

EDITORIAL

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OTs, what's good?



Fred Fyles – Felix Editor

Another week, another editorial. But what made this week a bit different was the return of one of my favourite parts of this time of year: daffodils. When I was passing a petrol station on the way home last week, I noticed bunches upon bunches of daffodils, their flowers pressed tightly closed against the roar of traffic, standing upright in a bucket, like regimented soldiers. I bought a bunch, which have been slowly blooming on my desk as I type up articles.

I don't know why I like daffodils so much, but it might be because they are reassuring. We know they are coming, every single year – and yet, when they do finally appear, they still seem to be something of a surprise. This is my sixth year at Imperial, so student elections have become a bit like these daffodils too – regular and expected, although not as pretty. This is the first year where I've really been involved with the elections, though, or with the Union as a whole. While I've been involved with *Felix* since coming to Imperial, it's never been

with an eye to checking out what's going on at the Union, or seeing what the College has invested.

This year has provided something of a rude introduction, therefore, into the world of Union hackery. While I can't say I've not enjoyed having a peek inside the inner workings of Imperial, I think a year will be enough for me – don't worry, you'll only have to put up with these for a few more months. This issue we're looking at something that I've been thinking about since I ran for the role: how we hold our elected officials

accountable. Each year we elect a set of officer trustees, who all run on manifesto promises; and each year they end their term with a list of things they have achieved, which – though admirable – is often different to what they set out to do.

While they've still got quite a bit of time left to do things, we thought this week would be a good time to check in with what they've been up to, perhaps giving potential candidates an idea of the kind of things Officer Trustees might do on a day to day basis.

We'll be doing another one at the end of the year, when time's really up, to see what's fallen by the wayside. So give it a read, and see what you think.

Or don't! Skip through to the Arts section and check out the latest reviews; or head over to Sport, which earned our Editor Imraj the MVP award for biggest section this week; or just skip straight to Puzzles, and give the crossword a go over your morning croissant. I won't blame you. As I said, Union hackery isn't for everyone.

When I first started this role, I was expecting the most exciting and rewarding aspects of the job would be holding people to account, and reporting on the news that really matters to you. While that's still hugely important to me, what I've come to realise is the part of the job I find so incredible is getting to work with the group of wonderful individuals who make up the *Felix* team. Each week I am bowled over by their efforts, and I hope you are too. Beauty and joy can crop up in the least expected of places – like those rows of daffodils on a gas station forecourt.

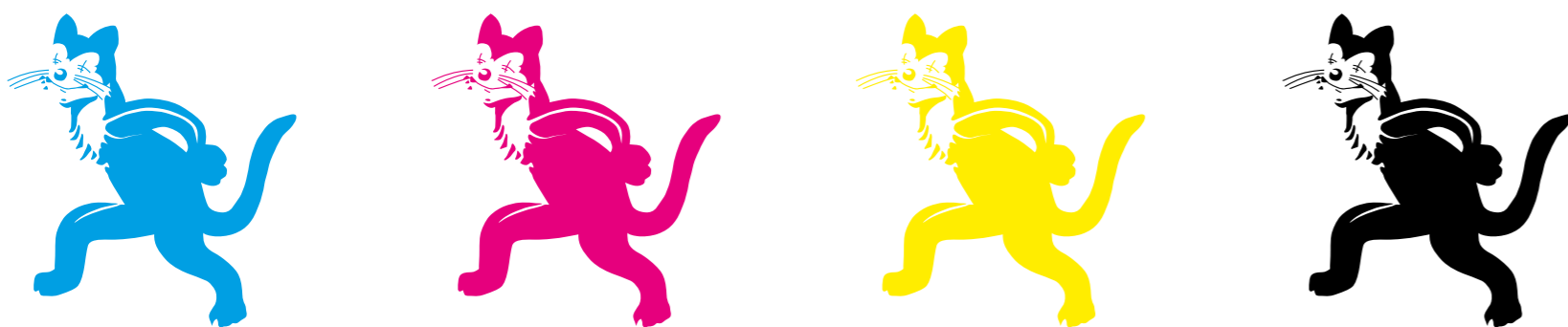


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NEWS

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Imperial among bottom of Russell Group in accepting state school applicants

NEWS

Fred Fyles
Editor-in-Chief

Data on the admission cycle has revealed only 63.5% of the 2016/17 entrants were from state school, placing Imperial only above Oxbridge and Durham.

New data show Imperial is among the worst-performing universities in the UK in terms of admission of state school applicants.

Data released by the Higher Education Statistics Agency (HESA), the official agency for collection of quantitative information about higher education in the UK, showed that out of the 2016/17 admissions, 63.5% were from state school. This places Imperial as 4th lowest out of the Russell Group for admitting state school applicants: only Oxford, Cambridge, and Durham admitted a lower percentage of state school

applicants.

These results show a slight drop in admissions from state school over the last couple of years: in the 2015/16 cycle, 65.5% of entrants were from state schools, while in 2014/15 64.8% of entrants were from state schools. Imperial's results are a significantly lower than the location-adjusted benchmark of 71%. These data cover only UK domiciled students, and therefore do not include EU or international students.

"The number of state school admissions has dropped since last year"

The Russell Group university with the highest percentage of state school entrants was The Queen's University of Belfast, whose entrants were 98.1% from state schools. These data come a couple of weeks after UCAS data revealed that Imperial was the most equal university



The findings come two weeks after Imperial was revealed as the most unequal university in England // CC

in England in terms of socioeconomic status. An analysis of the data found that those from the most well-off backgrounds were eleven times more likely to be admitted to Imperial than those from the most deprived areas.

Ansh Bhatnagar, Undergraduate Ordinary Member of Council for the Faculty of Natural Sciences, told *Felix*: "Once again, we have more data showing that Imperial has problems with socio-economic inequality. College needs to have a hard look at its admissions process which

seems to be promoting this disparity, and the Union needs a dedicated representative for economically disadvantaged students who are already at this university."

Over the last two decades, the percentage of university students coming from state schools has steadily increased: this year 90% of entrants in the UK were from state schools, up from 85% at the turn of the millennium.

In a statement, a College representative told *Felix*: "We firmly believe an Imperial education should be open to the best and

brightest students, whatever their background. We work with schools, colleges, and community organisations to inspire, raise aspirations, stimulate interest in STEM subjects, and support attainment"

"Examples of activities include our STEM Potential programme, aimed at high-achieving students from backgrounds under-represented in higher education – offering lectures, workshops, and a summer school"

"We offer the most generous bursary scheme of its kind of any UK university, as well as a wide

range of scholarships. However, we know that there is more we can do, and we are working to review our outreach strategy to understand how we can improve."

Speaking at the World Economic Forum last month, Professor Alice Gast, President of Imperial, said "While we strive to be elite universities without being elitist, we fail to connect with many in society", and highlighted the importance of "develop[ing] new ways of collaborating and engaging with [underrepresented] communities."

Portrait of Professor Tom Kibble unveiled

NEWS

Fred Fyles
Editor-in-Chief

A portrait of the theoretical physicist was revealed on Monday.

A portrait of Professor Sir Tom Kibble, former

Professor of Theoretical Physics at Imperial College London, was unveiled earlier this week.

The portrait, which was painted by Tess Barnes, was revealed by Professor Kibble's three children, in a ceremony on Monday. Professor Peter Higgs, who had worked in similar research areas to Professor Kibble, was scheduled to attend, but was unable

due to illness. The unveiling was preceded by two short lectures by Professor Kellog Stelle and Professor Anne-Christine Davis.

Professor James Stirling, Provost of Imperial, said he was "one of the hundreds of thousands of young scientists that Tom inspired", and that it had been "a real privilege...to get to know him" before his death in 2016, at the

age of 83. Professor Kibble, who was born in 1932 in Madras, India, came to Imperial in 1959, after completing a PhD in mathematical physics at the University of Edinburgh.

He joined the Theoretical Physics Group, which was a recent development at Imperial. In the 1960s, Professor Kibble's work with Gerald

Guralnik and C. R. Hagen led to the co-discovery of the Higgs mechanism and the Higgs boson, for which he was awarded the 2010 J. J. Sakurai Prize for Theoretical Particle Physics.

He was notably absent from the 2013 Nobel Prize in Physics, which was awarded to François Englert and Peter Higgs for their "theoretical discovery of [the Higgs

mechanism]" – Higgs later expressed his disappointment that Professor Kibble did not share the award.

The portrait is scheduled to go on display in the Blackett Laboratory soon.

NEWS

news.felix@imperial.ac.uk

Six months in – checking up on the Officer Trustees

Officer Trustees – What have they done? Have they done things? Let's find out!



Fintan O'Connor
Deputy President (Welfare)

//Nate Macabug

1 Continue the Under Pressure campaign – SUCCESS 😊

The Under Pressure campaign, which runs each year, aims to “give students strategies for coping during periods of heightened stress.” This year the campaign ran at the beginning of December, during which time Union staff spoke to over 400 students about how they can cope with stress, and distributed information about dealing with course stresses.

1 Implement student “teaching consultants” who will be paid to work with lecturers and improve performance – IN PROGRESS 🚶

While students at Imperial have a number of ways of making their views on their teaching known – speaking to their academic reps is one way, as is finally filling out that SOLE feedback you’ve been putting off for weeks – but this year has seen the beginning of a new development. Called *Student Shapers*, and similar to the UCL Changemakers scheme the project will be a partnership between College and the Union, aimed at allowing students to help shape education at Imperial. A director has already been recruited – on a salary of around £60,000 – and the scheme is scheduled to launch next year.

2 Extend the undergraduate teaching assistant role outside the Physics Department – SUCCESS 😊

Undergraduate Teaching Assistants (UTAs) are those helpers you might have seen in your labs, eagerly giving you advice on why your experiments aren’t working, or – in some cases – desperately fighting off a hangover. This year has seen the UTAs rolled out to a couple of other departments: EEE and Bioengineering students can now look forward to seeing them in their labs.

2 Continue work in frontline mental health training – WAITING ON COLLEGE 🏠

Mental health has been a long-running issue at Imperial. The 2015 Mentality survey revealed that only 15% of those surveyed had never suffered from a mental health condition or experienced mental stress. More than two years later, the topic of mental health training is still on the table: in the Union’s response to the National Student Survey results they made the recommendation that appropriate mental health first aid training is provided to student-facing staff – they are continuing to lobby the College on this.

