion earlier in September.

Kevin Isen, Project Manager in ICT said: "I saw IMPACT as an opportunity to develop my management skills and to see where the gaps were. It's different from a lot of the other courses offered by the College as it encompasses the full skillset rather than focusing on one particular skill.

"Through IMPACT I released that I would like to be part of the strategic planning of projects. At the moment I'm just given my projects – I'm not part of the initial discussions when the project is being scoped out."

Mirabell Nsofor, Contracts Officer in the Research Office added: "There is a lot of scope for positive change at the College in terms of fulfilling the College's strategy "I saw IMPACT as an opportunity to develop my management skills and to see where the gaps were."

and Imperial Expectations – creating a more open, fair and inclusive organisation. The workforce here is quite diverse - different cultures, different backgrounds – and this contributes to the success of the College."

-ELIZABETH NIXON, COMMUNICATIONS AND PUBLIC AFFAIRS



### **Doors open**

A new visa pilot scheme will make moving to the UK easier for international students who win a place on Imperial Masters programmes.

The Tier 4 Visa pilot scheme, launched this week by the Home Office, supports applications from talented students from across the world who wish to study at Imperial and three other UK universities.

Those who achieve places on Imperial's one-year Masters courses will gain access to a streamlined visa application process. Students will also be granted an additional six months on their UK visa after their course ends, allowing for extra time to find work or pursue further study and research.

Imperial joins the universities of Oxford, Cambridge and Bath in piloting the scheme, which will affect visa applications decided on or after 25 July 2016. It is open to students commencing their studies in 2016/17 or 2017/18.

Imperial's President Professor Alice Gast said: "International students are a priority



for Imperial and they add to our diverse community in myriad ways. They bring creative, entrepreneurial and academic excellence.

"This pilot scheme is an encouraging step forward. The ability to stay on for six months will bring benefits to the students and to the country as our talented graduates will be able to pursue their entrepreneurial ideas, further study or add to the UK's talent pool."

-ANDREW SCHEUBER AND DEBORAH EVANSON, COMMUNICATIONS AND PUBLIC AFFAIRS

## Peace of mind

New scheme to launch in 2017/18 will allow students unable to find a UK based guarantor to use the College in rental agreements.

The pilot scheme will see the College act as a legal guarantor underwriting rent obligations for students renting in the private sector who are not able to provide a suitable guarantor themselves.

Many students do not have someone based in the UK who is able to act as a guarantor – whether international students whose families are based overseas, or home students from a low-income background.

The pilot will be open to all returning undergraduate students (first years already have guaranteed accommodation in halls of residence).

Imperial's Provost, Professor James Stirling, said: "The College is committed to providing high quality accommodation to all its first year undergraduate students but we've

always known that after this securing accommodation can sometimes be

difficult, particularly for international students, because of the requirement for rent guarantors.

"In launching this pilot we're pleased to be able to help students who would otherwise be faced with expensive upfront costs when renting. I'm sure this scheme will be greatly welcomed by our student community."

The scheme is being launched following recommendations from Imperial College Union led by the 2015-16 Deputy President (Welfare) Jennie Watson, looking at the challenges students face in securing private accommodation once they leave College accommodation after their first year.

Emily-Jane Cramphorn, Deputy President (Welfare), Imperial College Union said: "The scheme will make a real difference to undergraduate students –

> another example of what we can achieve when we work together with the College on behalf of our student community. I will be looking to build on this approach over the coming months."

> > –JON NARCROSS, COMMUNICATIONS AND PUBLIC AFFAIRS

#### >> **NEWS**update 5

## media mentions



## First look inside new £650 million superlab

EVENING STANDARD ► 01.09.2016

The Francis Crick Institute, a complex one million square feet in size next to St Pancras International station, will become Europe's biggest biomedical research institute as scientists help fight some of the 21st century's deadliest diseases, the Evening Standard reports. More than 100 labs inside the 12-storey glass-fronted building will help scientists investigate the basic biological processes underlying human health. By the New Year there will be 1,250 scientists and 250 support staff at the Crick. The institute is funded through the Medical Research Council, Cancer Research UK, Wellcome, University College London, Imperial College London and King's College London (see page 11).

#### Controversial pill that could 'cure' alcoholism

*THE GUARDIAN* ► 16.09.2016

France is ground zero for clinical research on Baclofen, a drug said to eliminate alcohol cravings. The medication will soon be more accessible than ever – but not everyone thinks that's a good thing. Anne Lingford-Hughes (Medicine), Professor of Addiction Biology at Imperial, supports the idea that the more severely dependent on alcohol you are, the more likely you are to get benefits from Baclofen. But more data is needed she adds, pointing to concern over drug/alcohol interaction, as well as potential overdoses. None of her colleagues in the UK, she says, would prescribe as high a dosage as is currently prescribed in France.

#### Rosetta's end could tell us how the solar system was formed

*iNEWS* • 18.09.2016

After 12 years in space, the Rosetta spacecraft is poised to crashland on the comet it has been orbiting for two years – heralding a new era in our understanding of where we came from. "Comets are so fascinating because they are pristine material from which the rest of the solar system formed," Chris Carr (Physics), who built the instruments measuring the plasma coming off the comet. Speaking to *iNews*, Dr Carr says so much data has been collected that it could take 30 years to get to the bottom of it all.

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"I can't say too much, but people involved with the mission are preparing research papers that are going to be very high impact," he said.

## Green light for £18bn power station at Hinkley Point

EVENING STANDARD > 15.09.2016

Theresa May averted a major bust-up with China today as she finally gave the green light to the £18 billion Hinkley Point nuclear power station, the *Evening Standard* reports. Lib-Dem Lynne Featherstone said: "Hinkley is now very bad value for money for the British taxpayer and should be abandoned immediately." But Dr Simon Walker, head of the nuclear research group in mechanical engineering at Imperial said: "The Government had to stick with the previously agreed price otherwise EDF may have walked away from the deal. "All low-carbon electricity is likely to be more expensive than that produced from fossil fuels. Hinkley is no exception to this."

#### awards and honours



COLLEGE Fulbrightest and Best

Two Imperial students awarded prestigious Fulbright Scholarships allowing them to continue their education in the United States. Laura Connell and Benjamin Miller are two of the 46 British grantees that make up the 2016-17 Fulbright Cohort. Laura, currently an MPhil student (Medicine), will be studying at Harvard Business School for a Masters of Business Administration (MBA) with a special focus on healthcare technology and services. Benjamin, who graduated from the College in 2012 with an MEng in Biomedical Engineering, has will study for a PhD in Bioengineering at the Massachusetts Institute of Technology (MIT).

#### engineering Engineering success

Imperial is celebrating the election of three more researchers to the Fellowship of the Royal Academy of Engineering. Professors Ahmed Elghazouli (Civil and Environmental Engineering), Ron Hui (Electrical and Electronic Engineering) and William Jones (Mechanical Engineering) have been formally elected this month. Becoming a Fellow is one of the highest honours that an engineer can receive in the UK and Fellowship is awarded in recognition of outstanding and continuing contributions to the profession. The new elections take the number of Imperial Fellows of the Royal Academy of Engineering to 84.



#### NATURAL SCIENCES Head space

Professor David Southwood has been appointed to a top role the UK Space Agency as it navigates Brexit and celebrates Tim Peake's success. Professor Southwood is a Senior Research Investigator (Physics) focusing on solar-terrestrial physics and planetary science. He now takes on a new role as Chair of the Steering Committee for the UK

Space Agency, which advises the agency on its strategic direction. Listen to an interview with David here: **bit.ly/spacehead** 

## Hope for Huntington's disease



A single injection of a new treatment has reduced the activity of the gene responsible for Huntington's disease for several months in a trial in mice.

Huntington's disease is a genetic disorder that affects around 1 in every 10,000 people and damages nerve cells in the brain, leading to neurological symptoms affecting movement, cognition and behaviour. It is caused by a mutant form of a single gene called Huntingtin.

Now, researchers at Imperial have engineered a therapeutic protein called a 'zinc finger' that targets mutant copies of the Huntingtin gene, repressing its ability to express and create harmful proteins.

Project lead Dr Mark Isalan (Life Sciences) said: "We are extremely excited by our latest results, which show a lot of promise for treating Huntington's disease.

"However, we still need to do a lot of work first



Huntington's brain

to answer important questions around the safety of the intervention.

In a previous study in mice, the team had curbed the mutant gene's activity for just a couple of weeks. By tweaking the ingredients of the zinc finger in the new study they were able to extend its effects to several months, repressing the disease gene over that period without seeing any harmful side effects. This involved making the zinc finger as invisible to the immune system as possible. The team are now working on ways to lengthen the repression period even further.

"If all goes well and we have further positive results, we would aim to start clinical trials within five years to see whether the treatment could be safe and effective in humans. We are urgently looking for industry partners and funding to achieve this," Dr Isalan said.

-HAYLEY DUNNING, COMMUNICATIONS AND PUBLIC AFFAIRS

## Q

#### Ticking time bomb

Huntington's usually only begins to show symptoms in adulthood. There is currently no cure and no way to slow the progression of the disease. Symptoms typically progress over 10-25 years until the person eventually dies. The mutant Huntingtin gene is thought to cause toxic levels of protein to aggregate in the brain. Preventing the activity of this gene could theoretically halt the disease, but this has been difficult to achieve.

The gene is present in many different cell types in the brain, making it difficult to target, and every patient also has a non-mutant copy of the gene, which scientists need to avoid targeting with any intervention in order to prevent unwanted side effects.

The zinc finger protein sticks to the DNA of the mutant Huntingtin gene and turns off the gene's expression. "We don't know exactly how the mutant Huntingtin gene causes the disease, so the idea is that targeting the gene expression cuts off the problem at its source – preventing it from ever having the potential to act," said Dr Isalan.

We are extremely excited by our latest results... If all goes well we would aim to start clinical trials within five years."

## Potential energy

Researchers have created an interactive web tool to estimate the amount of energy that could be generated by wind or solar farms at any location.

The tool, called Renewables.ninja uses 30 years of observed and modelled weather data from organisations such as NASA to predict the wind speed likely to influence turbines and the sunlight likely to strike "We built our solar panels at any point on the models so Earth during the year. These they can be figures are combined with easily used manufacturer's specifications by other to give an estimate of the power researchers output that could be generated by online." a farm placed at any location.

It aims to make the task of predicting renewable output easier for both academics and industry, as co-creator Dr Ian Staffell (Centre for Environmental Policy) explains.

"Modelling wind and solar power is very difficult because they depend on

complex weather systems. Getting data, building a model and checking that it works well takes a lot of time and effort.

"If every researcher has to create their own model when they start to investigate a question about renewable energy, a lot of time is wasted. So we built our models so they can be easily used by other researchers online."

To test the model, Dr Staffell and colleagues used Renewables.ninja to estimate the productivity of all wind farms planned or under construction in Europe for the next 20 years. One finding was that taller turbines placed further out to sea would allow three times as much energy to be produced by wind power in Europe compared to today.

