

REPORTER

#312
15 NOVEMBER 2019

SHARING STORIES OF IMPERIAL COLLEGE LONDON'S COMMUNITY

“ A BRILLIANT WAY TO
THINK ABOUT SOMETHING
COMPLETELY DIFFERENT



**MAKE THE MOST
OF YOUR LUNCH** 6
Art classes, running groups,
concerts and more

**AIR
POLLUTION** 8
Imagining car free
cities



**RESEARCH
NOTES** 12
From singing fish
to the 'Surrey Swam'



STUDENT SUPPORT

On hand, online and on
demand, the colleagues who
smooth the student journey

4



In this issue



4

FEATURE

We meet some of the people working to support our students to stay healthy, safe and happy at Imperial.



8

FEATURE

Our tips to help you make the most of your lunch hour.



14

EDUCATION

We speak to colleagues from across the College to find out more about our inspiring new curricula.



16

COMMUNITY

Professor James Best, Dean of LKCMedicine, reflects on the School's relationship with Imperial.

Imperial College
London

IMPERIAL IN BRIEF

COLLEGE

Influential Imperial

Imperial's community has been celebrated in the Progress 1000, the *Evening Standard's* annual celebration of London's most influential people. From AI to driverless cars, and cyber security to biotechnology, Imperial's academics, innovators and entrepreneurs have been recognised for their contribution to London life. The theme of this year's list is the future and technology, embracing whole new sectors including augmented and virtual reality and cyber security.

► **FULL STORY:** bit.ly/reporter312-progress1000



COLLEGE

BAME TALENT

Sixteen graduates have celebrated completing Imperial's IMPACT programme for Black, Asian and Minority Ethnic (BAME) staff. Now in its sixth year, IMPACT is a four-month talent development programme run by Imperial's Equality, Diversity and Inclusion Centre. As part of IMPACT, BAME staff are given the tools and confidence to make positive changes in their career through a series of workshops, one-to-one mentoring and networking.

► **FULL STORY:** bit.ly/reporter312-IMPACT

COLLEGE

NEW ACADEMIC STRATEGY

The College has launched a new Academic Strategy, which will help the College realise its ambition to make a transformative impact on society and provide a world class education for our students.

► **FULL STORY:** bit.ly/reporter312-Strategy



The world's most advanced institute for disease and emergency analytics has opened at Imperial. J-IDEA, the Abdul Latif Jameel Institute for Disease and Emergency Analytics, will rapidly respond to emergencies such as epidemics, extreme climate events, and natural and humanitarian disasters.

► FULL STORY: bit.ly/reporter312-J-IDEA

COLLEGE
ATHENA SWAN AWARDS

Imperial has been awarded two new Athena SWAN awards in recognition of its continued support for women in higher education. The College's Centre for Environmental Policy and Department of Mechanical Engineering have both been awarded their first Bronze Athena SWAN awards. The Department of Chemistry has also successfully renewed its Gold Award, making it one of a small number of university departments in the UK to maintain this level.

► FULL STORY: bit.ly/reporter312-AthenaSWAN



COLLEGE
TIMES PARTNERSHIP RENEWED

Imperial has renewed its partnership with Times Newspapers Ltd giving students and staff a free digital subscription. All students and staff can get a free 12 month subscription, providing digital access to *The Times*, the *Sunday Times* and the *TLS*. Imperial students will also be able to win the chance to write for *The Times* as part of an exclusive competition.

► SIGN UP: imperial.ac.uk/times-offer

NATURAL SCIENCES
NEW DEAN OF FACULTY OF NATURAL SCIENCES

Leading mathematician and Director of the Abraham de Moivre CNRS-Imperial international research unit Professor Richard Craster will take up the role on 1 January 2020.

He will be responsible for providing strategic leadership, planning and coordination and for driving continuing excellence in research and education.

His ties with Imperial go back to the beginning of his career, as he completed his BSc and his PhD at the College. He joined Imperial as a lecturer in 1998 and has held a number of key leadership roles.

He said: "It's an honour to take up the role of Dean in the faculty where I have conducted my entire academic career."

► FULL STORY: bit.ly/reporter312-Barnes





(From left) Debra Ogden, Michael Swan,
Naveeta Bhatia and Laura Regan

Student support: on hand, online and on demand

We meet some of the people working to support our students to stay healthy, safe and happy at Imperial.

FOR CURRENTS STUDENTS WAITING FOR THE START OF A NEW term, or a potential applicant in the UK or overseas, Social Media and Campaigns Officer, Naveeta Bhatia ensures that anyone with a question about College life receives a quick and comprehensive answer.

“The questions come through on Facebook, Twitter and Instagram,” she says. “With prospective students, the main ones are about scholarships, funding and entry requirements, plus requests for more information on courses. A lot of the time we can refer people back to our website where the information is up to date and accurate.”

For those already offered a place at Imperial, Naveeta and her team recently ran a day-long “Ask Me Anything” session on Instagram, which fielded more than 200 questions. Many were about the practicalities of student life, such as clubs and societies, libraries, transport links and facilities in and around the campus. Other concerns were more general.

“A big one was managing work-life balance,” she says. “We can suggest that if students join clubs and societies, they should ensure they still have time to do their work by managing their deadlines properly. But we can also tell them that if they ever need help with work-life balance, we’ve created a Student Support Zone on our website.”