3 Improve the development of College services, ensuring the welfare services are supported – IN PROGRESS 🚶

In 2016, *Felix* revealed that the number of students seeking counselling services had soared by 38% over three years, despite only a 5% increase in students. It has attracted criticism in recent years over long wait-times and lack of room to expand. This year the DPW has been working with the College on a Wellbeing Strategy, which aims to “bring together the wellbeing work...hold College to account on improving the wellbeing support and culture at Imperial...[and] secure funding for wellbeing at Imperial”, covering all aspects of wellbeing.

3 Ensure coursework is returned within a ten working day period – IN PROGRESS 🚶

This year’s NSS results highlighted a number of problems with assessment and feedback at Imperial. The most common benchmark at Imperial for getting marks back for coursework is ten working days, but it is not clear how often this has been met. Since October, Nick has been running an audit on all Year 1 assessed work, seeing when feedback was supposed to be received, and when it was actually received. The report from this is scheduled to be presented this month.

4 Ensure that students are consulted during the design, implementation, and evaluation of major changes to education – IN PROGRESS 🚶

At the end of the last academic year, the College launched their new Learning and Teaching Strategy, led by Professor Simone Buitendijk, Vice Provost (Education). The Strategy will prioritise “the review and redesign of our curricula”, and, as such, restructuring education will take a top priority this year. It is vital, therefore, that students are consulted on this. Since coming into office, Nick has been working with Departmental Reps and Academic Affairs Officers to draft a framework for how students should be consulted during this review, which is scheduled to be presented to College this term.

4 Develop support systems available for sexual violence and sexual consent training – WAITING ON COLLEGE 🏠

Last year the Union, working with the College, secured funding from the Higher Education Funding Council for England’s (HEFCE) ‘Catalyst Fund’, which was funding projects addressing sexual harassment on campus. This funding was supposed to be used in the training of Sexual Violence Liaison Officers (SVLOs), who would form part of the Union and College’s new systems for disclosure of sexual violence. As of November, Fintan reported that the support policies “continue to develop”, and that the “new staff roles of SVLOs to launch in the coming weeks”. The SVLOs are currently waiting to be deployed.

5 Develop the Welfare Roadmap and ensure that students know how to get help in and out of Imperial – GOAL SHIFTED 🚶

Last year’s DPW promised to deliver a ‘Welfare Roadmap’, which would function as a way of signposting the support services on offer. Fintan initially promised to continue working towards this aim, but the Union has since shifted focus to the Wellbeing Representation Network (WBRN).



Nick Burstow
Deputy President (Education)

//Nate Macabug

5 Improve communication between departments and academic reps through existing channels – SUCCESS 😊

This year, attendance at ERB (Education and Representation Board, for those of you not knee-deep in Union hackery) has sharply increased from 30 attendees to 49, with three meetings remaining in the year. Nick might argue it’s because of his sparkling personality, but attendance of senior members of the College, including the Vice Provost (Education), might have something to do with it...

NEWS

news.felix@imperial.ac.uk



Alex 'Chippy' Compton
Union President

//Nate Macabug

1 Commit to establishing staff and OT time at non-South Kensington campuses – SUCCESS 😊

The majority of this year’s OT team are medical students, so you might think they need no incentive to head over to Charing Cross, or other campuses. This year student-facing Union staff and OTs have been spending more time at other campuses, with an estimated 7-8 trips out to Reynolds, and more scheduled for the rest of the term.

2 Create a buddy scheme for students returning from Interruption of Studies (IoS) – IN PROGRESS 🚶

In October, it was announced that a scheme had been launched parallel to Mums and Dads, which would pair students returning from IoS with a parent from their new cohort to facilitate the return to study, which can often be daunting. The scheme has thus far been quite small, but Chippy is planning on developing it further, and launching it at the start of the next academic year.

3 Ensure counselling triage appointments are available within ten College days – IN PROGRESS 🚶

As previously mentioned, the College counselling service has long been a sticking point for students at Imperial, who are highly likely to report mental stresses and mental health problems. While counselling isn’t the only solution, improving resources to the counselling service is a must in the coming years. While it is College procedure to have an appointment within ten working days, this still isn’t being met. The ongoing wellbeing strategy will aim to address this.

4 Protected lunchtimes when timetabled across two sites – IN PROGRESS 🚶

It’s a familiar problem for some students: how can you go from one campus to another, while still having enough time to queue up for Tanpopo in the JCR? A classic dilemma. Students should have at least an hour of lunch, which is kept separate from time needed for travel. The curriculum review, which is part of the Learning and Teaching strategy, should address this issue with timings.



Tom Bacarese-Hamilton
Deputy President (Clubs & Socs)

//Nate Macabug

1 Review the Union’s room booking system – IN PROGRESS 🚶

Anyone trying to navigate the system through which Imperial deals with room requests, will have faced familiar problems. Reforming the room booking system has been on a priority for a number of DPCS, stretching back to at least 2014. Tom has been meeting with the College, who are also looking at reforming the room booking system. A pilot group for the new system is due to be launched later this year.

2 Ensure that Union jobs and roles have clear descriptions – STILL WAITING 🕒

Openness was one of Tom’s big manifesto areas, and while the Union has done work towards becoming a more open organisation – the new section of the website for the elections is an example – there can still be confusion about who everyone is. Going on the ‘Contact Us’ webpage still results in a list of names and roles, leaving you to figure out the difference between Student Activities and Student Development. This will be on Tom’s to-do list for later this year.

3 Generate recommendations for sponsorship costs based on size – IN PROGRESS 🚶

How much is your time worth? What about the back of your club hoody? Your email signature? From the sponsorship review that has been completed, Tom and the Student Activities team plan to develop a system so that clubs know exactly how much they should be charging KPMG et al. when they hit them up for sponsorship. A report has been produced, but we’re waiting on it to be incorporated into a new training package.

4 Create a new reporting system for minibus damage – STILL WAITING 🕒

The Union’s fleet of minibuses are an invaluable resource for clubs who need to shuttle around London (and beyond) – heading to matches, going on camping trips, and even delivering issues of *Felix*! Tom’s plans for a reporting system have not got off the ground yet, but he is looking into possible options for delivering it.



Matt Blackett
Deputy President (Finance & Services)

//Nate Macabug

1 Bring in pre-poured pints to ACC nights – GOAL SHIFTED 🚶

Pre-poured pints have become something of a Union legend, as people envision an ACC night free of queues, but full of lager. Matt trialled pre-poured pints at the first ACC night of the year, but it didn’t work for a number of reasons – staffing issues, problems with drink choice. He is now looking into other ways of speeding things up as part of the tender process.

2 Establish a coach service to Heston and Harlington – IN PROGRESS 🚶

Matt was one of the three OTs who promised to look into establishing a Heston coach service, and the task has now fallen to him. He has spent last term looking into usage of minibuses, and running a trial service on Monday evenings. The rest of this year will be spent reviewing the proposal, and coordinating the service with pitch bookings for next year. It will feed into an overall examination of the minibus system, as the coach service takes pressure of minibuses.

3 Improve range and quality of food on offer – STILL WAITING 🕒

For those who think curly fries and beef burgers aren’t enough, prepare to be disappointed... there have been no substantial menu changes as of yet this year, and the ongoing tender process is looking at beverages on offer only.

4 Increase external income to the Union, including centralised sponsorship – IN PROGRESS 🚶

As part of his remit as DPFS, Matt is responsible for looking at the cash flows in and out of the Union, including income from external sources – sponsorship and investments, namely. He has been working with Rhidian Thomas, the Union’s Ethics and Environment Officer, to ensure the Union begins to divest from fossil fuels, while also maintaining returns on investments. Plans for centralised sponsorship got off to a rocky start, after delays to the recruitment of a new Sales and Sponsorship Manager, but someone should be coming into the role shortly. There’s also the money they got from including Bud Light in the bars...

Union report highlights issues with Wellbeing Representation Network

NEWS

Fred Fyles
Editor-in-Chief

The report cites particular concerns over communication, development, and consultation.

Imperial College Union (ICU) have written up an evaluation of the first term of the newly-implemented Wellbeing Representation Network (WBRN), which highlighted issues with communication, development, and consultation. The document, which was presented to ICU's Trustee Board, centres around the development of the WBRN – a network of departmental and year representatives, responsible for listening to concerns students might have about their wellbeing, and pointing them to relevant support services. The positions within the WBRN, which was rolled out for the first time this year, were elected in this

year's Autumn Elections. The report highlighted problems with the time-scale of the rollout, which "put constraints on the ability to conduct effective and meaningful consultation". The launch-date of Autumn meant there was "not sufficient time to consult with College staff", who had expressed concern over a lack of trialling. This lack of time was compounded by "a lack of staff leadership and clear objectives... until June 2017."

"The report said students who 'opposed the Network met with departments before the Union, which led to biases'"

A number of students and staff members had raised concerns during

the implementation of the WBRN, specifically around student safety, communication, and the speed at which the implementation was being done. The report admits "if departments had been met earlier in planning more could have been done to address points raised", and says the students who "opposed the implementation of the Network met with departments before the Union, which led to biases and uncertainty... and discredited the work that had been completed."

Consultation with students was also an issue identified by the evaluation, which described the communication with students as "insufficient" and having "no reach beyond existing elected volunteers". The authors said this poor communication led to "limited widespread understanding of the Network, which continues to be a challenge for volunteers".

Fintan O'Connor, Deputy President (Welfare), told *Felix*: "The new WBRN has been recognised as a success by elected representatives,

College staff, and our members since its launch." He said the Network "has directly led to a surge of new campaigns and community-building projects across the whole undergraduate student body," which has "helped us lay the groundwork for a campaign to lobby College to create a meaningful and radical student wellbeing strategy."

"Fintan O'Connor said 'we believe the success of the WBRN speaks for itself, backed up by the views of participants'"

Michael Edwards, President of the Royal College of Science Union (RCSU), who had previously raised concerns about the pressure the Network might place on students, told

Felix: "This report echoes concerns the RCSU has been raising for months. I am glad these shortcomings in implementing the WBRN so rapidly have been accepted, and I hope now we will get some more constructive input on the future of the Network. I look forward to...ensuring the WBRN can overcome these challenges and deliver for all students."

O'Connor told *Felix* the Union were "committed to completing a term one evaluation that would take a critical look back at how the WBRN was consulted upon and implemented", and the report would "tell an honest picture of how we can perform better in future." He told *Felix* "These evaluations are intended to help us understand what can be done better... meaning taken on their own they can paint a negative picture"

Nevertheless, the report does highlight a number of successes of the WBRN, including "a high percentage of positions filled", "creation of tangible change" as a result of staff-student committees,

building of "relationships with key staff across all departments". It also makes a number of recommendations for moving the WBRN forward into the next academic year. O'Connor told *Felix*: "We believe the success of the WBRN speaks for itself, and that's backed up by the views of the participants."