They also found that even though Britain is not the sunniest country, on the best summer days solar power now produces more energy than nuclear power.

-HAYLEY DUNNING, COMMUNICATIONS AND PUBLIC AFFAIRS

## New gesture technology could lead to more realistic virtual worlds

Dr Tae-Kyun Kim (Electrical and Electronic Engineering) is in charge of one of the world's leading labs in human-machine interface technology. His latest breakthrough is the development of prototype 3D hand-gesture interface technology.

#### What is a hand gesture interface?

The technology consists of a depth camera, which records hand movements, and relays information to a computer where a program creates a diagram of the hand. Each hand movement is plotted as a set of 3D coordinates on the diagram. If a coordinate on the diagram moves it is interpreted by the computer as a command. This enables the user to control a computer by simply moving. Many gamers will know the Microsoft KINECT technology – a system that can record body movements in real-time to control games.

## What are the drawbacks with the technology?

They can only recognise a limited set of hand movements and the information captured is only displayed in two dimensions. In the real world, we are constantly using our hands in complex configurations to communicate. These gestures can be rapid and varied. To enable users to have more complex interactions with this technology then hand gestures need to be captured in 3D.

## How is your research group addressing this challenge?

We've developed technology that recognises full hand movements from 21 coordinates on the hand – capturing different articulations and viewpoints of the hand in 3D, which means that we can detect much more complex hand gestures. We use machine learning techniques that enable computers to learn and predict rapid hand movements in real-time with minimal instruction from us.

## What are the implications for your breakthrough?

In the future, we could create environments in virtual or augmented reality that are much more realistic for the user. Imagine putting on a virtual reality headset that detects every subtle hand gesture you make, so that you could play a virtual instrument like a violin. Just as we interact with objects, people and the environment in the real world, this technology could make our virtual encounters just as real.





### **Sleeper cells**

A new study suggests it may be possible to predict which people infected with TB will develop the disease.

Scientists have found evidence of a separate 'subclinical' stage in tuberculosis (TB) infection, where people have no symptoms but are more likely to develop the full disease.

The results offer hope in controlling spread of disease, says study co-author Professor Robert Wilkinson (Medicine): "People ill with TB can infect up to 10–15 other people through close contact and if we can identify people in the transition stage, before they transmit the disease,

that's potentially a game-changer in terms of TB eradication."

Conventionally, TB infection is classed into two stages: 'latent' and 'active'. People with latent infection test positive for an immune response to the TB bacteria, Mycobacterium tuberculosis, but do not have the symptoms of active disease.



Around 10 per cent of people with latent TB infection progress to active disease if left untreated. However, currently there is no accurate way to predict which infected individuals will develop the disease.

The team used a combination of medical imaging techniques to study the lungs of the 35 patients who had latent TB.

Ten out of the 35 participants with latent TB infection had lung abnormalities – or 'hot spots' consistent with a transitional or subclinical stage of TB progression. The other 25 participants had no hot spots and showed no signs of disease progression.

Over the course of the study, four of the 10 patients with lung abnormalities developed fully-fledged TB symptoms and started full treatment for TB.

Professor Wilkinson said: "These high-tech images provide us with new ways to evaluate whether treatment has cured an infection. Most importantly, it will show whether we need to treat for the full recommended duration of six months, as most patients find the standard six months regimen of two or three different antibiotics very challenging."

The researchers are also investigating cheaper, simpler methods of identifying subclinical TB, for use in sub-Saharan Africa, where latent TB is rife.

-KATE WIGHTON, COMMUNICATIONS AND PUBLIC AFFAIRS

1.5 million

die of TB annually

2 billion

estimated number of people with latent TB

## FOWER for the people

This month the College installed a new efficient power plant that will provide

electricity and heating across the South Kensington Campus

Imperial houses some of the most advanced, energy-hungry equipment in all of London. There's 'Cerberus', the UK's most powerful nonmilitary laser, based in the Physics Department; the Data Centre with rows upon rows of high performance computing (HPC) servers that need 24-7 power and cooling; and across College there are freezers full of important biomedical samples and cells.

This means that planning for the College's energy and heating demands is a particularly... demanding task, which falls largely to a team of engineers and experienced project managers in Estates Facilities.

Back in 1999 it was decided that the College should replace the old boilers that burned heavy oil to heat water and also look for a supplementary source of electricity to work in concert with the grid. This was achieved with the installation of a Combined Heat and Power (CHP) plant, which has recently been replaced with a new, more efficient design.

Andrew Caldwell, Energy Manager in Estates Facilities, explains the thinking behind CHP.

"Typically in your home, you will get electricity from the National Grid which might for example be generated in gas-fired power stations in the Midlands, as is the case for many homes in London. When the plant burns gas, all the heat goes up the chimney and is wasted – and the electricity is then transmitted long distance. So overall, from the fuel source to your house, it's about 40% efficient.

"Given the College's very large demand for heat and power, we really need to be employing more efficient solutions and CHP fits that bill as it generates electricity for us

to use on site but also captures most of the waste heat from burning gas which we can use for heating buildings, producing hot water and generating steam for autoclave facilities. Crucially, we think our new system will be around 80-90% efficient overall."

Central to the new CHP project has been data gathering and metering across the site. Before any new energy solution was considered it was important to get a more detailed picture of how the College uses energy and heat and at what times. Andrew and team completely re-designed how they capture, store and output data – with a new system and software now rolled out to most of Imperial's Campuses.

"All our buildings are controlled by one central building controls system that turns on fans, pumps, and so on. It's very big and very complex. We did a lot of work optimizing those controls; essentially making sure that we turn things off when there's no requirement and

> reduce the amount of air going to labs when they are empty for instance. We've also done work in all the plant rooms to change how that system interacts with the building."

Having set the system up and collected data for an extended period they then fed into the College's 2014 Site Energy Strategy carried out in collaboration with engineering consultants Arup.

The strategy examined a broad range of technologies for potential use at College, including solar photovoltaics (PV), biomass, borehole aquifers, and CHP, and also factored in external variables such as projected gas prices.

"CHP generates electricity but also captures most of the waste heat from burning gas. We think our new system will be around 80-90% efficient overall."



The strategy board then decided the best thing to do practically, economically and in terms of curtailing carbon emissions for the next 20 years.

It quickly became clear that some options would simply not be feasible for the South Kensington site – for example generating our energy from biomass sources would require the delivery of 17 articulated lorry-loads of biomass per day to the campus with a substantial increase in traffic.

The recommended course of action was the installation of the latest CHP technology – in combination with other efficiency gains, for example replacing fluorescent lighting with LEDs, something that is already happening at College.

The new CHP plant will fire up in October,

ready for the winter season. Andrew says that conservative estimates suggest the engines will meet around 75% of the South Kensington Campus' electricity requirements and a high percentage of waste heat will be utilised in meeting the campuses heating requirements. Indeed, there could be a surplus of heat, and the team is looking at ways of maximizing that capability.

Currently there are water and steam networks which service radiators, hot water taps, autoclaving, cooling absorption chillers and air handling units. The team are considering extending the heat network under Exhibition Road to Princes Gardens, encompassing Halls of Residence and Ethos – which, with its constantly running showers, is major heat user.



#### Engine Model: 2 x General Electric, Jenbacher Type 624 Features: 2-stage turbocharger for improved efficiency and flexibility

#### **Greater independence**

Imperial's CHP plant is one the largest in central London – but it's not alone. The Shard building has its own CHP plant, as does Citibank for backing up its vital financial servers. Meanwhile, more individual homes and local communities are looking for ways to achieve a greater level of energy independence, particularly with smallscale, off-grid renewables such as solar photovoltaics.

Reporter asked Professor Timothy Green, Director of the Energy Futures Lab at Imperial, if this trend for decentralization is likely to continue apace. "London and the

Southeast are short of generation as there are not many power stations



in the area, so we import much of our energy. "A lot of organisations are looking at

on-site generation from renewable sources, such as solar PV – but it's not necessarily easy in city centres; you've got tall buildings with large occupancy and a relatively small roof space, so PV helps but it's hard to make a big contribution. I think this is all part of a move to a more decentralized electricity system and energy system more generally."

Nevertheless, Tim believes we will retain big power stations – ideally alongside a more advanced grid that can connect large scale gas, nuclear, wind and solar so they can better complement each other at different times of the day. If it's not a very windy evening you can fall back on nuclear for example to cook dinner.

As part of the ongoing dialogue about our energy requirements he says that community groups can have an important role to play – and cites the example of his own home village of Balcombe in West Sussex. Following a successful test bore for shale gas a few years ago, the village saw some of the biggest protests in the UK against

"People started to think about where their energy came from – not just assuming it's over the horizon somewhere."

extracting shale gas using 'fracking'. "Ultimately it made many people in the village think about where they got their energy from and what sort of energy they wanted to use – perhaps they were against exploiting shale gas, but what were they for?

"So a group of people set up a community group called Repower-Balcombe, which started putting up solar PV on the roof of the school and some farm buildings – just trying to get toward energy self-sufficiency. But they quickly realised that PV works well works in the middle of the day but that they would need to import power to sell to residents in the evening. So what would be the best option? A contract with a nearby wind farm or gas-fired power station?

"The important point is that people started to think about where their energy came from – not just assuming it's over the horizon somewhere. Community energy starts to engage people in that debate about what we're in favour of – and we need to do that because there are some big transitions coming."

# Learning Curve

Meet Imperial's new Vice Provost for Education, Professor Simone Buitendijk

Leading educator and physician Professor Simone Buitendijk joined the College last month as Vice Provost (Education), having moved from the Netherlands where she performed a similar role at Leiden University as Vice-Rector Magnificus, with responsibility for education and student affairs.

When I ask if she misses the 'Magnificus' title from the 16th Century institution, Simone bursts into an infectious laugh that's a feature throughout our interview.

"Friends in the US and the UK always used to have a lot of fun with that title; it has such a Harry Potter ring to it doesn't it? But having 'Imperial College London' embossed on my business card will more than make up for it though," she says.

We can do a lot better in ensuring students understand that they are in a research intensive university and engaging them in research." Simone's obvious warmth, sense of humour and empathy with students will no doubt stand her in good stead for her role in leading Imperial's vision for education and student experience.

As a globally recognised researcher in public health, Simone is also well placed to help deliver the College's Strategy 2015–20, which reaffirms Imperial's mission to achieve enduring excellence in research and education for the benefit of society.

#### **Building bridges**

But how best to bridge these sometimes disparate worlds of teaching and research?

"That's the million dollar question that all research-intensive universities are trying to answer and I'm afraid, as a group, we're not doing a good enough job," Simone says.

"We can do a lot better in ensuring, firstly students actually understand that they are in a research intensive university, but also engaging them in research. For example, there are ways of letting students practice with actual research and with databases."

Simone draws on a wealth of experience in education and says there are numerous types of great teaching and different ways of defining it. She does though emphasise the need for a positive experience on both sides – a partnership with a genuine connection. That can come through traditional teaching methods, but also through online and blended learning.