The Student Support Zone is where students and staff can access information about welfare issues and support services. Senior Student Services Administrator Laura Regan says: “We wanted to ensure that we had a product that every student was aware of, so they can pick up their phone, tablet or laptop, and access the right resources quickly.”



Debra Ogden, Deputy Director of Student Services, adds: “Previously, there was a similar website called Student Space. Although it was a good resource, we found that many students thought it was a physical place to visit, rather than a virtual space that contained information about common concerns and how to access support.

“We also felt that while its language may have been fresh five years ago, it needed modernising – and we’re reviewing the whole branding of Student Services, so the Student Support Zone will become stylistically related to other specialist services, including the Counselling Service, the Disability Advisory Service and Careers.”

The Student Support Zone website has been optimised for easy navigation, giving prominence to the most common questions asked by incoming students – such as how to register with a GP and dentist. There has also been a conscious effort to take a plain-speaking approach to thornier welfare issues.

“We’ve not shied away from being direct about difficulties that students face,” says Debra. “We didn’t want a site that said, ‘Oh, if you have a problem, just go and talk to your personal tutor.’ We’ve enhanced the information about key issues like sexual health, homesickness, bereavement and drug and alcohol misuse, and we’re trying to break down the stigma of issues around mental health, as well as encouraging students to support their own wellbeing.”



WE’VE NOT SHIED AWAY FROM BEING DIRECT ABOUT DIFFICULTIES THAT STUDENTS FACE.

Debra Ogden, Deputy Director
of Student Services

Most students will gain some familiarity with the Student Hub, a one-stop shop that brings together many basic support services. Its knowledgeable team of advisers and assistants can answer queries in person (on level three of the Sherfield Building), by email or via the Hub’s website.

“We support all areas of the student journey, from prospective students enquiring about the admissions process; to recent graduates requesting official College documents,” says its Acting Manager, Michael Swan.

However, the Hub also acts as a valuable second line of pastoral care for new students, beyond the services provided by warden teams in College accommodation. “Our students tend to migrate to the Hub if they have issues once they’ve moved in, or if they’re struggling to adapt to living away from home,” says Michael.

“Later on, they might come to us for one-to-one advice about issues in the private sector. We regularly read over tenancy agreements and help with landlord disputes, repairs, or non-return of deposits.”

As to general pointers for helping new members of the Imperial community settle in, Naveeta and her team polled current students on Instagram to find out what they wished they had known as new students. “Lots of people said, ‘you should know there’s always someone there to help’” she says. “Take advantage of living in London, enjoy meeting so many different types of people, and don’t hesitate to seek help.” ●

Make the most of your lunch break



Cecily Sheppard,
COMMUNICATIONS
AND PUBLIC AFFAIRS

It's 11.45 and, let's be honest, lunch has probably been on your mind for at least the past two hours. But how often do you actually take a break away from your workspace?

WHETHER YOU'RE RIGHT IN THE MIDDLE OF A weighty article or up to your eyeballs in emails, it can be easy to slip into the habit of staying at your desk during lunch. However, research has shown it's important to make sure you give yourself a break. In 2013, a study of 300 white-collar workers, co-authored by Professor Mark Cropley from the University of Surrey, found that those who valued and scheduled leisure time were better able to switch off from work when they needed to. We can also use lunchtime to move more, eat a healthy meal, do something creative or talk to our colleagues, all of which are good for our mental and physical wellbeing.

"Breaks aren't a deviation from high performance. The research shows that breaks actually enhance our performance," explains Chris Allan, Senior Occupational Health Adviser at Imperial.

"Taking the right sort of break is important. Social is usually preferred over solitary, in nature over in the office, and a creative focus is a great way to refresh the mind. So, go for that walk, take some time out, meditate for ten minutes, go for a swim. Because self-care is not selfish."

So, when the clock strikes lunch, what could you be doing to get away from your desk?



**BREAKS AREN'T A
DEVIATION FROM
HIGH PERFORMANCE.
RESEARCH SHOWS
THAT BREAKS
ACTUALLY ENHANCE
OUR PERFORMANCE.**

Chris Allan, Senior Occupational
Health Adviser



**GET
CREATIVE**



*A class in the the
Blyth Art Studio*

At Imperial we're pretty good at embracing our creative side and there are lots of opportunities to get involved with something arty during your lunch hour – from watercolour painting to music practice.

"I'm a firm believer in the mental health benefits of crafts, and you can feel that coming through in our warm and friendly group," says Sue Flockhart, a member of the Imperial Stitchers, who works in the Office of the Chief Information Officer in ICT. The Stitchers are a group of 25 avid knitters, crocheters and embroiderers who meet every Tuesday at the South Kensington Campus. "I've really enjoyed meeting staff from other departments, chatting about creative topics while doing something totally absorbing and different from my job," adds fellow Stitcher Emma Morrison from the Education Office.

The **Blyth Centre for Music and Visual Arts** is another great space at Imperial to explore your creativity. Its ten **music practice rooms** in the Sherfield Building are available for all students and staff at the College to use for free.

"We have staff from every department using the facilities at the Blyth Centre," says Naomi Anderson-Eyles, the Centre's administrator. "Many come and practice in the music rooms while others take lessons in piano, voice or violin. I know people from Catering and Security who have used the rooms – we've even had a professor conducting a musical experiment!"

But if you'd rather bask in the music than create it, then the Centre's lunchtime concert series might be for you. Held every Thursday during term time, these free concerts present a range of world-renowned musicians across the year, with

performances of everything from Haydn and Shostakovich, to brass quintets and Klezmer ensembles.