One participant in the WBRN told *Felix*: "my main issue with the Network was it was trying to address an issue without a mission statement of how to do so. So many students dealing with sensitive issues were unsure of their roles, meaning the Network is hard to handle logistically. Ultimately while the wellbeing of students is something we can campaign about, the main issue is a poorly equipped counselling service. A network of students feeding into this already-overloaded service is not going to solve this."

Nominations in the Leadership Election for positions within the Network are now open. You can nominate yourself at vote.union.ic.ac.uk

Cashless trial extended to end of February

NEWS

Fred Fyles
Editor-in-Chief

The trial, which was due to run until the end of January, has been extended.

The cashless trial at eight of Imperial College London's out-

lets has been extended for a second time, until the end of February.

The trial, which originally began at the beginning of December across four outlets, was continued through January, when it was expanded to eight outlets. The trial will now run until the end of February in outlets including the SCR Restaurant, Queen's Tower Rooms, and the College Café, among others.

While the pilot is in place, students, staff, and visitors will be unable to pay with cash, but will be able to pay with Yoyo, contactless, and chip and pin. The College's justification for the change is to "reduce queuing times and create a faster service", citing feedback they had received on these issues. They claim that, on average, over 80% of transactions are already cashless.

"Staff and students have criticised the move to cashless-only"

Since the start of the trial, a number of students and staff have spoken to *Felix* in criticism of the changes. One postgraduate

student told *Felix* she had stopped going to College outlets, but recognised this was not possible for all students. Theodor Videnberg, a postgraduate student, cited a number of concerns over the move to cashless transactions: "Cash is a valid and legal tender, and I see no reason to prohibit it at the College. The College has not provided any statistical or scientific evaluation of the reason for the long

queuing times they cite. They have not shown they are due to the paying procedure itself, rather than more fundamental issues [with the catering systems]"

Students and staff are able to leave feedback on the trial through an online form. The College say that they will be "assessing [the trial's] overall impact...and will publish this evaluation here online in March."

Masterplan for White City revealed

NEWS

Fred Fyles
Editor-in-Chief

The southern site of Imperial's White City campus will feature retail space, a hotel, and up to 370 homes.

Imperial College London last week revealed their masterplan for the southern section of their new campus in White City.

The site, which is located south of the Westway, next to Wood Lane and the White City underground station, is the second aspect of Imperial White City – the new campus, which covers a 23-acre site. The cost of the development is expected to total between £2 to £3 billion.

The masterplan, which has been submitted to the

London Borough of Hammersmith and Fulham (LBHF), comes following a year-long consultation with businesses and local residents.

The southern site will include a number of new features, including a hotel, retail space, and new houses. It will also feature connections between the two sides of the campus, including a new land bridge over the Central Line railway tracks.

Up to 370 homes will be built on the site, in two buildings of 17 and 32 stories, the latter of which already has planning permission. A portion of the houses will be provided at below-market rates to Imperial key workers, who include early career researchers and Imperial NHS staff.

There are also plans to build a 9,000m² hotel, with up to 150 bedrooms, and provide 13,500m² of space for retail, leisure, and food and drink outlets.

The majority of the space will be used for research and business space: 178,000m² will be dedicated to both College research projects, and businesses who "help translate this work into commercial applications which benefit society".

Professor Neil Alford, Associate Provost (Academic Planning), said the campus was "an exciting new chapter in the College's history". He said the masterplan "represents a long term commitment to the White City community."

Imperial College first bought land in White City in 2009, and the northern site has been under construction since 2012. The Molecular Sciences Research Hub, which is due to open in 2018, will provide the new home for the Department of Chemistry.

Chemistry students are due to make the move over the coming year. One



What the new campus will look like // Imperial

chemistry undergraduate who spoke to *Felix* said: "the new equipment and buildings might be nice, but it's so far away, which is inconvenient, not only for travel and associated costs, but because I won't be able to get back to where everyone else is based. Research placements this

summer are also affected, since the research groups don't have time given the move."

Concerns have previously been raised by a number of local residents, centring around the 35-storey tower which dominates the north portion of the site. The St. Helen's

Residents' Association in North Kensington have accused the College of acting like an "aggressive property developer when it comes to the planning and design of its buildings, and their impacts on their neighbours."

UCL staff have no confidence in expansion plans

NEWS

Fred Fyles
Editor-in-Chief

UCL has faced criticism from staff over their expansion plans, which they claim have been driven through without consultation.

Academics at University College London this week backed a motion of no confidence in the university's leadership, amid concerns over plans for expansion.

On Wednesday evening, at a meeting of

academics, 94% voted they had no confidence in UCL's governance, which has been pushing aggressive expansion over the past few years.

The meeting came just days after one of the UK's most senior judges asked for an investigation into the alleged managerial misconduct.

Terence Etherton, the master of the rolls, has asked barrister Charles Bourne to look into complaints that members of UCL's ruling council have been excluded from decisions over the expansion. In a letter, Sir Terence said that Professor Michael Arthur, UCL's provost, and Dame DeAnne Julius, chair of the ruling council, were

"intent on driving through a programme of rapid expansion of UCL, exposing

"This comes days after a senior judge asked for an investigation into misconduct"

it to serious financial and academic risks".

Since 2005, the number of students at UCL has swelled from 17,000 to 40,000, a decision management has said is

necessary due to financial concerns. It was reported that plans may be underway to increase the size to 60,000 students in the near future, as universities struggle to keep up in increasingly-global league tables.

Rex Knight, UCL's vice-provost for operations, told the meeting that dropping student numbers to 20 or 30,000 would have "pretty appalling" consequences for the university.

A key aspect of this expansion is the development of a new campus in east London, located on the Olympic Park. 'UCL East', which will cover 4.63 hectares, is due to complete its first phase

by 2021, and will provide resources for 4,000 students. The total cost of the project is expected to reach £483 million.

"'UCL East', located in the Olympic Park, is due to open in 2021"

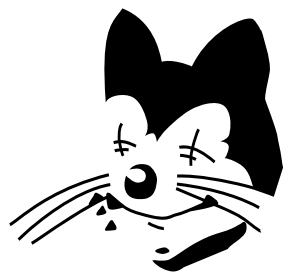
In 2016, the expansion project was revealed to be endangering the cash flow at UCL, as college leadership announced they only had 42 days of cash on hand – less than half the university average of

93 days. Last year The Guardian revealed that morale among UCL staff was at "an all-time low", with nearly 70% of staff surveyed feeling it was not well-managed. Less than 10% of staff felt that the increase in student numbers would improve UCL.

UCL, a member of the Russell Group, is regularly ranked among the top higher education institutions in the world. In this year's Times Higher Education rankings they placed 16th, down from 14th two years ago. Many see the move to expand as indicative of increased pressures being placed on higher education institutions.

POLITICS

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Poor use of statistics is undermining our faith in public institutions

Politicians have been misuing statistics for too long, and it's paved the way for the rise of fake news.

POLITICS

Divyen Vanniasegaram
Politics Editor

The rise of statistics has led to many benefits in everyday life: we use statistics in medical research to determine what the best treatment; they inform decisions from stock markets through to how many pop tarts Walmart stocks; and, perhaps most significantly, statistics shape decisions made by modern governments such as which levels of taxation are required to meet spending demands and stimulate the economy.

The kind of Brexit the UK government should seek has been thrust into the spotlight with the leaking of the statistical models produced by the civil service. These suggest that all forms of Brexit would harm the UK economy and the UK must have as close a relationship with the EU to save it from the worst of these consequences. Several individuals and groups have lined up to criticise the work as misleading and politically motivated, including one of the government's own Brexit ministers. Recently there's been a growing backlash against statistics, at first from the public, and now, more worryingly, from politicians. However, this is the fault of politicians themselves.

Politicians of all stripes hide behind misleading statistic

after misleading statistic to justify their policy positions. This can be most evidently seen at Prime Minister's Questions (PMQs) every week. During PMQs on the 25th of January this year the Prime Minister trotted out the following statistic in relation to A&E services: "In England 497 people were waiting more than 12 hours, but the latest figures also show that, under the Labour Government in Wales, 3,741 people were waiting more than 12 hours." What the Prime Minister failed to mention was that these figures aren't even comparable. In England, the clock starts only once a patient has had an initial assessment by a doctor, while in Wales the clock starts the moment someone walks through the door in A&E. The intentional misuse of statistics such as this causes several problems.

At PMQs, neither the Prime Minister nor the Leader of the Opposition spend any time answering questions. All that appears to happen is Corbyn throws a question wrapped up with some statistic at Teresa May, which she will entirely fail to answer, instead retorting with contradictory and apparently equally truthful information. This does nothing to get to the nub of the issue or inform the public, leading to poor governance and poor policy; flaws and criticisms are not given the careful consideration needed to



Why have we had enough of experts, Mr Gove? // Wikimedia

ensure the best outcome as politicians swat away any issue with the use of a few facts and figures. This undermines the role of Parliament and the crucial work it must do in holding the government and the executive

"Misuse of statistics erodes the public's faith, not just in politics, but in other areas of life too"

to account.

This behaviour erodes away the public's faith in statistics, which has ramifications, not just in politics but other parts of life too. There

has been a push back against "experts" which has been seen in the vote for Brexit, Trump, and even in medicine, where experts have been portrayed as out of touch and callous. Cases such as Charlie Gard and Alfie Evans, which has itself spawned "the Alfie Army" to help fight off the nasty clinicians who are apparently out to kill Alfie, are indicative of this trend. The rise of alternative therapies, such as homeopathy and Gwyneth Paltrow's Goop, fits with the pattern. When the veracity of fact has been abused so abundantly it becomes increasingly easier for fringe groups to release information that is intentionally misleading or "fake news", as the ability to decipher the truth from fiction has already been undermined by the mainstream media and politi-

cians. This sorry state of affairs is epitomized by tools such Channel 4's FactCheck, which nobly attempts to explain the truth behind some of the statistics politicians and others use. Its utility and existence highlight the fact that statistics are now unfortunately often half-truths, mis-truths or entirely untrue.

Perhaps statistics should be taken out of politics altogether. They very rarely appear to inform the debate, but are rather utilized as a smokescreen to deceive the public. Statistics should be used to inform government policy rather than be manipulated and misrepresented to justify poor policy after the fact. Politics devoid of statistics would see politicians make decisions based off of what they believed to be right by moral principle rather

than what might garner them more support at the polls according to their spin doctors and focus groups. Ideally politicians should utilise all the information at hand to make the decisions they see fit. The honest use of statistics would lead to better outcomes for government, allowing it to react and develop policy to clearly tackle the real challenges the UK faces. The government and politicians could lead from the front, demonstrating the good work facts and figures can and should do. They could roll back the tide of "fake news" and the war against experts. Unfortunately, politicians appear unable to do this. If they left statistics alone the purity of fact would be restored for the rest of us to enjoy and prosper from.