"Innovation and online learning is one of my themes, but it should never be a goal in and of itself – it's a tool. You need to make sure it enhances the connection, for example using classroom technology with handheld devices, where the teacher has a dashboard and can immediately see students' follow-up questions and answers."

#### Challenges ahead

The challenges inherent at Imperial, as an elite university trying to maintain research excellence and improve teaching, was something that actually appealed to

#### Simone's CV

- Vice-Provost (Education
  Imperial College London
- Vice-Rector Magnificus, in charge of Education, Student Affairs and Diversity Leiden University
- Professor of Women's and Family Health Leiden University Medical Center
- Professor of Maternal Health and Midwifery
   Amsterdam University Medical Center (AMC)
- Head Division of Child Health

Simone. Indeed, she doesn't shy away from one of the more specific challenges, which is the recent dip in National Student Satisfaction (NSS) scores. Whatever the root causes of the drop, she says the first step is to listen more to students and try to better understand the student experience across the board.

"Many students in their qualitative reviews complained that they are not being seen and heard. It's important for people in positions of responsibility like me to listen empathically

to both staff and students and find out where things aren't going so well and how we can improve"

As part of its response to this year's NSS results, the College will be working with Imperial College Union to review the results in detail and to develop a joint action plan to address problem areas identified. The College also plans to introduce new teaching initiatives with a focus on student feedback, research experience and entrepreneurial opportunities.

Indeed, Simone points to the Enterprise Lab, an exciting new facility in the basement of the Library for students who have entrepreneurial aspirations or just want to enhance their workplace skillset (see page 12).

"I'd actually like to expand the definition of entrepreneurial; we should offer opportunities for students who want to change the world in different ways – working with NGOs or improving healthcare delivery in different regions for example."

Earlier in the year, Simone herself went on an enterprising mission to South Africa and Mozambique alongside colleagues at Leiden – to explore new opportunities for delivering online learning.

Closer to home, Simone is slowly settling into London life. With the unseasonably warm mid-September weather she's been walking from her home in Earl's Court into the College most days.

"I'm assured by my colleagues it almost certainly won't last, so I'm making the most of it while I can!"

## inside\* story

### mini profile

## Malcolm Irving

Professor Malcolm Irving FRS is Associate Research Director (Partner University Liaison) at the recently completed Francis Crick Institute. A leading academic at King's College London, he represents the three university partners (King's, Imperial and UCL) at the Crick.

#### You're a biophysicist –

how did that come about? I was a physics undergraduate but by the end of my degree I decided that the really exciting bits of science were in biology. So I did a master's degree in physiology at UCL, followed by a PhD. After posts in the US, I ended up at the Cell Biophysics unit at King's set up by John Randall who led the King's team that worked on the structure of DNA. His deputy Maurice Wilkins shared the 1962 Nobel Prize with Watson and Crick. Interdisciplinarity is not new of course, but the scale has changed; the reach and breadth is so much bigger now.

Did you always believe that interdisciplinary research could be painted on a larger canvas? Yes, but that idea was already in the original proposal and stems from the MRC's realisation that their home at Mill Hill, being far away from any hospital, was not the



best place to build links with experimental medicine and clinical applications. When King's and Imperial joined UCL it was already on the agenda to create two kinds of interdisciplinary partnership – one at the clinical interface and another at the physical sciences interface. The universities are key players in both interfaces.

#### How do you interpret your role at the Crick?

What we clearly need is to facilitate interactions between the universities and the Crick - and the liaison job is to a large extent trying to bridge the cultural and organisational gaps that exist. The Crick as a core-funded, independent institute feels a lot different from the universities, and group leaders at the Crick have a slightly different approach to their research than typical PIs in universities. I sit at the Crick table and bring the university perspective - and it works the other way round as well.

## Imperial celebrates 2016 academic promotions

Imperial has recognised the hard work and dedication of 124 of its academics with the 2016 round of promotions in the Faculties of Medicine, Engineering and Natural Sciences.

This year, the Provost's Board has approved the introduction of a new Professor of Practice title, which recognises individuals who have made an outstanding contribution to education, research or leadership outside of the established criteria for a professorship.

Professor Nigel Gooderham, Assistant Provost (Academic Promotions), said: "I am fortunate to see the development of our academics as they progress from lecturer to professor. It is a privilege to work alongside these individuals and a pleasure to see them move successfully through our promotions process."

Below, we meet three of the newly promoted staff.

#### Professor Anne Dornhorst, Imperial Centre for Endocrinology

Professor Anne Dornhorst, a leading diabetes expert, is one of the first members of staff to become a Professor of Practice. She first joined the College in 1995 as an honorary senior lecturer and she is also a diabetes consultant at Imperial College Healthcare NHS Trust. Her key research area is diabetes during pregnancy, which she believes is a driver of the global obesity crisis. Professor Dornhorst also mentors female doctors on balancing career with family life.



"Having a career and a young family is certainly not easy – when I was a junior doctor I would race home to read my two sons a bedtime story, then head back to the wards once they were asleep. Becoming Professor of Practice is an enormous honour, and will hopefully show women at the early stage of their career that a Professorship is possible."

#### Dr Tae-Kyun Kim, Electrical and Electronic Engineering

Dr Tae-Kyun Kim has been promoted to the role of senior lecturer. His research is in the field of computer vision and learning, where he is developing the next generation of hand gesture recognition technology (see page 7).

Dr Kim said his promotion is in part a reflection of the great work of his research group: "I've stuck to the advice that was given to me, which is to recruit people who can

.....

contribute their ideas to the group so that others can benefit. I also think it is always important to encourage team spirit, open-minded discussions and collaborations to get the most out of your group."

#### Dr Marina Kuimova, Department of Chemistry

Dr Marina Kuimova has been promoted to Reader in Chemical Physics. She uses fluorescence imaging to investigate biological cells and tissues, with applications both in medicine and in pure research.

On her promotion, Dr Kuimova said: "I am delighted to have received this recognition from my peers. Being an academic at Imperial is a fantastic opportunity for

an academic at Imperial is a fantastic opportunity for anyone fascinated by research. This promotion comes very shortly after my return from maternity leave and at this critical time spurs me on and motivates me to strive for even more in the future."



For a full list of academic promotions visit: **bit.ly/promotions2016** 

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## Great minds gather

Aspiring innovators and entrepreneurs at Imperial will soon have a new place to meet, develop ideas together and get advice and support, with the imminent launch of the Enterprise Lab.

The Lab is based in a brand new facility in the basement of the Library in the Sherfield Building. Once fully up and running it will offer state-of-theart digital tools, techniques and training to help students build better business plans and improve their performance at pitching to potential clients, partners or investors.

It will not only help nurture budding entrepreneurs, but also give students the knowledge, skills and experience to compete for the best jobs and make a real impact in companies that hire them as some of the best paid graduates in the country.

Bruno Cotta, formerly Director of Enterprise Strategy in the College's Enterprise Division (and Imperial Engineering and Business School alumnus), came up with the idea for the Lab and will head the new support team.

He said: "Our aim is to maximize the impact of Imperial's unique multi-disciplinary and enterprising culture in which every student is encouraged to translate their ideas into practice – whether it's through innovation in organizations they join, or entrepreneurship in organizations they create themselves."

The Enterprise Lab will also support a new Imperial Horizons course in innovation and entrepreneurship, host the pioneering Althea-



Imperial programme for aspiring female students with new business ideas, as well as the growing the 'Create' community of technology start-up teams and Venture Catalyst Challenge.

Ultimately, Bruno hopes the Lab will bring staff and students from all disciplines together with Imperial's global community of alumni and friends, partners and businesses – stimulating and supporting the development of a whole new generation of innovators and entrepreneurs.

"We look forward to welcoming past, present and future students to drop in to the Enterprise Lab, whether it's just to find out more, join us for coffee, or get started on their mission to change the world!"

## Summer of start-up successes for alumni

Imperial's enterprising alumni have pushed the boat out this summer, in more ways than one, with ex-students driving three major technology start-up successes in the space of as many months.

#### JUNE

Magic Pony, an Al start-up co-founded by Computing alumnus Zehan Wang was acquired by Twitter for \$150m. Using machine learning techniques, Magic Pony creates high-quality videos from grainy footage.



#### AUGUST

Ocean data gathering service Saildrone raised \$14m in a series of funding investments, including from Google pioneer Eric Schmidt. Founded by alumnus Richard Jenkins, Saildrone deploys fleets of unmanned, autonomous sailing drones to monitor weather, fish populations, ocean acidification and climate change.

#### SEPTEMBER

The mobile advertiser Avocarrot, founded by Information Systems Engineering alumus George Eracleous, was acquired by Glispa Global Group for \$20M.

avocarrot

## Ship shape: shipping containers as farms of the future

An Imperial design engineering student has created a new hydroponic farming system to utilise wasted space in the shipping container industry.

Every year millions of tonnes of goods are shipped across the world in shipping containers. Global trade patterns mean that whilst these 20,000,000 containers set off packed full of goods, many make their return journey empty.

Imperial design engineering student Phillipe Hohlfeld has developed Growframe, a collapsable hydroponic farm that can be set up to grow crops in otherwise empty shipping containers on their return journeys.

When set up in a 20 foot container Phillipe estimates that Growframe will be able to produce around \$1,500-\$2,000 of crops in a journey. When not in use it collapses to 1/10th of its original size making it easy to transport on the outward journey before being put to use on the return trip.

"For routes between China and every other continent so many of the containers go back empty because so many goods are produced in China," Phillipe said. "The empty container was an opportunity. There's 12sqm of land in a container, it's essentially free, it's sealed and you can do anything you want in it."

"I wanted to create something that could exist autonomously over three weeks in the sealed container and help fulfil a need in China," Phillipe added. "China is having a lot of problem with crops due to pollution, so Growframe could provide a solution there."

The product is currently in its testing stage, having produced successful on-land harvests of vegetables such as pak choi, lettuce and beansprouts. Phillipe is currently working to take Growframe to sea for its next big test.



## Imperial at the Rio games

Celebrating the College's success in the Olympic and Paralympic Games.

#### The sound of silver

Celebrations were held last month for returning Olympians from Imperial's Boat Club (ICBC), who clinched silver at this summer's Rio games. Imperial alumnus Mel Wilson and fellow ICBC rower Zoe Lee took the silver in a historic win in the Women's Eight event – Team GB's first ever medal in that race.

Mel, Zoe and the rest of the held off Romania on the line, finishing a nail-biting 0.12 seconds ahead. The US, who were favourites in the competition, retained the gold they won in both 2008 and 2012.

Imperial's Provost Professor James Stirling hosted the event to congratulate the returning Olympians, as well as recognise everyone at ICBC who contributed to their success.

Professor Stirling said: "The Olympics lifted the whole nation's spirits this summer with two fantastic weeks of sport. We're so proud of Mel and Zoe for being part of that success.

"Mel's medical degree and Zoe's PhD are difficult things to achieve in themselves but to the couple that with the intensive training needed for the Olympics is an incredibly impressive feat."