Meanwhile the Blyth Art Studio hosts lunchtime classes and workshops with professional artists covering everything from watercolours and ink drawing, to weaving and fabric printing. Places are free and open to all levels and abilities, and the Studio also holds weekly Wednesday drop-in sessions with the Centre's resident artist, Mindy Lee. Mindy provides one-to-one support to anyone who would like to develop their practice and demonstrate how to use different materials, which are all provided as part of the session.

*Crafting fantastic: pieces by the
Imperial Stitchers*





GET
SOCIAL



Staff groups and workshops play an important role in promoting a supportive campus community, helping members to make new friends and connections across the College.

The College's Yammer site has details of lots of clubs and groups across College, such as I.Run, the Imperial running group. There's also MeetUp Imperial, the staff social networking group where you can find or post about special discounts and spare tickets to local events.

Imperial College Union's student societies also play a key part in creating our community, and many of the groups welcome College staff as Associate Members of the Union – maybe you could host a lunchtime radio show on ICRadio, row with the boat club or perform in a College choir.

Alongside all this, the **Support Services Social Committee** provides networking opportunities for support services staff through activities like lunchtime walks and tours of the Queen's Tower, as well as the annual support staff summer party. The Committee also helps bring together staff with shared interests and hobbies by promoting clubs, events and activities across both the College and the surrounding area. Upcoming events include a wine tasting, a trip to see the musical *The Book of Mormon* and a quiz night in Eastside.





Have you ever considered learning while you lunch? The College runs lots of lunchtime courses. There's also a discount on the course fee for Imperial staff.

Dr Anna Nyburg, who works in the Centre for Languages, Culture and Communication, attended the Joy of Art class. "There were many laughs, some unexpected discoveries," she recalls. "It was an excellent way to think about something completely different for one hour."

From mindfulness to religion-based practice, **meditation** is an increasingly popular way to take a moment to pause and focus on yourself. The College runs several types of meditation at our South Kensington Campus to help staff and students manage the stresses of London life. The purpose of meditation is to give you the means to achieve relaxation despite pressures and restore tranquillity, happiness and vitality. Once you've learnt the fundamentals, you can use your new skills to help stay on top of your life and work and improve your wellbeing.

A little lunchtime exercise is highly beneficial, especially for those of us who sit at our desks all day.

Whether you're looking for a mood boost or hoping to improve your general fitness, **Active Imperial** could be for you. It offers classes like yoga, Tai Chi and Pilates – as well as high-paced cardio workouts and spin sessions at the South Kensington, Hammersmith and Charing Cross Campuses. All you need is an Active Imperial membership to get started!

"I love going to Body Attack and Spin classes at lunchtime over at Ethos," says Liz Scholfield from Communications and Public Affairs. "The group classes are fun, you make friends and you get fit at the same time! The endorphins really make me feel positive and more productive when I get back to my desk." ●



Reclaim your lunch break today!

ART WORKSHOPS

Where: Blyth Art Studio, 153 Roderick Hill Building/ ACE Building, South Kensington Campus

When: Every second and third Wednesday, 12.30–13.30

More info: www.imperial.ac.uk/music-and-arts/visual-arts/art-classes

LUNCHTIME CONCERTS

When: Thursdays (term-time), 13.00–13.45

Where: Read Lecture Theatre, Sherfield Building, South Kensington Campus

More info: www.imperial.ac.uk/music-and-arts/music/lunchtime-concerts

I.RUN

When: Wednesday at 12.30

Where: Meet by the Albert Memorial for a 5km run through Hyde Park

MEDITATION

When: Mondays (Christian), Tuesdays (mindfulness) and Fridays (Buddhist), 13.05–13.50

Where: Chaplaincy Multi-Faith Centre, South Kensington Campus

More info: www.imperial.ac.uk/health-and-wellbeing/meditation



The anti-pollution revolution

Cars are killing us, but we need help to give them up. Dr Audrey de Nazelle explains how a simple change of habit could have a dramatic impact on our physical and mental wellbeing.



Dr Audrey de Nazelle,
LECTURER IN AIR
POLLUTION MANAGEMENT
AT THE CENTRE FOR
ENVIRONMENTAL POLICY

WE NEED TO MAKE THE IMAGINATIVE LEAP TO CITIES FREE OF pollution, where people – commuters, the elderly and children – can get about, socialise and play safely in clean air. People need to experience the joy of car-free streets to really understand what they are missing, and become engaged in pushing for change. But when you ask people whether they want roads to be pedestrianised, they become anxious at the prospect – even non-drivers ask: “But where will the cars go?” It won’t happen without vision.

That’s what my research aims to bring. We’re trying to understand how to promote an appetite for change. It doesn’t work simply to tell people not to drive, even if you say they’ll be healthier. As pedestrians, they’re scared of traffic and of inhaling harmful fumes. We know for instance that school runs account for a huge amount of pollution. My neighbours tell me they don’t really want to drive their children to school, but they fear it’s not safe to walk or cycle.

This is undoubtedly important. According to the World Health Organization, outdoor air pollution contributes to more than four million deaths globally every year. In cities, our children’s lungs and brains aren’t developing to their full capacity because of harmful particulates in the air. Noise and pollution are not allowing them to develop as they could. Many of today’s ailments are compounded by pollution – obesity, social isolation and disease.