COMMENT

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Solving inequality at Imperial does not mean relocating the campus to White City

Thomas Fisher responds to Alan Perfect's article in an attempt to solve Imperials stark inequality problem.

COMMENT

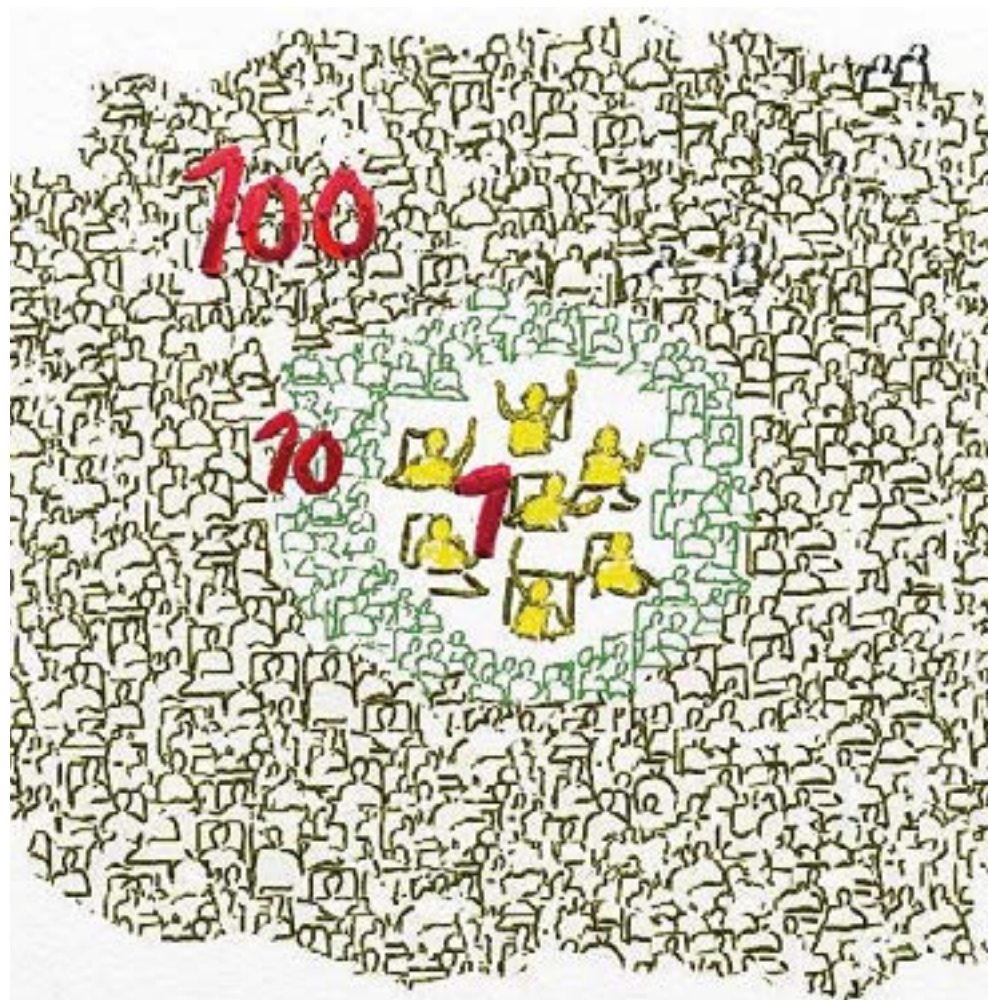
Thomas Fisher

Comment Writer

Having read Alan Perfect's article on how Imperial should best tackle the obvious equality problems it possesses, I felt compelled to add my own opinions on the matter to the melee.

As Alan pointed out last week, Imperial now has the highest ratio of students from the most advantaged backgrounds to students from the most disadvantaged backgrounds. From this, Alan's analysis is precisely right; Imperial simply isn't offering equal opportunities to prospective students from every background.

However, what I do have to take argument with is Alan's suggestion that we need to 'sacrifice' Imperial's current location in order to tackle this problem. I fail to see how simply moving the Imperial campus from one of the most expensive boroughs to a slightly cheaper borough whilst remaining in one of the most fantastically expensive cities in the world will make any substantial difference. Prospective students will still be faced by the perception of 'London Prices' whether we are based in White city or Kensington. Further to this, the chances are that the college would struggle to attract the same talent it does now because, let's be honest, unless you are really into dual carriage-ways, the A40 is hardly a patch on Exhibition Road.



Solving inequality at Imperial is an issue the university will dodge for years // Flickr

But with all this negativity let's take a moment to consider something that Imperial already does really well. The Imperial Bursary scheme is one of the most generous schemes of its kind in the country, with the most disadvantaged students receiving up to £5k on top of the £11k that they already receive from the UK government. This is easily enough to live a comfortable student existence in Kensington without even considering potential earnings over the 3-month summer break that most students get. If finance really is the problem, the college should promote their bursary more. It

will almost certainly go much further to tackling the inequality problem at Imperial than decanting the physics department into Zone 12.

Not only do I think Alan's solution would be ineffective, I feel it completely misses the real point here: dropping people's rent by a few quid a week isn't the issue. The issue isn't that disadvantaged students perceive Imperial to be too expensive, but that they perceive themselves to be unlikely to attain the A*A*A average offer. For real change the problem needs to be tackled twofold, with policy revised by both

the government and the college.

Firstly, the College needs to wake up and rethink its admissions policy in order to ensure that it makes offers to the most talented students.

According to the Institute of Fiscal Studies, in the academic year 2015/16 the mean average spending per head on state school A-Level students was of the order of £5k a year. In contrast, in 2015 average fees for private day schooling in the UK stood at a little over £13k, with some of the leading public schools charging substantially more than this. This vast difference in spending results in

students from less well-off areas receiving a considerably inferior education than those from the more advantaged backgrounds. This is particularly true of applicants to Imperial from state schools. STEM subject specialists are particularly hard to attract and retain at state schools due to the significantly higher salaries which these staff can attain in other professions.

By the time UCAS applications come around, this vast discrepancy in educational backgrounds

“Students from less well-off areas receive a considerably inferior education than those from privileged backgrounds”

leads to an equally vast difference in the quality of applications between these students. But crucially, this difference in the quality of the applications is not the same as a difference in quality of the applicants! On the whole, students in state schools are not any less intelligent, hard-working, enthusiastic or driven than those who have had a private education. Give these state schooled students access to the same excellent quality of education (at Imperial College) and they are just

as likely to excel as those who scored top marks in their A-Levels but paid for the pleasure.

I concede there are difficulties in identifying who these talented, but educationally under-nourished students are, but it appears Oxford and Cambridge have managed to succeed in doing so. The ratio of students admitted from the most advantaged to most disadvantaged backgrounds at the Oxbridge universities has fallen significantly over the last seven years.

Personally, I am of the opinion that the best way to identify the best students is not through A-Levels, but through a rigorous and broad interviewing process. Admissions tutors, in a face to face environment, can much better probe a student, see how they understand things and judge their suitability for an Imperial degree programme. We should not be making offers to prospective students based on how many Saturday classes they have had and how well they have been spoon fed A-Level exam answers.

Although we appear to be the worst for it, this isn't a problem that exists at Imperial alone. The problem of the UK's universities being dominated by the privileged few is a nation-wide problem. The government needs to act, investing more money into state schools to ensure that all students have access to the inspiring and well qualified teachers that they deserve.

COMMENT

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COMMENT

Henry Bennie
Comment Writer

Lecturers are striking: where can we claim our tuition fee refund?

With strike action confirmed, almost three weeks of tuition will be lost. Are we still to pay?

escalating waves, with the first week seeing strikes from 22nd-23rd February and the second week from 26th-28th February; there will then be a week's break, before a four-day strike from 5th-8th March, and finishing with a five-day walkout from 12th-16th March.

This will result in the loss of almost three weeks of tuition, estimated at around £675 per undergraduate student.

Universities are becoming businesses, treating students as customers. If so, they need to offer refunds when they can't provide the services they are expected to provide.

After discussions with Universities UK (UUK) over pensions ended without an agreement, members of the University and College Union (UCU) have announced a wave of strike dates. Strikes are set to take place over 14 days at 61 universities in the UK, including Imperial. The strikes will occur in

lecturers.

This is a choice that students should not have to make, and it is a choice we do not have to make. We students are now treated as consumers, so we should be given the same rights as consumers: we should be given a refund for each day of strike action.

Rail companies like Northern Railway and Southern Rail already offer refunds to commuters who decide not to travel on strike days. Airlines also offer compensation to travellers whose flights are cancelled or delayed due to strike action. These refunds benefit both the consumers and the striking workers: consumers get their money back and therefore strike-breaking by consumer pressure is lessened.

This puts us students in a difficult position. Either we stand beside the striking academics, who are only defending themselves against an unjustified attack on their pensions and their livelihoods, losing hundreds of pounds worth of our education, or we cross over and support UUK. I can only foresee and expect solidarity with the

As scientists or science students we often see ourselves outside the realms of political interaction. We often think of ourselves as remote and unaffected, using science as a shield. However, science is not a

Refunds focus the impact of a strike squarely

on service providers and offer consumers the freedom to stand with striking workers. You could argue that students are not normal 'consumers', but by examining the current model of higher education, especially the government's Teaching Excellence Framework plans that increase competition between universities, you'd struggle to see students in any other way. Students are already internalizing this fact: according to a recent survey by ComRes, about half the students in the UK now view themselves as customers.

As scientists or science students we often see ourselves outside the realms of political interaction. We often think of ourselves as remote and unaffected, using science as a shield. However, science is not a

shield. It is not a unit, it is made of different parts that proceed in radically different ways, all shaped by the outside political world.

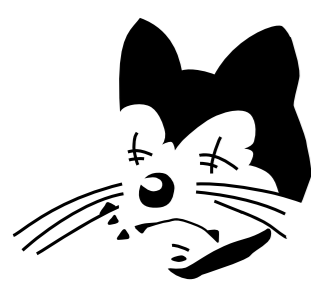
We need to embrace this outside political world, and open our eyes to the forces that are changing higher education - because these forces will not stop with the dismantling of our lecturers' pensions, they will gnaw away at the very heart of education and science. They will turn universities into factories that exploit researchers and students to "advance knowledge", no matter the human cost. I say we should be more concerned in the support of people than the advancement of knowledge for profit.