Mel said: "For every athlete at the games, there's a huge team around them and both the College and the boat club were a huge part of that for us. The margins between silver and bronze were so small that every bit of support we've had made a difference."

#### **Brilliant Bronze for Dave**

Bioengineering PhD student and Army Captain Dave Henson MBE won a bronze medal in the T42 200m at the Paralympic Games in Rio. PhD student Dave,

who previously completed an MSc at the College, contributed to team GB's record medal rush at the games with a strong finish in the 200m final to join compatriot and gold medallist Richard Whitehead on the podium.

Dave said: "It was tight for the medal – I wasn't convinced I'd got it but I carried that belief all the way with me during the race."

He added: "Balancing a PhD with being



a full-time athlete has definitely proven quite challenging, but Imperial and the staff in the Department of Bioengineering have been incredibly supportive of my sporting ambitions."

Before joining the College, Dave served in the British Army with the 22 Engineer Regiment. It was during military service in Afghanistan that he was injured by an improvised explosive device (IED). Dave's research focuses on issues faced by amputees and is supervised by Professor Anthony Bull, Head of the Department of Bioengineering.

"Dave is not only an inspiration to his research group colleagues, but also to the whole Department of Bioengineering," Professor Bull said. "He is a successful athlete, PhD student and father, but also contributes far more widely in advocacy and support for others who have been severely injured in conflict.

"We are proud to be associated with Dave Henson and look forward to him returning (with his medal) and spending a little more of his precious time on his research!"

> -JON NARCROSS COMMUNICATIONS AND PUBLIC AFFAIRS

#### **Enabling athletes at Rio**

British paralympic swimmer Andrew Mullen was propelled to a silver medal at Rio using a starting block aid developed by students at Imperial.

Andrew, who swims the S5 category, has been working with the students over the past few years to develop a number of innovative devices to help him in competition, training, and generally getting around.

He took the starting blocks in the S5 50m Backstroke using a device developed and honed by Imperial students Kathryn Sayer, Andrew Goodhead and Pui Sze Sham, who worked on the project as part of Imperial's summer Undergraduate Research Opportunities Programme (UROP) under the supervision of Dr Ian Radcliffe (Bioengineering).

Backstroke swimming events begin in the water, with competitors resting their submerged feet on a ledge and reaching up to set of bars on the poolside block to achieve a poised position from which they launch backwards into the water. It presents a unique set of challenges to Paralympic athletes.

"Andrew has some grip with his stumps but is not able to reach upto those bars which are quite high on the poolside out of the water," says Dr Radcliffe. "So he started using these luggage straps to wrap around the block then grip on, but they kept breaking. The students came up with this simple but elegant system, using adapted horse riding stirrups, climbing carabiner and reins. Crucially it's easy for Andrew and his coach to set up and adjust."

Andrew has also been involved with Imperial student projects to help with moulded arm paddles for swimming training sessions; a gimbal rig for helping him do squat lifts in the gym; and a pedaldriven wheelchair prototype to help him get around.



### obituaries

#### **BEVERLY GRIFFIN**

Beverly Griffin, Emeritus Professor of Virology died on 13 June 2016, aged 86. Her friend and colleague, Professor Paul Farrell (Medicine) pays tribute.

Born in 1930 in Louisiana, USA, Beverly was an alumnus of Baylor University, where she gained a Bachelor of Science in 1951. She went on to receive doctorates from the University of Virginia in 1955 and the University of Cambridge in 1958.

In 1968 Beverly began work at the Laboratory of Molecular Biology (LMB) in Cambridge with Fred Sanger, before joining the Imperial Cancer Research Fund (ICRF) laboratories at Lincoln's Inn Fields in 1972. She made the move to the Royal Postgraduate Medical School at Hammersmith Hospital in 1984 to become Professor of Virology, where she worked until her retirement in 1996.

Professor Griffin's most notable achievement at the ICRF was establishing the sequence of the mouse polyomavirus. At its completion in 1980, it was one of the longest pieces of DNA sequenced at 5,293 base pairs. Beverly's work expanded into the study of the Epstein-Barr virus (EBV) – the causative agent of a number of cancers. Beverly was 'ahead of her time' in many ways.

It was partly a shared interest in EBV research that led Beverly to meet her future husband, the Nobel laureate Tomas Lindahl. He later joined her in London, where he is now an Emeritus Scientist at the Francis Crick Institute.

Beverly was also a great supporter of Professor Elizabeth Molyneux's work treating childhood cancers in sub-Saharan Africa. A particular focus was Burkitt's lymphoma, another condition caused by EBV.

Alongside her own work, Professor Griffin helped train and inspire a new generation of virologists. Those to have worked under her include Dr Alison McBride, head of the DNA Tumor Virus Section at the Laboratory of Viral Diseases in Washington DC, and Professor Dorothy Crawford, who was Robert Irvine Professor of Medical Microbiology at the University of Edinburgh.

She was a very thoughtful, generous and inspiring individual and will be greatly missed.





Staff featured in this column have given many years of service to the College. Staff listed celebrate anniversaries during the period 1 April–21 July 2016. The data are supplied by HR and correct at the time of going to press.

#### 30 years

- Dr Raul Margara, Emeritus Reader in Reproductive Biology, Surgery & Cancer
- Alan Raper, Technician, Physics
- June Woodward, Tuition Fee Administrator, Finance Division
- Dr Fariba Sadri, Senior Lecturer, Computing
- Brendon Maguire, Customer Solutions Lead, ICT
  Professor Michael Kerney, Emeritus Reader, Earth Science and Engineering
- Jacqueline Gardner, Accounts Payable Assistant, Finance Division
- David Fullerton, Functional Business Systems Specialist, ICT

#### 40 years

- Professor Dame Julia Higgins, Senior Research
  Investigator, Chemical Engineering
- Professor Peter Harrison, Professor of Mathematical Modelling, Computing

#### 50 years

- Professor George Webster, Distinguished Research Fellow, Mechanical Engineering
- Dr John Nolan, Honorary Senior Lecturer, Earth Science and Engineering



#### SPOTLIGHT

Dame Julia Higgins, Senior Research Investigator, Chemical Engineering 40 years

Polymer scientist Professor Dame Julia Higgins FRS FREng is a Senior Research Investigator in Chemical Engineering, having previous served at Imperial as Dean of the City and Guilds College and Principal of the Faculty of Engineering. Professor Higgins lends her name to the Julia Higgins Medal and Awards, which are awarded annually to recognise individuals and departments that have made a significant contribution to the support of academic women at the College.

## Welcome

#### new starters

Mr Ahmed Abdul, Faculty of Medicine Centre

Mr Duane Abraham, Catering Services Dr Dominic Affron, Chemistry Dr Lionel Agostini, Aeronautics

Mr Adedayo Akiode, Public Health Dr Mohammad Al Sad, Medicine Mrs Deepthi Alex, ICT Mr Demran Ali, Public Health

Mr Verinan An, Fasting Mr Kevin Allain, Computing Mr Matthew Alphe, ICT Mr Matthew Alprie, ici Mr Mohammed Al-Saffar, Public Health

Mr Justin Alsing, Physics Mr Samuel Alston, Student Recruitment

& Outreach Mr Moaatasim Amer, Surgery & Cancer Mr Georgios Anagnostou, EEE Miss Rebecca Andrews, Public Health

Mr Nas Andriopoulos, ICU Dr Napat Angkathunyakul, Medicine

Miss Abigail Antao, ICT Dr Beatriz Antolin Fontes, Clinical

Science Ms Jane Antony, Surgery & Cancer Ms Jane Antony, Swag

Dr Alyssa Apsel, EEE Glaria Miss Artazcoz, Surgery & Cancer Mr James Arthurs, School of Professional Development

pment ephanie Ascough, NHLI Miss Alex Ashbee, Careers Miss Amirah Aslam, Registry es Mr John Auger, Security Services Dr Melina Aulino Campos de Lima, Life

Sciences Dr Georg Auzinger, Physics

Dr Sam Azadi, Materials Dr Mehrdad Babazadeh, Computing Miss Josephine Backhouse, Faculty of

Medicine Centre Miss Lara Bailey, Residential Services Mrs Ellie Baizani, Education Office

Miss Huda Baldo, Public Health Mrs Raiinder Ballman, Medicine Mrs Milda Batutiene, Mathematics

Dr Mustafa Bayazit, Chemistry Mr Amr Bayoumy, Medicine

Miss Hannah Behague, Faculty of Medicine Centre Miss Sarah Belfield, Business School

Mr Malek Belkacemi, Centre for Environmental Policy Dr Christophe Bellisario, Physics

Dr Maria Belmonte Sainz-Ezquerra, Physics

Physics Miss Stefi Benjamin, Life Sciences Physics Dr Patricia Bernal, Life Sciences

Mr Alex Berwick, HR Dr Rajesh Bhargave, Business School

Dr Gaurav Bhutani, ESE Miss Carla Bleasdale, Residential

Miss Rachel Blythe, ICU Dr Adriano Boasso, Medicine Dr Esther Boler, Business School

Ms Layla Bolton Saghdaoui, Surgery & Cancer

Mr Andrew Bottomley, ICT Ms Claire Bower, Business School Mr Timothy Bracewell-Milnes, Surgery

& Cancer Mr Luke Brady, Residential Services

Miss Danielle Bream, Public Health Miss Rebecca Bristow, Surgery & Cancer Ms Caroline Brogan, Communications

and Public Affairs and Public Affairs Miss Laura Brown, Registry

Dr Michael Bruyns-Haylett, Bioengineering

Mrs Aimee Buirski, Estates Division Professor Simone Buitendijk, College Headquarters

Headquarters Mr Henry Burridge, Civil and Environmental Engineering

Environmental Engineering Mrs Geraldine Butler-Wright, HR Dr Alessandro Cabboi, Mechanical

Engineering Do Rosario Caeiro, Business School Mr Luke Caldwell, Physics

Mr Luke Caldwell, FilySics Mr Owen Cameron, Security Services Dr Philip Carter, Surgery & Cancer Mr Edgar Carter, Mechanical Engin Dr Biancastella Cereser, Surgery &

Cancer Dr Andrea Cerone, Computing Miss Claudia Cervelli, Catering Services Mr Georgios Chalivopulos, Mathematics Mr Robert Chatley, Computing Dr Rabiah Chaudhry, Public Health Miss Nayab Cheema, ICU Dr Kaiying Cheng, Medicine Mrs Floria Cheng, Surgery & Cancer Dr Matthew Child, Life Sciences Dr Konstantinos Christoforidis, Chemical

Dr Kalipso Chalkidou, Surgery & Cancer

Dr Liliane Chamas, Surgery & Cancer Mr Joseph Chater, Finance

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Miss Alex Compton, ICU Dr Megan Coombs, Research Office Dr Robert Cooper, Chemistry Miss Isabella Cordani, Public Health Dr Louise Cowpertwait, Public Health