Low emission zones and cleaner fuels have limited benefits – ultimately the solution is not to fight pollution with ever more technology. Even electric vehicles emit particulates from tyres and brakes – and are powered mostly by fossil fuels. Rather than focusing on what is coming out of the tailpipes, we should adopt a more holistic vision, engage the public and push for policies to bring car free streets.

THE CYCLE OF LIFE

In one of my projects, we modelled the benefits of cycling in cities and found that the health benefit of using bikes in Barcelona was 77 times greater than the potential risks of breathing in pollution or having an accident. Cities worldwide are introducing bike hire schemes. Paris Mayor Anne Hidalgo has made the brave call to close the capital's quay-side roads along the Seine to cars, freeing them up for walkers and cyclists. Other cities such as Oslo, Hamburg, Milan and, to an extent, Madrid are tackling the issue.

But it's a Catch 22 situation. Policy makers won't change without pressure from the public, but public attitudes don't change without external pressure and information. We need to study the science of engagement, and how we can persuade politicians that we don't want to live in fear of our lives every time we cross the road, and that we want our kids to be safe. Research shows that places which have most enthusiastically embraced cycling policies – such as parts of Canada – have had city-level campaigns to promote active transport. Our role as academics is to show what works.

Data now offers us huge advantages – we can track people to understand what activities affect their exposure to air pollution, and how we can change this by switching routes or transport modes. We're trying to build an evidence base and contribute to policies that make life better for people. In our Centre for Environmental Policy, we are developing an app (with my PhD student Rosie Riley) which informs users about air quality and gives them concrete actions to improve their health and get engaged. And on the basis that children can be great influencers upon their parents, we're also investigating how air pollution interventions in schools can work best to encourage healthy behaviours such as active travel. We're also collaborating with colleagues on developing digital tools to engage members of the public and policy makers around these themes.

We aim to give a positive vision of what cities will look like – this is where we are going, and these are the benefits. I know this first hand. If I cycle to work with my baby on the bike, it takes me half an hour. It's longer by bus and tube, and I don't have to squash in with other commuters. If my husband and I go home from a concert, I beat him home every time by bike. And I don't even have to go to the gym to stay fit. ●

Dr de Nazelle presenting her research on air quality and emissions to the Department for Transport



4+ million

Global deaths in which outdoor air pollution was a contributing factor, according to research by the World Health Organization.



Dr de Nazelle's research shows that the health benefits of cycling were **77 times greater** than the potential risks.

1,000

London hospital admissions for asthma and serious lung conditions caused by air pollution every year.

Greening Imperial

- Get a bike and start cycling – check out Bikeability for free lessons: bit.ly/reporter312-Bikeability
- Find out more about creating a parklet in your street with a toolkit on the Living Street website: bit.ly/reporter312-Parklet
- If you have a regular short car journey try walking or getting the bus part of the way
- Write to your local council/MP to ask for improvements
- Check out the Greening Imperial website and sign up to their newsletter: bit.ly/reporter312-Greening
- Talk to your neighbours and colleagues and encourage them to try some of these tips

RESEARCH NOTES

JULY–OCTOBER 2019

Vaccines, earthquakes, glaciers and microdosing.



MEDICINE

Hearty insights

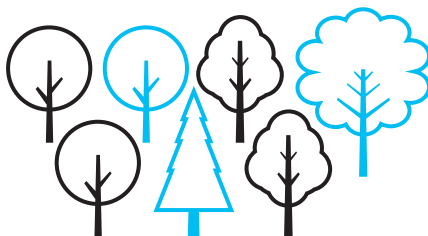
Studying the fine structure of muscles used by fish to 'sing' to their mate could help researchers to better understand, and treat, heart conditions.

► FULL STORY: bit.ly/reporter312-sing

Six years' worth

The amount of current carbon dioxide emissions today's plants and trees could remove from the Earth's atmosphere by 2100 if no further deforestation occurs.

► FULL STORY: bit.ly/reporter312-trees



4.4kg

The average weight loss of patients taking part in a small study into the effects of a 'GOP', a hormone combination injection which suppresses appetite and improves the body's ability to use the sugar absorbed from eating.

► FULL STORY: bit.ly/reporter312-GOP



MEDICINE

Vaccine hope

The first ever early clinical trial for a vaccine for genital chlamydia has shown it to be safe and effective at provoking an immune response.

► FULL STORY: bit.ly/reporter312-chlamydia



SCIENCE

Antarctic archive

Digitised archival film has revealed that part of Thwaites Glacier in the Antarctic is melting faster than thought, suggesting the shelf may collapse sooner than expected.

► FULL STORY: bit.ly/reporter312-glacier

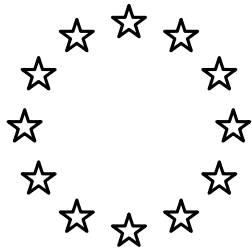


ENGINEERING

Surrey swarm

There is no evidence that oil extraction caused recent earthquakes known as the ‘Surrey swarm’ in Surrey and Sussex, according to a new Imperial analysis.

► **FULL STORY:**
bit.ly/reporter312-earthquakes



€11 million

The total value of 11 Starting Grants recently awarded to Imperial academics by the European Research Council.

► **FULL STORY:** bit.ly/reporter312-grants



WE HAVE SHOWN THAT THE ORIGINS OF ADULT OBESITY LIE IN EARLY CHILDHOOD, AND THAT THERE ARE CLEAR WINDOWS ACROSS THE LIFE COURSE WHICH SHOULD BE BETTER CONSIDERED IN OBESITY PREVENTION.