I ask you to support the lecturers by writing to registry asking for a

tuition fee refund that covers the period of the strike. If universities see us as consumers, we need to act as consumers. Hurt them where it hurts, their pockets.

"Hurt universities where it hurts, their pockets"

UUK and the universities that make it up are responsible for this strike. It does not fall on the UCU, who are merely defending themselves. We as students have been given a choice: turn against academics and support the commercialisation of education, or throw aside our shield of science, embrace the political, and support people.



COMMENT

Grumpy Bastard
Comment Writer

I am fed up with adverts from authoritarian states

This week, Grumpy Bastard has been getting ads from states and would really like it to stop please

a day with a simple trick that involves a spatula. Instead, these bits of drivel have been replaced with advertisements from brands that get me, like the Turkish and Polish governments.

It's not that these governments have authoritarian streaks so wide it's as if they've let a toddler with cholera loose in their underwear, and it's not that they have a fetish for re-writing history that makes Big Brother look like the only thing he enjoys is lights-out eyes-closed

missionary; as always, the thing that makes me empathise with these brands is their product.

From the Turks, it's the invasion of Kurdish occupied Afrin. This is my jam. It's the continued oppression of one of the largest and unfortunately geographically incoherent ethnic groups in the whole of the Middle East that have taken a kicking from every single one of the countries in which they are resident. In Turkey they're arrested, in Iraq they're gassed, and in

Syria they were massacred. Luckily, whoever organises the YouTube adverts is happy to ignore this and ram on something that would only appeal to rabid Ottoman fans.

The Polish are, of course, doing wonderful things at the moment. I'm a big fan of taking away freedom from the judiciary, but what they advertised on YouTube was right up my alley: they have taken the action of denying that any Poles were involved in the wholesale slaughter

of Eastern European Jewry. Finally, someone is approaching this topic with the sensitivity of an artillery barrage on the Somme, and completely ignoring the complex moral problem that occupation and collaboration posed, just like the rest of occupied Europe! A whole section of history that is completely ignored, all for the benefit of the moral scruples of a new blind generation.

Why am I getting these adverts, YouTube? I am quite frankly not interest-

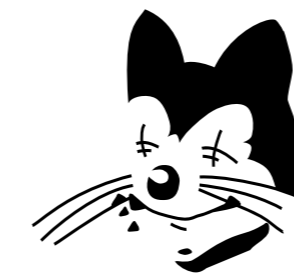
ed in these petty tyrants attempting to justify themselves in the face of widespread condemnation from the West and indeed anyone with a brain. Please remove them and bring back Poppy the

"Please bring back Poppy the psychic"

psychic. Everything she said was comforting and kind. And didn't disturb me at all.

COMMENT

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COMMENT

Aretha Carroll
Comment Writer

Should we think more about our consumption habits?

Aretha Carroll delves deep into the broad ethical implications of living in a hyper-consumerist society.



Your cherry tomatoes might not be as harmless as you think // Flickr/patkuhl
Flickr/

When I am shopping I can feel different parts of my brain whirring away. The parts I use for systematic problem solving take a break and instead it is a desperate rush to find the most sticker-coated, cheapest and most appealing supplies for the week ahead. It is impossible, it seems, to truly understand what it took to create the fruits of modern agriculture and technology lined up alongside their identical siblings. How were they made? Where were they made?

This is something which goes undiscussed when we talk about shopping. We talk about shopping very much on a personal level - "I like your new trainers", or "I found a bloody bargain" - but we don't discuss the value of how things are made or the implications on a societal level. This article serves as a personal confession and a challenge to all of you out there who also silently turn over similar thoughts.

Let me set the scene. Just like millions of other people, here I am on Tuesday evening foraging along white-painted shelves in an LED-dappled cornucopia of abundance. Items sitting above paper labels yell out to our primate brains their low prices or multi-pack offers - and only as an

after-thought, mention the fact it may have travelled half the globe to get here. The question nags me - what impact do I have on the environment and the people where these products are made - people and places with whom my only interaction may be my selection of some exotic 'superfood' or yellow-stickered ready meal that are the fruits of their labours, and to whose troubles I give little thought? What gives me the right to make choices about which things are made? What gives any of us this ability, other than the privilege of sitting at the top of the planetary food chain?

These questions are not easy to answer and may take a backseat when in the midst of a shopping frenzy. It is however precisely these irrational decision-making processes which collectively cause many of the problems we face as a species - from inequality to environmental damage.

For instance, when choosing stuff do we bother to read the ingredients on the back of the packet? You might be surprised, like me, to find that your lunch has a more fantastic origin than you might expect. Consider the simplest sandwich you can get in Library café - a BLT or cheddar ploughman's. That sandwich contains palm oil which reaches you now thanks to enormously sophisticated supply routes spanning the globe. Moreover, you may ask, why are there packs of blueberries in bloody January? And... when are tomatoes for that mozzarella panini in season exactly?

I do not worry that such and such ingredients being in my bread means companies are conspiring to poison us, or that foreign migrants are infringing upon the plastic thrones of blue-blooded British blueberries in their seasonal absence.

I do worry that it is only in recent history that

highly energy-intensive processes, such as international transportation and manufacturing, have become intrinsic to every part of our lives since our discovery of fossil fuels. It is not a sound plan for our future to increase the energy intensity of the way we sustain ourselves. Renewable energies simply will not be able to support exponential growth like fossil fuels were able to in the past century and a half. Former-banker turned environmentalist Nate Hagens remarks that our contemporary economy is predominantly "a measure of how fast we can burn through fossil capital and convert it into immediate neurotransmitter responses".

My second concern is that this level of consumption is not something enjoyed by everyone partaking in our society's food web. Just last week, Oxfam published a report estimating that 82% of the wealth generated worldwide last year went

to the wealthiest 1%. The poorest 50% saw no increase. Is it possible our global food chain actually depends on exploitation?

This being said, I believe with our bonanza of energy unlocked by our discovery of coal and oil, and our intelligence, we have achieved a great deal, such as providing people with more time, a higher level of societal organisation and truly remarkable scientific and cultural achievements.

So what can we do to

"We have many choices in what we purchase and hence a power to decide what is created, by whom, and by what means"

save this? Firstly, we have many choices in what we purchase and hence a power to decide what is created, who it is created by, and by what means.

Money is a token which gives one a way, though not the only way, to express our values - what we care about. Let me be clear - spending more of it is not going to make your choice more ethical. Nor is going for the things which are perceived by others, or by the claims on the label, to be better. However, we do have needs, and one of our achievements as a species is to develop this

remarkably successful tool for fulfilling them. Secondly, we need to learn habits to help us make the best decisions we can in the shop, just as we have learnt to switch lights off when we leave a room. For instance, reducing meat consumption is a simple way of hugely reducing environmental impact. The New Scientist reports this week that a medium-meat diet of 50g-100g per day produces 2600 kg of CO₂ in a year - the equivalent emissions of four return flights to Majorca. For measure, a typical ham sandwich bears about 40g of pig.

Thirdly, at the same time as our environmental footprint has worsened, we have been equipped with the tools to make more informed decisions when it matters. Today, many of us carry smartphones everywhere we go. The smartphone brought us Fruit Ninja, but it could also let us look up how much energy it takes to fly real fruit from the other side of the globe and slash our real environmental footprint. But while I have often overheard people in shops say "turns out it's cheaper on Amazon", I have never overheard someone say "apples aren't in season at the moment", or "turns out this brand has better working conditions than that one".

As individuals we should use our choices and technology to make better, more democratic, mindful decisions about what we want and truly need, rather than just taking what is on offer.

COMMENT

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Avocados and drugs? Yes, they are related – and in a very toxic way

The West's thirst for these sweet, buttery fruits should be contrasted with the potential consequences millennial food fads can have on producers.

COMMENT

Jennifer Eden
Comment Writer

This week I was supposed to talk about the Imperial College Endowment Fund. But given the post mortem has been carried out and Imperial students have got back to thinking about the science stuff, I thought I'd write about drugs and avocados.

Let's start with the latter. They're green, they're clean and a fruit, not a vegetable. They also contain approximately four grams of protein and have helped facilitate surging trends in veganism, 'raw' eating and all round healthiness. Some talk so highly about them you would think they are the underlying cause of this generational shift, such are their properties.

In the UK alone avocado sales increased by £29.8m from 2016 to 2017 and in 2015 the US consumed 4 billion of the damn things. The Hass Avocado Board (real thing) recorded 92,535,729 kg of avocados produced worldwide in 2018 so far, this being estimated to hit 405,195,664 kg by July. In short, our increased demand for them in the West has seen prices soar and the profits roll in. So far, so good for consumers and exporters alike.

One such exporter, Mexico, produces 45% of the world's green gold. It is also a country plagued by drug cartels. For all the millions and millions that have been invested in



In Spanish, avocados are called ahucates (Aztec for testicle) // Flickr/ quinnanya

“Whenever hardworking people are prospering there's always a parasite wanting their slice of the action”

the war against drugs, organised crime still seems

to hold Mexico in a state of terror. In fact, last year was the country's most violent on record as homicides totalled 29,168. Of course not all these deaths can be attributed to the cartels, but an alarming proportion are.

What's the link between avocados and cartels? Well, that's simple. Whenever hardworking people are evidently prospering, there's always a parasite wanting their slice of the action. Michoacán, a province known to be the avocado capital of Mexico, is the

prime example, having previously been burdened by the parasitic tendencies of cartels. On noticing farmers' lucrative activities, cartels would force payments upon the crop's production, taking their cut as a sort of protection money. If payments failed to be met, threats, kidnap and murder would follow. Thus a tense, fractured atmosphere pervades in many parts of Michoacán, and all to keep the shelves of our supermarkets sufficiently stocked.

On a broader spectrum, it does seem to be a recur-

ring pattern that whenever a new superfood, new fad or even new must-have pet emerges, with the huge economic prospects come unforeseen problems. Unforeseen because demand becomes so intense so fast that the whole nature of the suppliers' original business has to aggressively evolve or itself be hijacked. In Peru there were rumblings that the popularity of quinoa in wealthy countries may be outpricing Andeans, for whom it has been a

“Money needs to be made before our goldfish brains turn to the next exciting thing”

staple for generations. It's known that demand for 'designer dogs' – pugs, dachshunds, French bulldogs (or whatever the new look this season is) – has meant barbaric industrial-scale puppy farming. To note a less extreme example, think of every time a new incredible holiday destination is displayed on Facebook, encouraging you to tag your 'travel buddy'. You can almost guarantee that next year, car parks will be overflowing with minibuses and someone has probably thought to bring in a KFC.