Mr James Cox, ICU Mr James Cox, ICO Ms Fala Cramond, Surgery & Cancer Mis rata Clanione, Surger, et electrony Miss Emily Jane Cramphorn, ICU Mr Andrew Crane, Finance Miss Suzanne Creasey, ICT Miss Ellen Crick, Surgery & Cancer

Mr Johann-Philipp Crusius, ESE Miss Natasha Cunningham, Education

Office Mr Derek Cutler, Surgery & Cancer Miss Michaela Dacosta, Estates Division Mrs Christelle Dalle, Catering Services Miss Katie Dallison, Careers Ms Sorina Damsa, Medicine Miss Alessandra D'Angelo, Surgery

& Cancer Mr Peter Dawson, EEE Mrs Aline De Almeida Drum Giazzon,

Catering Services Ms Monica De Brito Figueiredo, Medicine

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Mathematics Miss Marianne De la Roche, Medicine Miss Flavia de Simone, Civil and Miss Flavia de Simone, coma Environmental Engineering Mr Nicholas Dean, Medicine Dr Abbas Dehghan, Public Health Miss Raquel Del Castillo Gaitan, EYEC Dr Fani Deligianni, Computing Miss Lindsay Dewa, Surgery & Cancer Dr Alihusein Dhankot, Public Health Dr Ornella Di Pietro, Chemistry ering

Dr Mamadou Diallo, Bioengin Miss Maria Dias Inverno, Centre for Environmental Policy Dr Maria Dickinson, Life Sciences

(Silwood Park) Mr Michael Dobbin, Faculty of Medicine

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and Public Affairs Ms Anissa Elfakir, Business School Dr Huw Ellis, NHLI Dr Mohamed Elmikaty, EEE Mr Vahid Elyasigomari, Computing

Mr Vanid Eryasigunian, Comparing Miss Catherine England, Faculty of Medicine Centre Miss Lizzie Eustace, Campus Services

Mrs Stephanie Evans, Public Health Mr Sean Fanning, Estates Division Mr Cheng Feng, ISST Dr Enzo Ferrante, Computing Mr Jose Morais Ferreira Rodrigues De

Mr Jose morals enclosed and a solution of the moral solution of th Dr Jahn Firth, NHI I

אר זיס ann Firth, NHLI Mr Colin Foley, Civil and Environmental Engineering Miss Alice Francis, NHLI

Ms Sue Francis, Estates Division . . . . . . Mrs Julie Fraser, Campus Services Mrs june maser, emp

Mr Brian Gallagher, HR Mrs Niketha Gamage-Watson, Grantham Institute Miss Cova Garcia Rodriguez, College

Headquarters Mr Richard Gaskin, Faculty of Medicine Centre Miss Christina Gatsiou, Chemical

Engineering Dr Mary Gaughan, Business School Mr Markos Georgopoulos, Computing

Mr Mean Ghim, Bioengineering

This data is supplied by HR and covers staff joining the College during the period 13 June – 23 September 2016.

This data was correct at the time of going to press. For Moving On, visit the online supplement at www.imperial.ac.uk/reporter

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Centre Ms Jennifer Griffin, Medicine Ms Anna-Marie Griffiths, Faculty of Medicine Centre Mr Andreas Gross, Mathematics

Ms Agnieska Grzelak, Catering Services Dr Yuniie Gu. EEE Dr Juan Guzman Inigo, Mechanical

Dr Jahn Guzman mge, increases Engineering Dr Silvia Haase, Life Sciences Mr Matthew Haddrill, School of Professional Development Mr Simon Hall Library

Mr Simon Hall, Library Ms Adele Hamid, School of Professional

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Dr Stuart Higgins, Materials Mr Peter Hill, Medicine Dr Thomas Hills, Chemical Engineering Mrs Susie Hilton Knox, Central

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Mathematics Mr Paul Huxley, School of Professional

Development Mr Ali Ibrahim, Security Services . . . . . . Miss Mai Idris, Surgery & Cancer Dr James Iles, Public Health Mr Kevin llett, Faculty of Medicine Centre Dr Andrew Innes, Medicine

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Dr Eleftheria Panteleiou, Medicine

Mr Edward Parker, Public Health

Mr Arun Patel, Residential Services

Mr Reetan Patel, Surgery & Cancer

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Mr Stylianos Ploumpis, Computing

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Mr Bhav Radia, Business School

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School Dr Saravana Ramasamy, Clinical Science

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Environmental Engineering Miss Heather Robinson, Security

Dr David Rojinsky, School of

Professional Development Dr Maria Romano, Life Sciences

Miss Leonie Roos, Clinical Science

Mr Francis Ruiz, Surgery & Cancer

Dr Giusy Russomanno, Medicine

Dr Julia Sachs, Chemical Enginee

Dr Fouzia Sadiq, Surgery & Cancer

Mr Michael Sadler, Catering Services

Ms Rabiah Saleh, Medicine Dr Savvas Saouros, Life Sciences

Professor Haresh Sapra, Business

Ms Konstanze Seidler, Chemical

Dr Fisnik Shala, NHLI

Miss Georgina Sava, Surgery & Cancer

Ms Deborah Schneider-Luftman, Public

Health Dr Christopher Schuster, Medicine

Engineering Dr Ovidiu Serban, ISST

Dr Ovidiu Serban, ISST Ms Meera Shah, Centre for Environmental Policy

Mr Henry Shelford, Advancement

Mr James Sholto-Douglas, School of Professional Development Ms Bryony Simmons, Medicine

Miss Amy Sims, Faculty of Medicine

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new starters, leavers and retirees to the Editor

Ms Penny Sparkes, Medicir

as necessarv.

Mr Christos Sagonas, Computing

Dr Eleni Salamaxani, Medicine

Dr Mateusz Pucek, Medicine

Dr Ludmilla Steier, Chemistry Mr Clement Stevens, School of Professional Development Mrs Kate Stevens, Advancement

Mis Kate Stevens, Medicine

Services Miss Helen Tamura-Wicks, Public Health

Engineering Dr Tom Tate, EEE

Dr Tom Tate, EEE Dr Kate Tatham, Surgery & Cancer

Miss Nikita Thakrar, Enterprise Dr Carolina Thieleke Da Silva Macedo

Matos, NHLI Miss Philippa Thomas, Surgery & Cancer

Miss Jessica Thompson, Public Health Mrs Nicola Thompson, Medicine

Mr Paul Thomson, Computing

Dr Thomas Thorne, Medicine

Miss Emily Timcke, NHLI

Miss Ivana Tomic, Computing

Engineering Mr Vincenzo Torraca, Medicine

Mr Costa Toulis, Finance Dr Lam Tran, Chemistry

Miss Rebecca Tregent, Medicine

Dr Menelaos Tzafettas, Surgery & Cancer

Mr Rohan Uppal, Residential Services

Miss Hajhnalka Valoczi, Catering

Services Mr Alessandro Vandini, Computing

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Mr Jose Vidal Fidel, ICT

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Mechanical Engineering

Miss Yasmin Vines, Sport and Leisure

Miss Alexandra-Petronela Voda, Catering

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Mr Aurimas Vysniauskas, Chemistry

Dr Pushkar Wadke, Enterprise Dr Simon Walne, Surgery & Cancer Miss Josie Ward, Surgery & Cancer

Mrs Bryan Ward, Chemistry Mrs Michelle Ward, Security Services

Dr Thomas Warelow, Chemistry

Mr Anthony Watson, Design Engineering

Mr Indaka Weerasekera, Physics

Miss Claudia Wierzbicki, Public Health

Medicine Centre Mrs Ceri Willmott, Business School

Mr Ryan Wilson, Campus Services

Dr Mei Wong, Public Health Mr Jake Xu, Student Recruitment &

Outreach Ms Lilian Yakawa, Residential Services

Dr Hsiu Yap, Medicine Dr Gokhan Yildirim, Business School

Dr Bo Vu, Aeronautics Mr Elias Zapantis, Surgery & Cancer Mr Saeed Zare Chavoshi, Mechanical

Engineering Dr Ketao Zhang, Aeronautics Mr Ou Zhao, Civil and Environmental

Engineering Dr Shuangyong Zhou, Physics

Mr Lulai Zhu, Computing Mr Karl Zimmerman, Medicine

Dr Limor Zwi Dantsis, Materials

Mr Alvaro Villanueva Pascual.

Dr Iris Vlachantoni, NHLI

Dr Pushkar Wadke, Enterprise

Mr Matthew Watkins, HR

Dr Rosalind Watts, Medicine

Dr John Welliaveetil, Mathematics

Dr Marleen Werkman, Public Health

Ms Gemma Williamson, Faculty of

Dr Hannah Wilson, Medicine

Dr Milad Toolabi, Mechanical

Dr Halil Uzuner, Computing

Centre

Services

Mr Keith Tarnowski, Mechanical

Jinata Subba, NHLI Iren Sukiasyan, Physics

Miss linata Subba, NHLI

Dr Namrata Syngal, NHLI Ms Karolina Szymoniak, Catering

15

on.

moving in. moving

Miss Natalia Kurek, Surgery & Cancer Mr Aslan Kutlay, Mechai nical Engineering Miss Min Kwun, Public Health Mr Nicolas Kylilis, Bioenginee Dr Davide Laera, Mechanical

Engineering Miss Shenice Lalor, Estates Division Miss Rhiannon Lambkin, Surgery & Cancer Dr Sabrina Lamour, Public Health

Miss Ivonne Pena Paz, Surgery & Cancer . . . . . Dr Natacha Larburu, Life Sciences Mr Esben Larsen, Physics Ms Marie Pereira, Medicine Mr Christopher Peters, Surgery & Cancer Ms Jessica Law, Public Health Mr Patricio Petruzzi, EEE Dr Heikki Peura, Business School Dr Fanny Lebosse, Surgery & Cancer Dr Zina Lechevallier, Public Health Professor Jose-Luis Peydro Alcalde, Business School Dr Jaemin Lee, Business School Dr Christopher Phillips, Bioengineering Ms Melanie Lee, HR Professor James Leiper, Clinical Science Mr Morgan Pinfold, Estates Division Mr Gregor Lenz, Computing Dr Fatemeh Pishbin, Materials Dr Dimitrios Letsios, Computing Dr Chen Li, Computing Dr Ryan Li, Surgery & Cancer Ms Andrea Pollard, Medicine Ms Anna Polowetzky, School of Professional Development Mr Wenbin Li, Computing Mr Panagiotis Postantzis, EEE Ms Xuefang Li, EEE Ms Xuefang Li, EEE Mr Peter Lia, Education Office Dr Iosifina Pournara, Computing Miss Mun Lim, NHLI Dr Fangde Liu, Computing Dr Krisna Prak, NHLI Dr Mairead Pratschke, Business School ve Longman, College Headquarters Mr Simone Principe, Catering Services Mr Da Dr Emily Prior, Medicine

Mr Nathan Lucas, Security Services Mr Angus Maidment, Mechanical Engineering Ms Agnieszka Malisz, Medicine Dr Reshma Malviya, Medicine