Marjo-Riitta Jarvelin on a major new study into the ways body mass index is influenced by genetic factors that change as we age

► **FULL STORY:**
bit.ly/reporter312-obesity



“Despite so much interest in the subject, we still don’t have any agreed scientific consensus on what microdosing is.”

Professor David Nutt on the lack of robust scientific evidence in psychedelics microdosing

► **FULL STORY:**
bit.ly/reporter312-microdose

Reviewing the curriculum

As our new students start their courses, they can expect to have more time and space to reflect on and integrate their knowledge, thanks to the recent College-wide review and redesign of all undergraduate (and many postgraduate taught) programmes. From more inventive lab sessions to testing new technologies in medicine, we're empowering our students to be global citizens and leaders in an ever more diverse and interconnected world, solving some of society's most pressing issues.

DR KRISTEL FOBELETS

**Director of Undergraduate Studies,
Department of Electrical and Electronic
Engineering, Faculty of Engineering**



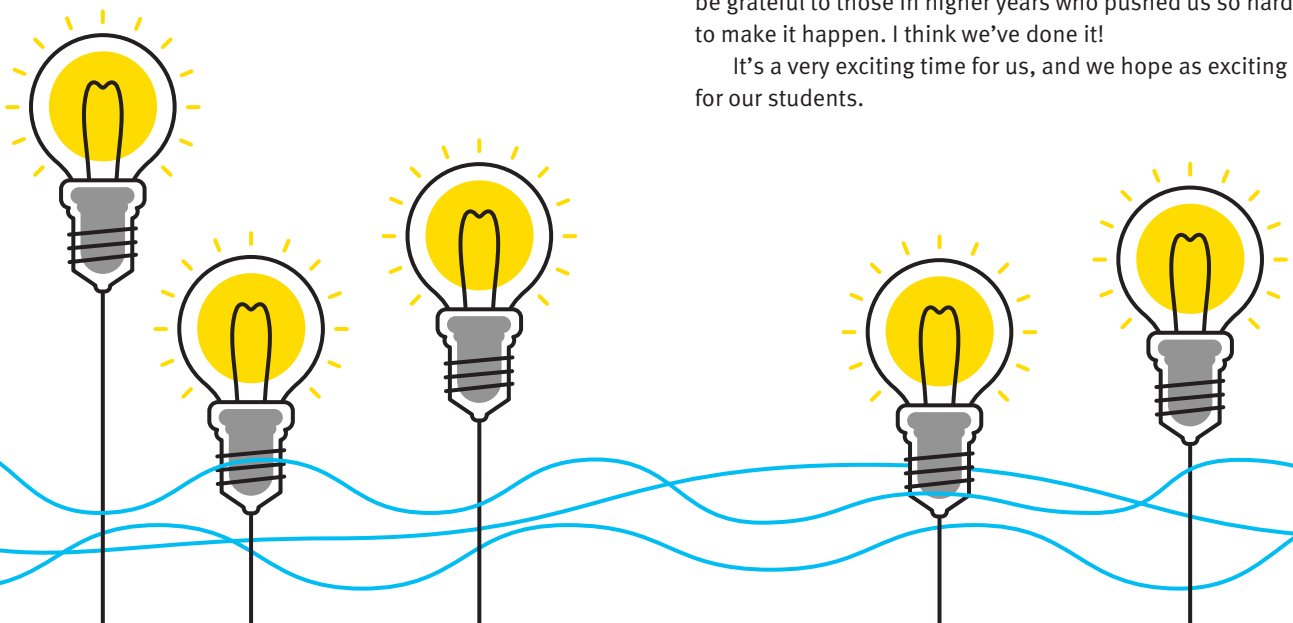
The changes we're making aim to offer students greater flexibility, more space to reflect and learn, and to prepare them for careers in the increasingly fast-changing world of 21st century engineering and technology.

We've created a combined first year for our two degree courses — Electrical and Electronic Engineering, and Electronic and Information Engineering. We recognised that electrical engineers require solid computer skills, and information engineers need equally fundamental electrical engineering knowledge. The new common programme will teach the essentials of both subjects to the same level, enhancing the professional identity of the two disciplines, and allowing all students to make a better-informed choice between the degree pathways after a year.

With investment from the College we've redesigned our computing labs as a reconfigurable study space that reflects the way engineers work in the real world — as problem-solving teams. It opens up opportunities for students and staff to be more actively engaged in learning and teaching through team-based learning, rather than dry study groups.

Another positive development is a preliminary module to help first years gain confidence in working in the electrical lab, and proficiency in data recording and analysis, supported by video presentations that demonstrate how to use the equipment. This enables us to fully connect the content of our taught modules with timely lab practice. All our students will recognise this welcome change, and our first years can be grateful to those in higher years who pushed us so hard to make it happen. I think we've done it!

It's a very exciting time for us, and we hope as exciting for our students.





MARTIN LUPTON

Vice-Dean (Education), Faculty of Medicine



The School of Medicine has been proud for many years of its science-focused curriculum, but new drivers for change have emerged for medical education in the UK. A pressing need for more doctors trained as community-based generalists; technological developments facilitating creative teaching approaches; the introduction of a national Medical Licensing Assessment, expected around 2022; as well as delivery of the College’s Learning and Teaching Strategy – all influenced the need to rethink our curriculum and its delivery to best equip our students for medical or scientific careers.