Now we have instant connectivity, a trend can spread like wild fire.

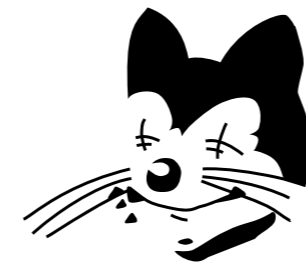
Oprah says it's good on a Monday, there's world consensus by Tuesday morning. And so my point is this: there's no time to think of the consequences. Suppliers know that demand must be met immediately, money needs to be made and the opportunity taken before our goldfish brains turn to the next exciting thing. Many suppliers can, for a time, fare well by catering to these wants. But often the pressure is too instantaneous, too unsustainable. Authorities cannot plan for such rapid rises of industry and are therefore unprepared for any unsavoury effects that can come with the boom. Hence Mexico, cartels and the avocado's potential to cause violent conflict at any given moment.

But before you start worrying that even avocados do more harm than good and before you start contemplating that anything you like is bound to be causing destruction somewhere along the line, let me offer some hope. Residents of Tancitaro, a city in Michoacán, have taken matters into their own hands by setting up self-defence groups backed by government forces. They have effectively driven the cartels out and for the most part people live in safety, no thanks to any of us importing countries.

Michoacán therefore lives to fight another day. Hipsters up and down the nation can breathe a sigh of relief that their avocado smoothies and face masks are still bang on the money.

COMMENT

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Why going cashless has a bigger impact than you might think

The College seems to be rolling out cashless-only payment, but the transition to a cashless campus has impacts on liberty, choice, and convenience.

COMMENT

Theodor Videnberg
Comment Writer

In December 2017, several catering outlets at Imperial College (e.g. SCR, H-Bar, Business School Café, etc.) started a cashless pilot. Initially intended to last until the end of January 2018, it has since been extended to the end of February. During the trial period the involved catering outlets do not accept cash payments, but only payments by credit cards, debit cards, and Yoyo. The College says that the cashless trial is intended to reduce queuing times. If this trial is not opposed by significant numbers of people, it is highly probable that the College will infinitely extend the trial and thus permanently ban cash from its premises.

An avid and passionate cash payer myself, I vehemently oppose any means to impair my freedom of choice. That goes for standard things like profession, hobbies, friends etc., but also extends to the method of payment. Cash is a valid and legal tender, and I see no reason to prohibit it at the College. Every year, many people from outside Imperial – contractors, visitors, and freshly-started students and staff – attend the college and might not yet have a bank account or credit card (for whatever reason). They would be denied the opportunity to buy a coffee or snack.

On a bigger-than-College perspective, I believe

that – amidst global financial upheaval, banking crises, and rising debt – the removal of cash would further virtualize money, and could lead to unpredictable consequences and bubbles. Bitcoin seems to be a precursor.

“There are concerns around privacy and security in giving the government and central banks complete control of assets”

Moreover, I have privacy and security concerns in giving the government and central banks complete control over my financial assets, a view shared by several experts. In a cashless society, a government can introduce negative interest rates and thus force the citizen to spend more. This is not possible with cash. Or think about dictatorial regimes, which are essentially untouchable if they have complete control over financial assets. According to an unpublished study of the European Central Bank (ECB), about 80% of point-of-sale transaction are done with cash. The general standpoint of central banks like the ECB or the German Bun-

desbank is that cash is still required, and the freedom of choice for users should be upheld. The World Economic Forum also agrees that cash is a direct link between people and central banks and serves to establish trust and public acceptance of central banks.

Other problematic issues of cashless societies are employment opportunities. A recent report by PWC examines the likelihood of job losses due to automation. It shows that disciplines like retail, food service, and manufacturing are especially endangered. It is highly likely that – amidst a move toward cashless Imperial – several cashiers and other catering staff might be laid off. While there is not enough space to cover all the problems



Moving to cashless can have a large impact on many areas of life // CC

with going cashless – and I could go on forever – there are other issues,

“Other issues include giving money to homeless people, which is significantly reduced in cashless societies”

such as giving money to homeless people, which are significantly reduced in cashless societies.

Coming back to College's arguments, the College has not provided

any statistical or scientific evaluation of the reason for the long queuing times. They also have not shown that the reason is the payment procedure itself, rather than more fundamental issues like too many customers arriving at the same time or time lost due to having to wait for a certain dish. It is also unlikely that there will be any significant improvements of the queuing times by squeezing out the remaining 20% of cash customers, with College claiming that 80% of payments are already cashless. It is difficult to comment on the College's arguments, since they have provided virtually none, other than a claim that some people have complained about queuing times.

I hope that I made my arguments clear, and that students – irrespective whether they prefer cash or cashless payments – will join me in opposing the ban on cash payments. As a cashless payer, it might not be directly relevant to you, but the implications are bigger than you might think.

Feedback on the cashless trial can be submitted at the following contact form until the end of February: <http://www.imperial.ac.uk/food-and-drink/contact-us/feedback/>

On a personal level, I

SCIENCE

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Hedgehog helps cancer stem cells survive

SCIENCE

Sarah Wong
Science Writer

Having to treat cancer once is enough, but stubborn tumours often have a habit of coming back, with cancer stem cells (CSC) as the likely culprits. These notorious cells have the ability to self-renew and to give rise to all cell types found in cancer samples, contributing to tumour heterogeneity and relapses. Researchers are therefore keen to understand how these cells communicate in order to develop novel tools to defeat cancer.

A recent breakthrough was reported by a group in Germany, where they found Hedgehog signalling was required for the survival of colon CSC.

Whilst the name Hedgehog signalling may remind you of cute household pets, in developmental biology it is known to be a crucial cellular communication method that regulates cell growth, development, and tissue homeostasis. In fact, the major signalling molecule in this pathway, Hedgehog

(Hh), was named by the scientists who discovered that the larvae of fruit flies that lack (Hh) had an abnormal spiny appearance. This highlights the Hedgehog's role in development across species, as well as the lack of creativity among scientists!

Another important signalling pathway is called Wingless-related integration (WNT). In the intestine, WNT helps to maintain the plasticity or 'potency' of intestinal stem cells, allowing these cells to replace dead intestinal cells with new ones.

Given the importance of WNT and Hedgehog signalling in both development and stem cell maintenance, it is not surprising that mutations in WNT signalling can be found in 90% of colorectal cancers. Unexpectedly, Hedgehog genes are not mutated in most cases, but are often upregulated, suggesting that both WNT and Hedgehog signalling play a major role in the progression of colon cancer.

Based on this hypothesis, researchers in Germany used cancer organoid models, a 3D culture of tumour cells obtained from patients, to study the relationship

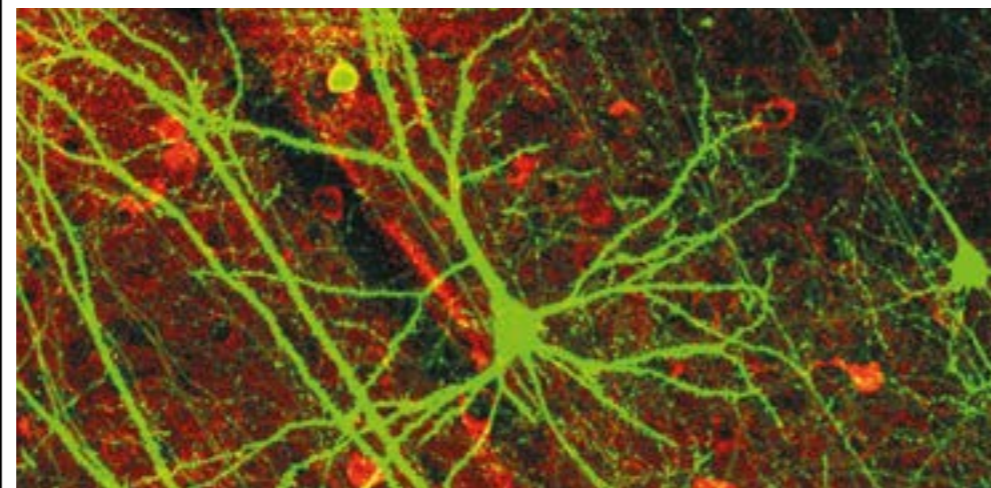
between these pathways and colon CSC.

By comparing the gene

"Tumours often have a habit of coming back"

expressions of the different colon CSC in the organoids, they discovered that the WNT and Hedgehog signalling related genes are often switched on. Upon further investigation with mouse models, they demonstrated that non-canonical Hedgehog signalling, a particular type of Hedgehog, drives the WNT signalling pathway. By genetically knocking out the gene (PTCH-1) that is involved in non-canonical Hedgehog signalling, this group showed that non-canonical PTCH-1 dependent Hedgehog signalling is necessary for colon CSC survival. More importantly, Hedgehog controls WNT signalling to maintain the pluripotency of CSC by inhibiting differentiation.

This is exciting because these pathways could potentially be targets for future development of anticancer drugs. Furthermore, two independent groups have already tried to target these pathways in Hedgehog-dependent pancreatic and breast cancers cells in 2005, with some degree of success – providing evidence for the feasibility of this concept. Though we are still far from obtaining a cure, there is still hope, and it would also be interesting to see if this applies to other forms of cancer too!



An inner look at the working of the brain // Wikimedia

Meeting of the minds

SCIENCE

Nastazja Laskowski
Science Writer

This year, Imperial College Neuroscience Society held its fourth annual conference – 'Meeting of the Minds' – hosting prestigious clinicians and neuroscientists from across the UK. This was indeed an apt title for the event, as research findings were shared, creating stimulating discussions and a buzzing atmosphere of intellectual curiosity!

The conference brought together speakers from many world-class institutions, including Imperial, UCL, Oxford, and Cambridge – to name a few. Having commenced a BSc in Neuroscience at UCL in 2014, I have been following this conference since its inception. On every occasion it explores current themes, with many students having the opportunity to watch a live brain dissection by the exceptionally experienced Professor Steve Gentleman. This year's themes included neurodegeneration, neuroadaptation, paediatric neurology, and many more.