Mr David Mann, School of Professional Development Dr Henry Maples, Chemical Engineering Mr Alessandro Marcia, Catering Services Mr Julian Marcon, Aeronautics Dr Isaac Martin, NHLI Dr Ainoa Mateu Mullor, Medicine Dr Indran Mathavan, Life Sciences

Ms Rebecca Matthews, ICT Miss Adi McCrea, Public Health Mr Luke McCrone, ICU Mr Luke McCrone, ICU Dr Steven McDonagh, Computing Dr Steven McDonag, , \_ Mr James McDonald, ICU

Miss Gillian McKenna, School of Professional Development Miss Sheila McKenzie, Medicine

Miss Heather McLellan, Public Health Mrs Hilary McPhail, Medicine Dr Morena Mills, Life Sciences (Silwood

Dr Marco Mion, Public Health Dr Zameer Mohamed, Surgery & Cancer Miss Lauren Mokry, NHLI Mr Iago Molist Perez, Life Sciences Miss Alessandra Morelli, Surgery & Ms Laura Morris, Surgery & Cancer

Dr Neil Morrison, Aeronautics Dr David Mosen Ansorena, Public Health Dr Andy Moskalenko, Physics Dr Toshinori Nakamura, Medici Dr Mable Nakubulwa, Public Health Mr Alvin Narain, Estates Division Dr Salomon Narodden, NHLI Mr Ammar Nasif, Physics Mr Amit Natha, ICT Dr Rooshi Nathwani, Surgery & Cancer Mr Gajanan Natu, Public Health Mr Andy Navedo, School of Professi

Development Dr Eyal Neumann, Mathematics Mr Mathew Niania, Materials Ms Annie-Rose Nicholas, Medicine

Miss Danielle Nichols, College Headquarters Dr Razvan Nicolescu, Computing Mr Paul Nkyi-Acheampong, ICT

Dr Andre Nobrega Pitaluga, Life Sciences Mr Bartosz Nocun, ICU Mr Andrew Northern, School of Professional Development Miss Fadumo Nur, Surgery & Cancer Mr Daniel O'Keeffe, ICT Mr Jimmy O'Keeffe, Civil and ronmental Engineering Dr Kike Olajide, Medicine Miss Gemma Oliver, Medicine Dr Gbemi Oluleye, Chemical Engineering Miss Kike Olupona, Surgery & Cancer Dr Ismail Omar, Surgery & Cancer

Miss Maria Osagie, Surgery & Cancer Dr Sarah Otner, Business School

Ms Katie Overton, Faculty of Medicine

Mr Joao Pacheco Dos Reis Pereira, EEE

Mr Ilias Pagkalos, NHLI

Centre

#### moving on

Mr William Abbott, Bioengineering Dr Edo Abraham, Civil and Environmental Engineering Mr Mohammad Adabi, Materials Mr Kyrillos-Fokion Adesina-Georgiadis, Surgery & Cancer Dr Vincentius Adi, Chemical

Engineering Mr Solomon Adjakloe, Medicine Dr Muhammad Afzaal, Chemical

Engineering Mrs Pamela Agar, Communications

and Public Affairs (16 years) Dr Blerina Ahmetaj-Shala, NHLI Dr Katja Ahoniemi, Business School Ms Sheila Akinlabi, Public Health Miss Zen Alaestante, Surgery & Cancer Dr Mina-Olga Aletrari, Surgery &

Cancer (5 years) Dr Nicolas Alferez, Mechanical

Engineering Mr Felipe Alves Portela, Aeronautics Dr Rachel Amouroux, Clinical Science (5 years)

(5 years) Professor Anand Anandalingam, Business School Dr Carmelo Andujar Fernandez, Life

Sciences (Silwood Park) Miss Pearl Anteh, Campus Services

Mr James Arthurs, School of ofessional Development

Dr Christina Atchison, Public Health Miss Talia Augustine, Residential Dr Ali Awan, Bioengineering

Mr Adarsh Babber, Surgery & Cancer Mr Salur Basbug, Aeron Dr Ana Batista Gomes, Life Sciences Ms Katherine Bayliss, Strategic

Planning (5 years) Dr Eleni Bazigou, Bioengineering (5 years)

Mrs Charlotte Beard, Estates Division

ss Sarah Beardon, Public Health Miss Diana Begum, Faculty of Natural

Miss Halima Begum, Bioengineering Miss Sofia Bekou, Physics Dr Francesco Belardinelli, Computing

Miss Lucy Bell NHLL Dr Jonathan Ben-Artzi, Mathematics Mr Henry Bennie, Faculty of Medicine

Dr Ivan Beretta, EEE

Dr Ivan Beretta, EEE Dr Emma Bergin, Civil and Environmental Engineering Dr Adam Bernard, Surgery & Cancer Dr Tomass Bernots, Mathematics Dr Clare Berny, Public Health Ms Nathaelle Recision

Ms Nathaelle Bessiere, NHLI Mr Arafat Bhallizada, Chemical ring

Dr Farid Biglari, Mechanical gineering (7 years) Hannah Blanchford, Medicine

Ms lennifer Blood, School of

Professional Development Dr Adriano Boasso, Medicine (8 years)

Dr Julie Borgel, Clinical Science Dr Maedeh Borhani, Bioengineering Ms Francesca Bottacchi, Physics

Mis Francesca Doutlet, Chemistry Dr Kristelle Bougot-Robin, Chemistry Miss Sophie Bowlzer, Medicine

Dr Lisa Bowman, Medicine

Mr Damion Box, Chemistry Dr Sophie Bozorgi, Mechanical

Engineering Mrs Sue Braham, Surgery & Cancer (6 years)

Dr Geraldine Brennan, Grantham

Miss Laura Brett, NHLI Dr Carlos Bricio Garberi, Bioengingenter

Dr Carlos Bricio Garberi, Bioengineering Dr Gareth Brown, Centre for Environmental Policy (5 years) Dr Neil Browning, Public Health Dr Susann Bruche, NHLI Mrs Deborah Buck, Registry Mr Scott Buckley, Sport and Leisure

Mr James Budzak, Life Sciences

Dr Stefano Buoso, Aeronautics

Dr Jordi Bures Amat, Chemistry

s Susan Burnett, Surgery & Cancer Ms Rachel Burrell-Murphy, Education Office Dr Sophie Camp, Medicine Dr Paola Campagnolo, Materials Dr Leo Carlin, NHLI Ms Marta Casanovas Espinar, Medicine Dr Abby Casey, Chemistry Dr Emilie Cauet, Surgery & Cancer Dr Jason Chang, Bioengineering Mr Neil Charlott, Public Health Misc Parter C

Mr Andrew Busuttil, Surgery & Cancer

Dr Samantha Field, Faculty of Medicine

Dr Elisa Fiorentini, Life Sciences

Miss Charlotte Fleming, Public Health Mr Shane Fleming, EEE

Dr Paul Fossati, Materials

Ms Leoni Francis, Sport and Leisure Professor Christophe Fraser, Public Hoalth (Thread)

Health (17 years) Miss Zoe Frazer, Surgery & Cancer Miss Ying Fu, School of Professional

Development Dr Joel Fulton, Surgery & Cancer

Dr Jennifer Garden, Chemistry Dr Benjamin Garfield, NHLI

Miss Christina Gatsiou, Chemical

Dr Mathilde Gendrin, Life Sciences

(5 years) Dr Mario Ghossoub, Business School

Dr Louise Gildea, Surgery & Cancer Dr Amy Gilligan, ESE

Dr Paul Ginzberg, Mathematics

Ms Joanne Glass, Registry Dr Katrin Glatzel, Centre for

Dr Paul Golby, NHLI Miss Gemma Golding, Faculty of Medicine Centre Dr Rafael Gonzalez, Medicine

Dr Joseph Goodwin, Physics Ms Wioletta Gora, Catering Services Mrs Laura Gosling, Centre for Environmental Policy (7 years)

Dr Martin Gould, Mathematics Mr Phil Goulter, Business School

Dr Aurelien Grolet, Mechanical

Engineering Miss Charlotte Grove, Public Health

Engineering Dr Rajesh Gurrala, Medicine (5 years)

Dr Benat Gurrutxaga Lerma, Mechanical Engineering Mr Matthew Haddrill, School of

Professional Development Dr Goli Haidari, Medicine Ms Adele Hamid, School of

Professional Development Miss Dionne Hammond, Medicine Dr Bo Han, Civil and Environmental

Engineering Mr Maredudd Harris, ICU

Miss Fevzive Hasan, Student

Recruitment & Outreach Dr Katerina Hnatkova, NHLI

Dr Katerina Hnatkova, NHLI Ms Jean Honeyball, Sport and Leisure Dr Rosalind Hopwood, Physics (5

years) Dr Mohammad Hogue, Civil and

Environmental Engineering Ms Susanne Horn, Mathematics

Mrs Lauren Howells, Education Office Dr Philip Howes, Materials

Mr Ben Howitt, ICU Mr Mathieu Hu, EEE

Mr Ricky Humphries, Catering Services

Mr Paul Huxley, School of Professional

Development Miss Natalie IIsley, ICU

Miss Natalie IIsley, ICU Miss Elena Ioannou, Medicine

Dr Henry Ip, Computing Dr Laurel Issen, Public Health

Mr Radoslav Ivanov, Mechanical

Engineering Mr Amadu Jalloh, Security Services

Dr Kevin Jean, Public Health

Dr Kevin Jean, Fusice ..... Dr Maud Jenart, Chemistry

Dr David Jennings, Physics Ms Ellie Jestico, Faculty of Natural

Sciences (7 years) Dr Britta Jewell, Public Health (6 years) Dr Christopher Johnson, Chemistry

Mr Robert Johnson, Life Sciences Mr Stephen Johnson, Mechanical

Engineering (14 years) Mr Graeme Johnston, Reactor Centre

Miss Amy Jolly, Medicine

Mr Vishal Joneja, Catering Services

Mrss Rinar Jones, Advancement Mr Michael Jones, Advancement Mr Patrick Jordan, Sport and Leisure

Miss Julieanne Jules, Library

Dr Chiyoung Jung, Mechanical

s Rhian Jones, Life Sciences

(10 years)

(12 years)

(9 years)

nmental Policy

Engineering Mr John Geeson, Business School

(5 years)

Dr Paul Golby NHL

Dr Joseph Goodwin, Physics

Ms Kate Greenaway, Faculty of

Dr Johan Guegan, Mechanical

Medicine Centre

Dr Nicholas Fyson, Life Sciences Ms Stefania Garasto, Bioengineering Dr Jonay Garcia-Luis, Clinical Science

Miss Rosina Chaudhry, Computing Miss Hannah Cheeseman, Medicine

MISS Halman Circuit, Standard Circuit, Standard Circuit, Standard Circuit, Standard Circuit, Standard Circuit, Materials Dr Lijie Cheng, Chemistry Dr Ciro Chiappini, Materials Mr Tiberiu Chis, Computing Dr Kok Chooi, Bioengineering Miss Daniela Ciccarello, Registry . . . . . Dr Agostino Cilibrizzi, Chemistry Ms Marilyn Clarke, Library (20 years) Dr Richard Clegg, Computing Dr Philip Clemow, EEE (5 years)