Designed, led and delivered by a team of clinicians and academics, one of the new modules in the reimagined curriculum is ‘Lifestyle Medicine and Prevention’, which explores the impact of modern life on health and wellbeing.

A wide variety of learning approaches will be used to deliver the module: a real-life health technology tracking research study; actor-delivered roleplay; and small group clinician-led tutorials. The module is built using the Coursera online learning platform.

A collaboration between the School of Medicine, School of Public Health and the Digital Learning Hub, the ‘Lifestyle Medicine and Prevention’ module introduces choice earlier into the curriculum than ever before. Based on one of five elective themes (diet, physical activity, money, wellbeing and sleep), students will spend the final few weeks of the year developing an evidence-based audio podcast and accompanying academic commentary.

While medical students will learn about the wider determinants of health, alongside use of behaviour change techniques, a strong clinical angle has been developed too – connecting communication skills, professional values and behaviours. In creating the module, its leader Dr Richard Pinder and the team have ensured that we will enable students to have greater insight and self-efficacy about their individual wellbeing – recognising the pressure, challenges and rewards of a career in medical practice. ●

There are more exciting curriculum developments coming up in future. Keep an eye on upcoming issues of *Reporter* for details about how we’re supporting our staff to implement the new curricula and review our remaining postgraduate taught programmes.

TEACHING NOTES

Education research

Imperial’s new education research centre has launched. The Centre for Higher Education Research and Scholarship (CHERS) welcomes some of the country’s foremost education specialists. Made up of a number of different levels of practitioners, the new team works closely with departments to support innovative learning and teaching, and to conduct education research.

Digitising medicine

School of Medicine students are trialling Augmented Reality (AR) headsets, bringing anatomy education out of textbooks and closer to real-world practice.

The pioneering trial involving MBBS students, the College’s Digital Learning Hub, and Leiden University Medical Center, is exploring whether AR technology could be introduced into medical student examinations.

For Dr Amir Sam of the Department of Metabolism, Digestion and Reproduction, this is a great way of training the medics of the future.

Dr Sam said: “Introducing this technology means we can test students’ ability to spatially orientate themselves when interacting with a digital version of the human anatomy. It really elevates the quality of our assessment and encourages far deeper understanding than simply looking at anatomy on paper.”



Ideal student

A new Imperial-led study of five English universities has explored staff and students’ interpretations of what it means to be an ‘ideal student’. The two-year study involved 75 university staff and students and was conducted by Dr Tiffany Chiu, Senior Teaching Fellow in Educational Development at Imperial, and Dr Billy Wong, University of Reading.

Dr Chiu and Dr Wong argue that exploring definitions of the ‘ideal’ student can encourage students and staff to discuss more openly what it means to be a student in the modern higher education system. Dr Chiu said: “What we found from our conversations is that most staff and students thought that the ideal university student is not about perfection, nor being the brightest or the best.”

LONG SERVICE

Staff featured in this column have given many years of service to the College. Staff listed celebrate anniversaries during the period 2 August–30 September 2019. The data is supplied by HR and is correct at the time of going to press.

30 YEARS

- Gary Gray, Supervisor Support Services (Technical Services), Security Services
- Ros Jones, Administrative Assistant, Estates
- Martin Kehoe, Opto-Mechanical Instrumentation Workshop Manager, Physics
- Professor Patrick Naylor, Professor of Speech and Acoustic Signal Processing, Electrical and Electronic Engineering
- Professor Jenny Nelson, Professor of Physics, Physics
- Stephen Rothery, Laboratory Manager and Senior Technician, National Heart and Lung Institute
- Louise Young, Strategic Purchasing Advisor, Finance

40 YEARS

- Professor Andrew Amis, Mechanical Engineering
- Professor Alan Boobis, Emeritus Professor of Toxicology, National Heart and Lung Institute
- Bob Brace, Technician, Chemical Engineering
- Leslie Clark, Laboratory and Hydraulics Operations Manager, Civil and Environmental Engineering
- Nicholas Collett, Senior Chef de Partie, Campus Services
- Ian James, Technician, Aeronautics
- Professor John Mumford, Professor of Natural Resource Management, Centre for Environmental Policy
- Andy Rochester, Technician, Physics
- Professor Timothy Sumner, Professor of Experimental Astrophysics, Physics
- John Wye, IT Support Specialist, ICT

SPOTLIGHT

PROFESSOR PATRICK NAYLOR

Professor of Speech and Acoustic Signal Processing, Electrical and Electronic Engineering

30 YEARS

“I did my PhD at Imperial and then became a member of staff in 1989, so I’ve spent my whole career here. The maturity of my research area has developed radically from work in the 80s on speech coding in mobile networks to now, when everyone has speech recognition on their phones and takes it for granted.

I’ve seen a lot of building work over the years and I despair at the amount of noise on our campus. The campus used to have trees and grass – as a PhD student I used to eat my lunchtime sandwiches under the trees where the ‘blue box’ now is.

The way the College has supported my European collaborations has been fantastic. EU projects have funded 50 per cent of my research career and provided 75 per cent of my professional network. Not all of the relevant industries for my research exist in the UK, so I look to countries including Germany, Italy and France – these industrial links outside the UK crucially provide additional impact opportunities.

I hope to continue contributing to the College – although maybe not for another 30 years! I’ve had a lot of fun in my research, and I’ve always enjoyed meeting enthusiastic new students, and sharing their joy when they graduate. I couldn’t ask for much more.