The day started with a warm welcome at registration from the committee of Imperial College Neuroscience Society, and a keynote speech

on primary progressive aphasia from Professor Peter Garrard. Later in the day, Imperial's own Dr Amin Hajitou discussed delivery of genes to the CNS to help treatment of neurodegenerative diseases and cancers such as glioblastoma. To date, methods employing retroviruses, adenoviruses, adeno-associated viruses, and herpes-simplex virus have had significant limitations. However, Dr Hajitou described why the use of bacteriophages may be a more favourable approach. Bacteriophages are viruses which only infect bacteria and are found in water and food offering us protection. They can naturally cross the blood-brain barrier, and once they have cleared their target they are removed by microglia. They work by targeting a ligand, and can be manipulated for selectivity to various molecules. The talk finished with a poignant quote: 'the enemy of my enemy is my friend'.

The second part of the day hosted a choice of several speakers, including Dr Patrick Grover from the National Hospital for Neurology and Neurosurgery, and Dr Bianca Jupp from Cambridge University. Dr Grover discussed his research investigating functional and structural connectivity (tractogra-

phy) with implications in neurodegenerative disease. His work has investigated the roles of the brain's default mode network (introspective) and the salience network (outside world). Dr Jupp spoke next about her research on the implication of impulsivity in addiction, elucidating which neurobiological factors may influence this. Dr Jupp's findings have implicated D2 receptors, neuronal spine density, and myo-inositol as factors, and have brought us one step closer to understanding the neurobiology beneath addiction.

These were a few of the many talks on offer throughout the day, ending on a keynote speech from Professor Sven Bestmann from the UCL Sobell Department of Motor Neuroscience and Movement Disorders. Professor Bestmann spoke about potential for precision in non-invasive brain stimulation, and the lack of disease specific models of stimulation.

This year's inspiring conference finished with a relaxed networking session. With so much to offer, this is an annual event that is not to be missed. We eagerly await to see which speakers will be on the jam-packed programme next year. Until 2019!

SCIENCE

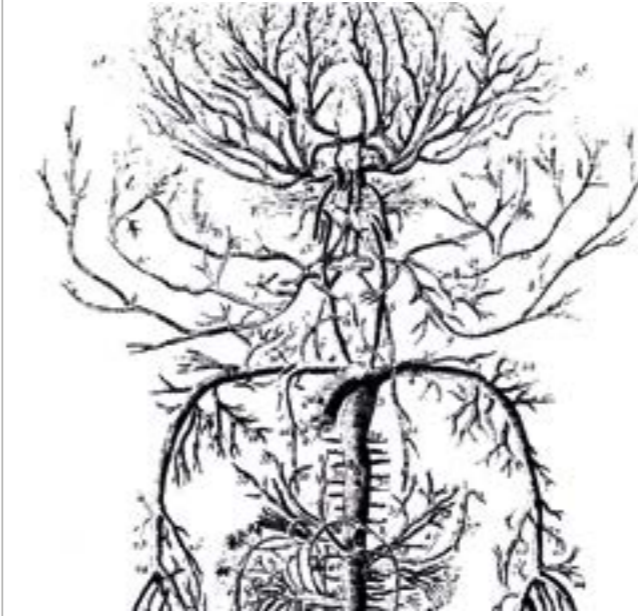
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Organs-on-chips to study anti-cancer effects of drugs

SCIENCE

Sarah Wong
Science Writer

While our iPhones get bigger by the generation, scientists are striving to keep things small in order to cut down on the cost of research. An example would be an 'organ-on-chip', where aspects of an organ are mimicked on a piece of polymer that is the size of your palm! The application of this technology is vast – from drug discovery to studying developmental biology. Not only can these models reduce the cost of research, because fewer cells and reagents are needed, but they can also decrease the number



Microvessel-on-chips are helping fight cancer // CC

of animals required in research.

A recent example of how organ-on-chips can be used is demonstrated by a multi-national group, which engineered blood vessels on silicon chips

to understand the progression of cancer.

Cancer, similarly to you and I, requires oxygen and nutrients to grow. They secrete chemicals into the local environment, which induce new blood vessels

to grow towards them through a process called angiogenesis, thereby bringing nutrition to their doorstep. If we can understand the mechanism by which they feed themselves, scientists may be able to starve them to death.

This concept is old, and available cancer drugs on the market try to achieve just that, but their efficacy is disappointingly low. Furthermore, traditional models used to study blood vessel growth have their limits, and hence better models are needed for developing new therapies against cancer.

A microvessel-on-chip has been devised for this purpose, and scanning technologies have shown these vessels can faithfully mimic the process of blood vessels sprouting

inside the body. On top of that, they demonstrated a key pathway that is known to regulate angiogenesis, suggesting these engineered vessels are of great biological relevance to studying cancer.

To investigate whether this model can be used for drug testing they treated the vessels with anti-cancer drugs that inhibit angiogenesis, Sorafenib and Sunitinib, as a proof-of-concept. Their result confirmed the effectiveness of such a model and implicated the potential use of microvessel-on-chip for drug screening in the future.

Nevertheless, there are drawbacks to this technology. Firstly, due to its simplicity the direction of angiogenesis cannot be studied. As mentioned, cancer cells often release

molecules to direct new blood vessels to grow towards them. This model can only mimic the development of vessels, but not the directional migration of angiogenesis sprouting. Therefore, it is likely that this technology will be used in pre-clinical models but may not fully eliminate the use of animals in research.

Nonetheless, this model is an improvement from traditional 2D-cell culture, and other diseases – such as rheumatoid arthritis and diabetic retinopathy – can potentially be studied. Hopefully, in conjunction with high throughput technologies, more effective drugs can be developed to cure cancer and these related diseases in the coming decade.

Connect with conservation – Detection dogs

SCIENCE

Steve Allain
Science Writer

Most people are aware of the amazing ability dogs have to sniff out targeted items or substances they have been trained for. Although more commonly known as 'sniffer dogs,' the correct term for such trained canines is detection dogs. They are frequently used at airports and other international gateways to detect illegal narcotics, but may also be used to detect explosives and other contraband that we ourselves are unable to detect. Recently, however, there has been a growing use of such well-trained dogs

to detect endangered species which have a low detection probability. This has worked well in the case of certain amphibian species and can easily be replicated across the board for other such taxa.

"Detection dogs can be used to look for explosives, but they can also be used in conservation"

Despite not being visible to the naked eye they are still present, and specially trained detection dogs have been proving this!

A team of researchers at the North-West Univer-

sity's African Amphibian Conservation Research Group have been investigating the potential use of detection dogs to find fossorial frog species. Fossorial species pose a number of problems in terms of conservation particularly when considering their low detection rates as they spend a majority of time buried underground, especially if they live in a hostile environment. Using detection dogs was successfully trialled recently to find members of the giant bullfrog – a species which is locally threatened. After their success they hope to train detection dogs to find additional species and even to detect traces of diseases, which so far have been promising!

There are examples closer to home that highlight the versatility of detection dogs, par-

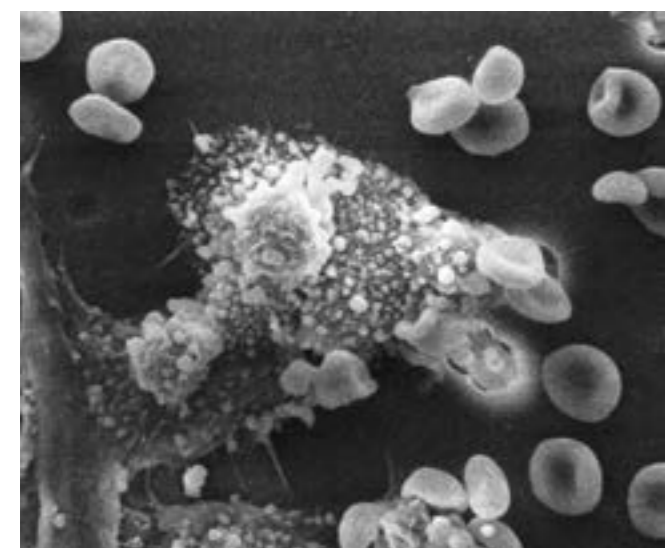


Man's (and nature's) best friend // flickr/Garry Knight

ticularly for an infamous amphibian species: the great crested newt is loathed by developers all over the country due to its legal protection and the work required to make sure they are moved out of harm's way when land developments takes place. Unfortunately, when pond or terrestrial habitats con-

taining newts are levelled, not all of the individuals can be removed. That is where detection dogs come in! Recently, a cocker spaniel was used in Norwich to find newts still lurking in potential cracks and crevices before the construction of an important bypass. This effort proved quite successful

and there are hopes that similar work will occur to help clear the way for the proposed HS2 route. Man's best friend has yet another practical application, one that will hopefully expand to other species, soon to aid in conservation efforts globally!



Nom nom nom cancer // Wikimedia

IC Hack 18 – a first timer’s perspective

A demonstration of what is possible in 24 hours when young, talented minds and litres of Red Bull come together.



Exhaustion crept in as most worked around the clock to put their ideas into practice // Tom Mrazek

TECH

Kaplan M
Tech Writer

Let’s admit it, pizza at midnight is the real driving force behind the technological advances of the past few years. The Hackathon is essentially the culture that built the technological titans of today - Facebook, Google and Microsoft. And the annual hackathon organised by DocSoc keeps up that spirit with IC Hack 18, which returned bigger and better than ever.

IC Hack 18 only saw the list of sponsors grow, with Microsoft being the title sponsor. Over 300 students, both from Imperial and other universities got together to come up with something cool, something neat, something awesome. The only condition was that they had only 24 hours

to work on their projects. Some (including me) were participating for the first time, whilst others were regulars.

Gracing the opening ceremony was Theo Blackwell, London’s first Chief Digital Officer. He shared about his role in realising the Mayor’s ambition to make London the world’s smartest city, ensuring that the capital’s status as a global tech hub helps transform the way public services are designed and delivered, making them more accessible, efficient and responsive to the needs of Londoners.

At the end of the Opening Ceremony, after all the sponsors had shared about their companies and what they do, the hacking began.

The designated hacking spaces were all over Sherfield Building, and groups occupied the Senior Common Room, Junior Common Room and the

Queen’s Tower Rooms. The energy started of really high - with a variety of music blasting, thanks to the crowdsourced music suggestions that was run using a Slack channel.

The scale of IC Hack is hard to wrap your head around. How much drinks does it take to keep over 300 students awake and active for 24 continuous hours? Your guess is probably nowhere near the actual 2 tonnes of drinks that was brought in for the event. The amount of soft drinks is not as impressive when you start considering the thousands spent on food - the menu for the weekend included Nando’s, Domino’s Pizza, Pret A Manger and Farmer J. (Unconfirmed reports state that American Express called up one of the organisers to confirm that they did really use their credit card to spend over £2000 on Nando’s.) Also highly popular

among participants were the Crepes, Waffles and Candy Floss stalls that set up on Saturday evening.