Mr Pedro Coelho de Almeida, Life Sciences (Silwood Park) Ms Judith Cohen, Civil and Environmental Engineering (5 years)

Dr Lachlan Coin, Public Health (10 ester Colaco, Sport and Leisure

Mi Sylvester Collado Fregoso, Chemistry Miss Leah Colthurst, Public Health Miss Laura Connell Medicine Miss Laura Connen, medicine Ms Nicola Conway, Business School Mr Lee Cooper, Clinical Science

Dr Carlos Correia Braga, Chemical

Engineering Dr Niccolo Corsini, Physics Dr Niccolo Corsini, Physics Mr Steven Cousins, Business School Ms Rebecca Coxhead, ICU (11 years) Dr Tiago Cravo Oliveira, Business

Dr Alastair Currie, Physics Dr Anish Cyriac, Chemistry Dr Doni Daniel, Materials (8 years)

Miss Megan Daunton, Sport and Dr Ceri Davies, NHLI

Dr Ceri Davies, NHLI Miss Alex Dawes, Business School Dr Paul Dawson, Surgery & Cancer Ms Luzia De Almeida, Faculty of

Medicine Centre Dr Gregory De Boer, Aeronautics Mrs Orquidea De Castro Ribeiro, Life

Dr Sonia De Oliveira Barbosa, Medicine (5 years) Dr Giovanna De Palo, Life Sciences

Mrs Alexandra De Sousa, Faculty of Medicine Centre Dr Kengo Deguchi, Mathematics

Dr Laura del Nido Varo, Public Health Dr Andree Delahaye-Duriez, Clinical Mr Pantazis Deligiannis, EEE Mr Pintazis Deligiannis, EEE Mr Nikita Demchenko, Life Sciences Dr María Demontis, Medicine (9 years) Dr Nathan Dennison, Life Sciences Dr Amutha Devarai, Materials

ering Dr Hele Diao, Chemical Enginee Mr Carlos Diaz Daniel, Aeronautics Miss Chiara Dionisi, Medicine . . . . . .

Dr Sourabh Diwan, Aeronautics Mrs Jennifer Dixon, Surgery & Cancer Dr Danielle D'Lima, Surgery & Cancer

r Gordon Duff, Faculty of Medicine

Ms Charlotte Duggan, Campus

Ms Charlotte Duggan, Campus Services (9 years) Dr Andrew Duncan, Mathematics Mrs Mulenga Duodu, Faculty of Dr Anozie Ebigbo, ESE Dr Anozie Ebigbo, ESE Mrs Agnes Edwards, EYEC Dr Astrid Eichhorn, Physics Dr Nasim Flahi, FSF

Dr Fadlalla Elfadaly, NHLI Mrs Laura Elliott, Library Mr Mark Ellis, Public Health Dr Red Elmahdi, Public Health Dr Red Elmahdi, Public Health Mr Mark Evans, Estates Division

Ms Caroline Evans, Medicine Dr Andrew Ewing, Chemical Engineering Mrs Virginia Fairclough, Life Sciences

Dr Joy Farnaby, Chemistry Dr Dorte Faust, NHLI Dr Iliana Fauzi, Chemical Engineering Dr Stephen Feeney, Physics Miss Alice Ferns, Communications and

Public Affairs Mr Edgar Ferrao, Finance (10 years) . . . Mr Magno Ferrao, Sport and Leisure Dr Michael Field, Mathematics

Dr Petri Jylha, Business School

Dr Tea-Sung Jun, Materials

Professional Development Dr Santanu Karan, Chemical Engineering Mr Dimitrios Katsanos, Life Sciences Mrs Ramandeep Kaur, Public Health Dr Ulrike Kauscher, Materials Mr Christopher Kaye, ICU Mr Christopher Kaye, ICU Ms Maureen Kearney, NHLI Mrs Pat Keener, Business School Mr Nick Keith-Barnett, Public Health Mr Nick Keith-Barnett, Public Health Dr Oliver Keown, Surgery & Cancer Mr Kristofer Kerrigan-Graham, Business School Dr Daniel Ketover, Mathematics Ms Leona Khaira, Finance Mr Irfan Khan, HR Mr Hany King, Reactor Centre Mrs Peta-Ann King, Faculty of Medicine Dr Ilze Kivleniece, Business School Dr Oleksiy Klymenko, Chemical Engineering Dr Vasilis Kontis, Public Health Dr Viola Kooij, NHLI Dr Jakub Kopycinski, Medicine (8 years) years) Dr Rigas Kouskouridas, EEE Mr Michael Kranert, School of Professional Development Miss Marina Krouski, NHLI Miss Marina Krouski, NHLI Dr Przemyslaw Kruczek, NHLI Dr Stefanie Kuenzel FFF Miss Larissa Kunstel-Tabet, Design Engineering Dr Ronald Lambert, Life Sciences Dr Maialen Lasa, Medicine Dr Helga Laszlo, Computing Miss Marie Laviron, Life Sciences Mr Walter Lawson, Sport and Leisure #N/A Dr Jennifer Le Blond, ESE Dr Christian Ledie, Computing (5 years) Mrs Amanda Ledie, Surgery & Cancer Dr Veronique Lefebvre, Life Sciences Dr Veroinique Lerebver, the Sciences (Silwood Park) Mr Michal Lepkowski, Public Health Ms Adele Levine, Public Health Dr Polina Levontin, Centre for Environmental Policy (8 years) Mr Leo Lightburn, EEE Dr Xinlei Liu, Chemical Engineering Mr King Liu, Medicine Ms Joanne Lo, Life Sciences Ms Joanne Lo, Life Sciences Miss Jessica Loftus, Advancement Mr Paolo Lombardi, Residential Services Dr Erick Loomis, Surgery & Cancer Dr Alejandro Lopez Lopez, Life Sciences (Silwood Park) Miss Joanna Lorent, Estates Division Miss Mavis Machirori, Surgery & Dr Adam MacLean, Life Sciences Dr Gesham Magombedze, Public Health Dr Susannah Maidment, ESE Dr Christopher Malone, School of Professional Development Mr David Mann, School of Professional Development Ms Sarah Marcus, Communications Ms Saran Marcus, commune and Public Affairs Dr Foivos Markoulidis, Chemistry Miss Alice Marks, Centre for Miss Alice Marks, center of Environmental Policy Mr Sean Markus, Aeronautics Dr Andrea Marongiu, NHLI Miss Lucy Marsh, Faculty of Medicine Centre Mrs Alex Martin, Finance (11 years) Ms Becky Mawhood, Centre for Environmental Policy Dr Christopher McDonald, Chemistry Dr Jed McDonald, Bioengineering Miss Emily Summers, Public Health Mr Alex McKee, ICU (10 years) Miss Gillian McKenna, School of Professional Development Mr Gianfrancesco Melina, Aeronautics Mr Wayne Merritt, Sport and Leisure Mr Gabriele Micali, Life Sciences Dr Aurelie Millet, Medicine Miss Kelly Mills, Advanceme Mr Joseph Mirza, Life Sciences Dr Badr Missaoui, Mathematics Mr Rvan Mitchell, Medicine Mr Mohamed Mohammadu Kairudeen, Dr Zahra Mohri, Bioengineering (7 years) Ms Yasmin Mohseni, NHLI Mr Thomas Monk, NHLL Dr Borja Mora Peris, Medicine Dr Andrew Morley-Smith, NHLI

Professor John Morton, Aeronautics

Miss Minhee Kang, School of

(5 years) Leisure Services (23 years)

Mr Satheesh Mupparaju, ICT Ms Jean Murch, Sport and Leisure Dr Neil Murphy, Public Health Dr Neil Murphy, Public Health Mr Tomaso Muzzu, Bioengineering Miss Marina Natoli, Surgery & Cancer Mr Andy Navedo, School of Professional Development Dr Shevanthi Nayagam, Surgery & Miss Charlotte Newberry, Life Sciences (Silwood Park) Dr Aisha Newth, Public Health (6 years) Dr James Newton, Mathematics Dr Nhuong Nguyen, Clinical Science Dr Nicolas Niasse, Physics (5 years) Dr Umar Niazi, NHLI Ms Victoria Nicholl, Computing Dr Nicoletta Nicolaou, EEE Dr Zacharoula Nikolakopoulou, NHLI Ms Kerry Noble, Communications and Public Affairs Public Artairs Dr Alexander Norori-McCormac, ESE Mr Bogdan-Alexandru Oancea, Catering Services Dr Martin Obligado, Aeronautics Mr Harrison O'Brien, Medicine Dr Josephine Ocloo, Surgery & Cancer Dr Nikola Ojkic, Life Sciences Ms Etsuko Okahisa, School of Protessional Development Ms Agatha Okeke, NHLI Dr Matthew Oldfield, Mechanical Engineering (6 years) Dr Eduardo Oliver Perez, Medicine (5 years) Miss Stephanie O'Mahony, School of Professional Development (8 years) Miss Marine Orain, School of Professional Development Dr Jim Osborne, Faculty of Medicine Dr Douglas Overholser, Mathematics Miss Victoria Palmer, Public Health

Mrs witcona ranner, rubite reacti Mr Wei Pan, Computing Dr Sam Pannick, Surgery & Cancer Dr Vasileios Panoulas, NHLI Miss Andriani Papageorgiou, Medicine Dr Rhys Parfitt, Physics Mr Gregory Parkinson, Sport and Leisure Mrs Pauline Parkinson, Sport and Miss Tara Parnham, EYEC Miss Bryony Parrish, Centre for Environmental Policy Dr Nandinee Patel, Medicine Dr Nandinee Patel, Medicine Dr Nisha Patel, Surgery & Cancer Mr Immanuvel Paul, Aeronautics Dr Sara Pauperio Ribeirinho Machado, Public Health Public Health Ms Charlotte Pauwels, Business Ms Charlotte Pauwels, Business School (5 years) Professor Peter Pearson, Centre for Environmental Policy Dr Bjorn Penning, Physics Dr Ruth Peters, Public Health (18 years) Dr Andreas Phanopoulos, Chemistry iss Charlotte Phillips, Medicine Miss Suzanne Picot, Public Health Dr Oliver Pike, Physics Dr Dan Plant, Mechanical Engineering Ms Anna Polowetzky, School of Professional Development Mr Martin Price, School of Professional Ms Paz Prieto Martin, Life Sciences Mr Simon Prigent, Aeronautics Mrs Hayley Protheroe, Medicine Dr Balaji Purushothaman, Chemistry Dr Carmine Putignano, Mechanical Engineering Dr Kamila Pytel, NHLI Miss Yasmine Rahman, ICU Dr Liam Rasch, Medicine Mr Paul Ratcliffe, Faculty of Medicine Centre (9 years) Mrs Ranjit Rayat, Public Health Mrs Simranjit Rayat, Residential