HONOURS

COLLEGE

Academic promotions

Over 130 academics were promoted across the Business School and the Faculties of Engineering, Medicine, and Natural Sciences. They took up their new roles at the start of September.

Mazdak Ghajari, Dyson School of Design Engineering, promoted to Senior Lecturer: “I joined the Dyson School of Design Engineering just one year after its opening, at the same time as the first cohort of undergraduate students. I was involved in the growth of the department from the beginning, including developing the new undergraduate curriculum.”



Sadaf Ghaem-Maghami, Department of Metabolism, Digestion and Reproduction, promoted to Professor of Gynaecological Oncology: “I have been working on immunotherapy in cancer for the last 15 years. We are working on ways to make ovarian cancer more immune responsive with drugs. We hope to move this into clinical trials with patients fairly soon.”



Karen Makuch, Centre for Environmental Policy, promoted to Senior Lecturer: “Being part of an interdisciplinary department is very important for what I do – you see a bigger picture for addressing grand challenges. You can’t apply environmental law without a really solid understanding of the intersecting scientific and policy issues.”



Paola Criscuolo, Business School, promoted to Professor of Innovation Management: “One phenomenon I’ve identified is ‘bootlegging’ – where scientists at big companies go underground with their research and innovation, and secretly work on extra projects outside the ones they’ve been assigned. Our key finding was that scientists who work on these kind of extra projects are actually much more productive in their official activities as well.”



► FULL STORY: bit.ly/reporter312-promotions

MEDICINE

“We value highly our Imperial connection”



Professor James Best is the Dean of Lee Kong Chian School of Medicine (LKCmedicine) – a medical school run jointly by Imperial and Singapore’s Nanyang Technological University (NTU). Professor Best received the Imperial College Medal at Commemoration Day in recognition of his exemplary work at LKCmedicine.

What were your thoughts when you first arrived at LKCmedicine five years ago?

I was excited with the opportunity to continue to build a new medical school in Singapore, having come from a very established medical school at the University of Melbourne, where I had worked for 25 years. The fact that LKCmedicine had two parent universities, NTU Singapore and Imperial, added an interesting dimension.

What’s it like to manage a school led by institutions in two continents, with different cultures and health systems?

The involvement of two highly ranked universities does add an element of complexity, but it has truly been a seamless partnership. Being based in Singapore, we are very strongly connected with NTU, but we value highly our Imperial connection and the support and prestige that brings. The East-West connection provides wonderful opportunities for our new medical school.

How is the LKCmedicine relationship with Imperial evolving? Where do you see the Imperial-NTU-LKCmedicine relationship going in the future?

The relationship is going from strength to strength. I see it evolving into a more bi-directional partnership, where Imperial derives significant benefit through collaborative efforts in education and research. In fact, that is happening already.

How do you find working with Imperial staff? What have they added to the relationship with LKCmedicine?

The opportunity to work with Imperial staff has been immensely beneficial for me, both at a personal and academic level. I appreciate very much the support and encouragement, as well as the sage advice I receive. Staff who have relocated to Singapore from Imperial have contributed mightily to our success and have provided a strong connection, as have the academic staff visiting from Imperial.

What does the Imperial College Medal mean to you?

The award of the Imperial College Medal is a significant and unanticipated honour, which I appreciate greatly at this stage of my career. It means the efforts I have made over the past five years are recognised by Imperial and that Imperial sees its presence in Singapore through its joint medical school in a very positive light.

Thoughts on the upcoming Transform MedEd conference?

It will be a superb meeting and an opportunity to celebrate our partnership in medical education, just as we did in Singapore last November. The programme will be outstanding and I look forward very much to attending.

Transform MedEd is an international medical education conference organised by Imperial and LKCmedicine.



THE FELLOWSHIP WILL ALLOW ME TO GO FROM BLUE SKIES RESEARCH ALL THE WAY TO APPLICATION.

Yuval Elani is one of eight Imperial researchers to have been awarded Future Leader Fellowships by UK Research and Innovation.



MY IMPACT JOURNEY HAS BEEN TRANSFORMATIVE, IN TERMS OF HOW I SEE MYSELF AND THE KIND OF OPPORTUNITIES THAT I COULD APPLY FOR.

Grace Adeyemi, Recruitment Administrator in Human Resources, one of the 16 staff who completed this year’s IMPACT programme for Black, Asian and Minority Ethnic (BAME) staff.

REVIEW

“Race science is not about biology, it’s about power”

ANGELA SAINI, *SUPERIOR: THE RETURN OF RACE SCIENCE*, 9 OCTOBER 2019

As part of Black History Month, science journalist and author Angela Saini visited Imperial to deliver a lecture that tackled the question of why science continues to be plagued by ideas of race. Organised by the College’s Equality, Diversity and Inclusion Centre, the lecture explored the topic of Angela’s latest book, *Superior: The Return of Race Science*, which tells the disturbing story of the persistence of ideas of biological racial differences in the world of science.

Angela, who studied engineering before becoming a journalist, discussed how following World War Two, eugenics transformed into genetics, as many of its former proponents simply switched fields. She explained how the influence of private funding has helped certain research publications to perpetuate damaging myths around race, allowing

those who support racial segregation to claim that ‘science is on our side’.

Highlighting that even the most well-intentioned scientists can fall back on the use of racial groups to categorise and analyse subjects in their research, Angela argued that scientists should beware of using racial definitions if they cannot explain them. She said: “Medical research gives data based on race but other explanations, such as diet, are overlooked in favour of racial explanations. Some scientists are projecting contemporary notions of race onto the evidence. Reconstructing the truth in this way is deeply dangerous.

“If you can’t define your variables, don’t use them. If you can’t define race, don’t use race.”

► **READ A FULL REVIEW OF THE LECTURE AND LISTEN TO AN INTERVIEW WITH ANGELA**
bit.ly/reporter312-Saini



BLACK PEOPLE OF IMPERIAL

Throughout Black History Month, Imperial College Union and Imperial African Caribbean Society have celebrated the Black community at the College by sharing their life at Imperial, one story at a time.

► **READ ALL THE STORIES ONLINE**
www.instagram.com/blackpeopleofimperial

REVIEW

Making a difference

FACULTY OF NATURAL SCIENCE’S MAKE-A-DIFFERENCE COMPETITION, 23 OCTOBER 2019

Team MultusMedia scooped the £7,000 prize in the final of the Faculty of Natural Science’s Make-a-Difference Competition in October. The winning team – which includes Cai Linton (Bioengineering), Evan Whooley, Kevin Pan and Réka Trón (all Life Sciences) – is creating an enabling technology for the clean meat industry.

The competition tasks three teams of undergraduate students with developing low-cost technology solutions which will have an impact on society. This year’s finalists spent eight weeks turning their ideas into proof-of-concept prototypes, before pitching their ideas at the final to VIP judges Professor Lord Robert Winston, Professor Sir John Pendry, Dominique Kleyn, Dr Ruth Allan and Dr Allan Samuel.

► **READ A FULL STORY:** reporter312-FoNS-MAD



Coming up this autumn at Imperial

Holding AI to account with Professor Alessandra Russo and sub-zero chemistry at the Winter Wonderlab.

► SIGN UP FOR A FULL EVENTS LISTING: www.imperial.ac.uk/whats-on

19 NOVEMBER, 17.00–18.00

Geoffrey Rose Memorial Distinguished Guest Lecture

With Professor George Davey Smith, University of Bristol.

Anthony de Rothschild Lecture Theatre, Faculty of Medicine Building, St Mary's Campus

20 NOVEMBER, 17.30

Can knowledge-based AI aid human-machine collaboration?

In her inaugural lecture, Professor Alessandra Russo will explain why a knowledge-based, and not just a data-intensive approach, is key to holding AI account.

Lecture Theatre G16, Sir Alexander Fleming Building, South Kensington Campus

28 NOVEMBER, 17.30

Surgery, statistics and science

Professor Eric Lim will share how mathematics transformed his career from bewildered medical student to international clinical opinion leader.

Lecture Theatre G16, Sir Alexander Fleming Building, South Kensington Campus



4 DECEMBER, 12.30–18.30

Global health in a snapshot

View the nine shortlisted entries in the Institute of Global Health Innovation's photography competition and vote for your favourite.

College Main Reception, South Kensington Campus

5 DECEMBER, 19.00

Plastic fantastic: solving plastic waste

Imperial alumnus and CEO of Recycling Technologies, Adrian Griffiths, explores how new approaches to recycling could help plastic reclaim its status as a wonder material.

Lecture theatre G16, Sir Alexander Fleming Building, South Kensington Campus



12 DECEMBER, 17.00

Hammersmith and White City Campus Distinguished Christmas Lecture

Professor Fiona Watt presents an adventure in skin biology.

Wolfson Lecture Theatre 1, Hammersmith Campus

HIGHLIGHTS



14 NOVEMBER, 14.30–18.00

A Celebration in memory of Professor James Stirling

Join us to celebrate the memory of Professor James Stirling, renowned theoretical physicist, respected academic leader and dearly missed member of the Imperial community. Register in advance online.

South Kensington Campus, locations TBC



5 DECEMBER, 18.00

Imperial Lates: Winter Wonderlab

As the nights draw in, we celebrate the chillier side of science via all manner of sub-zero chemistry and festive fun and embrace the cold in our Winter Wonderlab.

College Main Entrance, South Kensington Campus

Apply to the Calibre Leadership Programme

Find out more at imperial.ac.uk/equality/support-for-staff/training/calibre

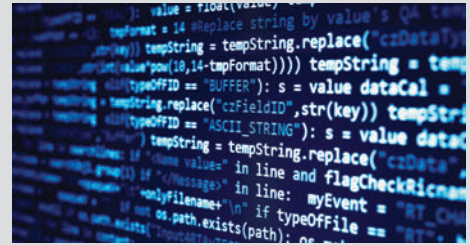
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TAKE NOTE



Research Software Engineering Service

The Research Software Engineering service provides specialist software development expertise to research projects across Imperial. Their team of professional software developers based in the Research Computing Service have extensive experience in computational science and high-performance computing. Visit the ICT website to learn more about the team and how they can help with your research project.

▶ **LEARN MORE:** bit.ly/reporter312-RSE



Disability History Month

22 NOVEMBER–22 DECEMBER

This year's Disability History Month shines a spotlight on invisible/hidden disabilities and follows the national theme of Leadership, Resistance and Culture. Events at Imperial include a talk by the founder of Elizabeth Tayki, Founder and CEO of A2i Dyslexia, disability awareness training for staff, a film screening and comedy night.

▶ **LEARN MORE:** bit.ly/reporter312-disability-history-month