Mr James Reardon, Estates Division Sadie Reed, Surgery & Cancer Mr Douglas Rees, Surgery & Cancer Dr Torsten Reimer, Research Office Miss Stephanie Reynolds, EEE Dr Sneha Rhode, Materials Miss Laura Riggall, Medicine Dr Charlotte Rivas, Chemistry Dr Benjamin Robinson, Bioengineering Mr Eduardo Rodriguez Lopez,

Aeronautics

Engineering (18 years) Dr Sheila Samsatli, Chemical Engineering Mr Chun Yin San, ICU Mr Chun Yin San, ICU Miss Lucinda Sandon-Allum, ICU Mr Sergio Santos, Graduate School Ms Mariem Sarghini, Medicine Ms Amber Sarna, Faculty of Engineering Dr Muge Sarper, Bioengineering

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Dr Saeed Salimzadeh, ESE Dr Nouri Samsatli, Chemical

Dr Gunnar Schroeder, Life Sciences

(8 years) Mr Renaud Schuck, Bioengineering

Mr Rehald Schuck, Bioergineering Dr Christopher Schuster, Medicine Dr Wolfgang Schuster, Civil and Environmental Engineering (11 years) Mrs Alexandra Seaton, Surgery &

Cancer (6 years) Dr Nowlan Selvapatt, Surgery & Cancer Dr Peter Shadbolt, Physics

Dr Rajiv Shah, Surgery & Cancer Miss Vedia Shahin, Surgery & Cancer Dr Arick Shao, Mathematics Dr Fariya Sharmeen, Civil and Environmental Engineering

Dr Caroline Shaw, Surgery & Cancer Dr Caitriona Sheridan, EEE

Mr James Sholto-Douglas, School of Professional Development Miss Melissa Shukuroglou, Public Health Health

Miss Haneesh Sidhu, Life Sciences Dr Cristoforo Silvestri, Bioengineering Dr Anna Simmonds, Medicine Dr Ajit Singh, ESE Dr Priyasmita Sinha, Physics Dr Priyasmita Sinha, Physics Dr Justin Sirignano, Mathematics

Miss Olivia Sleet, Careers Miss Natalie Smart, Chemistry Ms Emilia Smeds, Centre for

Ms Emilia Sfrieds, Centre 10. Environmental Policy Mr Vitor Soares Lopes, Computing

Miss Anu Solanki, Materials Ms Fiona Soliman, School of Professional Development Mr Gavin Sooranna, Surgery & Cancer

Mr Peter Sowinski, Bioengineering (6 years) (6 years) Ms Eleonora Spanudakis, Medicine

Ms Eleonora Spanudakis, Medicine Dr Dimitrios Stampoulis, Life Sciences Mr Konstantinos Steiros, Aeronautics Mr Karol Stepien, Aeronautics Mr Aalon Steplen, Aeronautics Mr Clement Stevens, School of Professional Development Dr Lee Stirling, Surgery & Cancer Mr Matthew Stott, Medicine Dr Luc St-Pierre, Aeronautics

Dr Christian Struber, Physics Ms Veronika Studena, Catering Services (7 years) Ms Natasha Studinska, Faculty of

Engineering (11 years) Dr Marc Sturrock, Life Sciences Dr Durvudkhan Suragan, Mathematics Dr Yentl Swolfs, Aeronautics Dr Yenti Swoirs, Aeronautics Miss Sophie Tapp, Surgery & Cancer Dr Chwen Tay, Life Sciences

Mr Dennis Teck-Yong, ICT Miss Cherry Thein, Faculty of Medicine Centre Mr Nikitas Thomareis, Aeronautics Mr Nikitas moniarcis, rece Mr Charles Thomas, Library

Mr Joel Thomas, HR Mr Paul Thomson, Computing Miss Phoebe Tickell, Life Sciences Dr Raul Torres, Clinical Science Miss Alexia Toufexi, Life Sciences Dr Marie Toussaint, NHLI Ms Amanda Townsend, Registry Dr Vincenzo Trovato, EEE Dr Angelos Tsoukalas, Business School

Dr Claire Turner, Medicine (7 years) Dr Hugo Turner, Public Health Dr Arwen Tyler, Chemistry Dr Arwen Tyler, Chemistry Professor Peter Tyrer, Medicine (8

years) iss Fatima Valencia Agudo, Medicine Miss Amy Valentine, Civil and Environmental Engineering Dr Isabel Van De Keere, Faculty of

Engineering Dr Sietse van der Linde, Life Sciences (Silwood Park) Ms Gayle Verdi, School of Professional

Development

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Dr Nikhil Vergis, Surgery & Cancer Dr Nikhil Vergis, Surgery & Cancer Dr Brian Vermeire, Aeronautics Mrs Trupti Vickers, Centre for Environmental Policy MS Susan Vickers, Library (8 years) Miss Rita Vieira, Public Health (5 years) Dr Georgios Vourliotakis, Mechanical Engineering Dr Zheng Wang, EEE Mr Weikun Wang, Computing Miss Jennie Watson, ICU Miss Julia Way, Careers Mr Yoni Weiner, Chemistry Dr Claire Weston, Chemistry Ms Ana Wheelock Zalaquett, Business School

MS Ana Wheelock Zalaquett, Business School Dr Nicola Whiffin, NHLI Mr Gerard White, ICT Dr Anisha Wijeyesekera, Surgery & Cancer (7 years) Dr Annika Wilhelm, Surgery & Cancer Mr Jimmy Williams, HR Professor Charlotte Williams, Chemistry (13 years)

Professor Charlotte Williams, Chemistry (13 years) Dr Gillian Wills, Medicine Mr Bjorn Witt, Physics Dr Rachel Wodarski, Surgery & Cancer Ms Chi-Tung Wong, Life Sciences Mr James Woodward, ICT Mrs Charlotte Woodward, ICT

Dr Anne Wozencraft, International

Relations Office Dr Dionysios Xenos, Chemical

Engineering Dr Junfeng Yang, Chemical Engineering Ms SunInn Yun, School of Professional Development

Dr Ivan Zadrazil, Chemical Engineering (5 years) Mrs Vanessa Zajdlic, NHLI

Mrs Vanessa Zajdlic, NHLI Ms Irina Zalivina, NHLI (8 years) Dr Fessehaye Zemichael, Chemical Dr Fessehaye Zemichaei, urennea Engineering (10 years) Dr Nan Zhang, Life Sciences (5 years) Dr Liang Zhao, Computing Dr Qiyuan Zhao, Life Sciences Mr Shaokai Zheng, Aeronautics

Ms Jinping Zheng, Computing Mr Ilies Zidane, Mathematics Mr Ilies Zidane, Mathematics Ms Nikola Zidkova, Catering Services Dr Nicholas Zufelt, Mathematics Dr Claudio Zuliani, EEE

#### Death in service

Emeritus Professor Tom Kibble, Physics (17 years)

#### Retirement

Mr Timothy Ashton, Estates Division (16 years) Professor David Chadwick, Chemical Professor David Chadwick, Chemical Engineering (43 years) Dr Robert Childs, Medicine (9 years) Dr Roy Clements, School of Professional Development (15 years)

Protessional Development (15 years) Mr Lesite Doran, Estates Division (14 years) Mrs Standra Griffiths, Public Health Mr Christopher Howard, Chemistry (37 years) Professor Russell Lande, Life Sciences (Silwand Park) (0 wares)

(Silwood Park) (9 years) Professor John Laycock, Medicine Dr Janice Main, Surgery & Cancer

Dr Janice Main, Surgery & Cancer. (27 years) Mr Ken Miller, Surgery & Cancer (8 years) Mrs Alice Powell, Physics (19 years)

Dr Tom Tate, EEE (32 years)

## events highlights FOR COMPLETE DETAILS: www.imperial.ac.uk/whats-on

### October 2016



#### 17 OCTOBER, 17.30

#### A periodic table of shapes

Fano varieties are basic building blocks in geometry. They are the "atomic pieces" of mathematical shapes, which can be assembled into more complex shapes in many different ways. In his inaugural lecture Professor Tom Coates will describe this work, touching on its applications in cryptography, scientific

#### 3 NOVEMBER, 17.00

#### Imperial Fringe: Criminal Investigations

Explore how science and engineering could aid the pursuit of justice and help uphold the rule of law. The second Imperial Fringe of the year will investigate Imperial research into crime, its causes. solutions and prevention. The evening

and physical form.

computing and physics, where it could

potentially answer questions about the

shape of spacetime. The lecture will also

include an exhibition of the work of artist

Gemma Anderson, who has given these

strikingly beautiful geometries visual

will include contributions from Business school researchers investigating insider fraud, toxicologists explaining their procedures and computing teams working with the NCA to improve evidence collection and logging

#### take note

#### **Evening classes**

Enrolment is open for evening classes run by the Centre for Languages, Culture and Communication with subject options including languages and a variety of science, arts and humanities courses. Classes begin on 17 October 2016

and are open to all. Discounted rates are available for staff and students and bookings made before 1 October benefit from an extra "early bird" discount.

See: bit.ly/life-learning

#### 06 OCTOBER, 08,30 The future of business. Is small the next big?

An expert panel asks will the future belong to small businesses, large organisations or a new disruptive hybrid?

#### 11 OCTOBER, 19.00 Our bizarre future of Bitcoins, **Blockchains and Smart Contracts**

Professor William Knottenbelt explores the potential for Bitcoins, Blockchains and Smart Contracts to revolutionise the way we live, work and do business



#### 12 OCTOBER, 18.00 **Tools for success**

An Imperial Business School panel debate on future trends for FinTech women.



#### 17 OCTOBER, 18,00 An evening with **Professor Stephen Hawking**

Professor Stephen Hawking presents Quantum Black Holes, rescheduled from March 2016.

#### Stay in the loop …>

#### 18 OCTOBER, 18,00 How do we grow from here? Towards sustainable food production

loin us to discuss with experts the challenge of feeding the world without costing the planet.

#### 19 OCTOBER, 17.30 **Choral Evensong with Imperial College Chamber Choir**

Whatever your faith tradition, or world view, you are welcome to enjoy the beautiful space of Holy Trinity and let yourself be surrounded by glorious music.

#### 19 OCTOBER, 14.00 Come rain or come shine

A Royal Meteorological Society National Meeting discuses improvements in understanding and predicting convective storms.



#### 20 OCTOBER, 17.30 A risky ride on natural resources where do we go?

View the future of minerals and resource exploitation through the lens of sustainability at this

Department of Earth Sciences and Engineering inauaural lecture.



### Who's looking at your files?

Stop others from reading your files without permission. Encrypting data makes it unreadable without a secret digital key.

#### What to do:

- You should encrypt all sensitive information before storing or sharing
- Use College's recommended file storage to save information (H: drive, group space, OneDrive for Business)
- Visit the Be Secure website for storage options and encryption advice

For more information visit www.imperial.ac.uk/be-secure



⊠ 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