No less impressive were the several workshops that were held over the weekend - when participants weren’t busy trying to fix their code, they were kept busy by Microsoft teaching them how to use their Azure Cognitive Services APIs, or hearing from Ocado Technology (a Gold Sponsor) about Scala and functional programming. However, the most popular workshop didn’t involve any fancy APIs or even any code. Next Jump’s Sleep Class was by far the most popular workshop, with demand so high that they had to have a third run of the workshop to meet the demand. Next Jump staff walked participants through a 20 minute session of Yoga Nidra, which left participants feeling refreshed enough to keep them going for the

rest of the long weekend. Later in the night, Morgan Stanley hosted a Bar Night for the participants in the Imperial College Union Bar for participants to take a break from squashing bugs to socialise and enjoy a free drink on them.

So where did all the food and the hundreds of Red Bull cans consumed go? It went into some awe-inspired projects that surprised both students and sponsors. The teams submitted the projects that they worked tirelessly for 24 hours on into different categories, and 2 finalists for each category were selected. Each finalist group then spent no more than 2 minutes presenting and demonstrating their idea to the audience and judges, and the winning team for each category was chosen at the end of the Hackathon.

“The scale of IC Hack is hard to wrap your head around”

Taking home 3D Printers was FPS Galloper 3000, the winner for The Best Hardware Hack category. They used Microsoft’s Kinect to build a motion-controlled way to play Counter-Strike. Winning the Best Newcomer’s Hack was Feedbacker, an app that uses Microsoft’s Emotion Recognition Service to gauge the excitement level of the audience during a lecture, using it to provide feedback to the lecturer. Winning The Best Web App category was Queen’s Treasure, which is a web-based interactive adventure

game built with Queen’s Tower as it’s primary setting. Fascinatingly, all the art used in the game was drawn up by the team within those 24 hours, which was definitely a surprising feat. Winning the best Mobile Category App was SugarHoneyIceTea, a hilariously named app that helped individuals track their consumption by asking them to take pictures of the food and drinks that they consumed. Winning Best Game/Augmented Reality Hack and taking home Nintendo Switches was iSpyAI (which I was part of), a hyperlocal AR treasure-hunt game where multiple players would race to find objects in their immediate vicinity to gain points. There were also sponsor-categories, such as the TPP Greatest Impact on Healthcare category and the Accenture best Ethical/For Good Hack category.

The logistical sophistication and the level of organisation that IC Hack 18 required to run smoothly was well satisfied by DocSoc and it’s volunteers. Every event during the weekend started on time with very little delays, and the smallest details weren’t left untouched (toothbrushes, slippers and blankets were provided for participants who wanted to catch some sleep during the weekend). The cooperation of the sponsors and the impressive lengths DocSoc went to make this event smooth-running was evident from how enjoyable IC Hack was. As a first-time participant at IC Hack 18, I truly applaud the spirit behind the event, and I only wish that DocSoc organises more successful hackathons over the years.

The future of medicine – edible QR codes?

Could the humble QR code form part of the medicine of tomorrow?

TECH

Krithika Balaji
Tech Writer

If you are ill, chances are you would book an appointment with your doctor. They would listen to your heartbeat, do some tests and then prescribe some medicines based on your symptoms. A trip to your local pharmacy would result in a bag full of medications, some of which being the ones that your doctor prescribed and some that you were told worked in the same way as the prescribed medicines that weren’t in stock. A week or two into the treatment, you might realize that you are still sick - the antibiotics don’t work. You aren’t alone - many people around the world face this problem.

This could be because of many reasons. One reason is the overuse and misuse of antibiotics. Some types of bacteria, single-celled living organisms, cause many bacterial infections. Antibiotics are effective against such infections because they kill the bacteria by stopping their growth and reproduction. Nowadays, people are misusing antibiotics by over consuming them or not taking medicines for the full duration of the treatment. This results in the bacteria developing resistance against the antibiotic, rendering it useless.

Also, it is possible that the prescribed drug just doesn’t work as effectively as it does in other people due to genetic or environmental factors apart from the overconsumption of drugs. This is why scientists are looking towards medications that



Edible QR codes can definitely be tasty, but can they help too?// The Land and Water co.

are personalized to an individual, so that the illness can be treated properly and more accurately than it is now.

Another reason is the consumption of ‘fake’ medicines in developing countries, which could contain incorrect doses, wrong ingredients or no active ingredients at all. Even some authorized medicines fall in this category because they fail to meet quality standards. This might be due to improper storage, amongst other issues. According to the World Health Organization (WHO), these bogus medications are a growing threat as increased pharmaceutical trade, including via the internet, allows opportunities for fake drugs to be distributed. National health organizations are trying to find ways to stop the spread of these drugs.

Scientists and engineers are trying to find different types of solutions towards more personalized medi-

cations and combating the distribution of fake drugs. Last Friday, a research group from University of Copenhagen and Abo Akademi University in Finland shared how they created a new way to individualize treatment - printing medicines in quick response (QR) code patterns onto an edible material.

“A week or two into the treatment, you might realize that you are still sick”

QR codes are a type of two-dimensional barcode that are read using a smartphone or other devices programmed to read it. These devices, after reading the code, connect directly to other things

like websites, emails and texts. They were invented in Japan by Denso Wave Incorporated to address the main limitation of barcodes - only being able to hold around 20 alphanumeric characters of information. After it was developed, it was first used by the automobile industry. Now, engineers are testing medicines printed in that pattern.

The medicines were printed using inkjet printing (IJP) technology to allow for greater flexibility in manufacturing doses tailored to each individual. The ink used had the active pharmaceutical ingredient and it was printed in the pattern of a QR code onto a newly developed porous, flexible, edible and mechanically stable substrate with a good absorption capacity. The mechanical properties of the substrate weren’t affected by the printing process. The QR code had good print definition and it didn’t have significant

edge bleeding.

Professor Jukka Rantanen working in the Department of Pharmacy said: “If we are successful with applying this production method to relatively simple printers, then it can enable the innovative production of personalized medicine and rethinking of the whole supply

“Data about the medicine and dosage can be stored in the pill itself”

chain.”

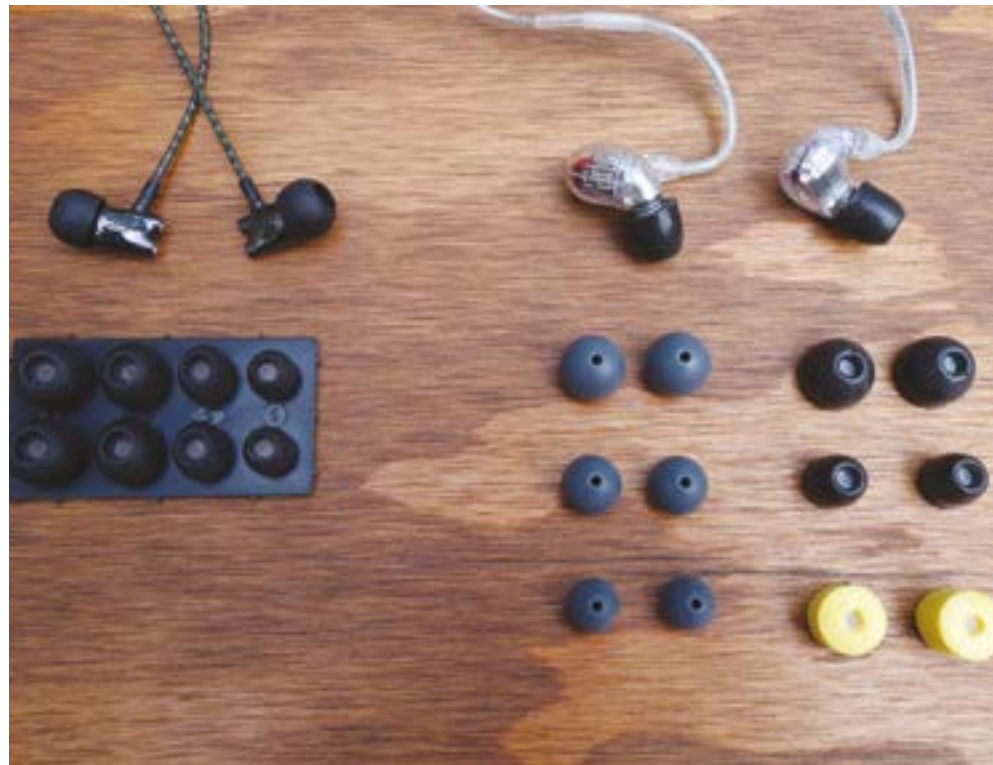
Due to the shape of the QR code, data about the medicine and dosage can be stored in the pill itself. Using an app, a quick scan of the QR code would give all the information about the pharmaceutical

product, which could potentially reduce cases of wrong or fake medication being used. The QR codes are still readable by smartphones even if the pills are stored in harsh conditions.

Researchers hope that, in the future, the medical drug can be applied in the pattern of a QR code onto the edible material using a regular printer, while the material would be produced in advance to allow on-demand production of drugs. Not only does the technology take a giant step towards personalized medicine, it also proposes a feasible solution to the problem of fake drugs. Should this technology be refined and used on a widespread basis, informed decisions can be made from the patient’s side in taking effective medication in the future.

The Audio Focus: An introduction to over-ear IEMs

Could these new earbuds help you avoid external noise?



IEMs offer great noise isolation and reduced risk of ear damage // *Techgreatest*

TECH

Robert Jin
Tech Writer

If you frequently turn up the volume on your earbuds to overcome external noise, you are at a high risk of noise induced hearing loss over time. The average hearing threshold for a young adult lies between 18 to 20 kHz, but can fall to as low as 15 to 16 kHz due to long exposure to sound above 85 decibels. At full volume, a typical earphone can reach above 100 decibels, able to cause long-term damage to the ear after exposures of just 15 minutes.

Over-ear IEMs (in ear monitors) differ from your “regular” earphones by being worn with the cable going over around the back of the ear and inserted deeper into the ear compared to earpods or regular earphones, which sit at the opening of the ear canal. This comes with several benefits:

Depending on the tip, a well fitting over-ear IEM can reach between 30-40 decibels of noise isolation, reducing the noise of a car going at 50 mph (~ 70 dB) to the ambient noise of an empty room (~ 40dB). While ANC (active noise-cancelling) headphones can also achieve this, they are bulkier, require charging, and work best with “white” noise; constant noise such as the sound of a plane engine. They are much less effective against sudden changes, such as loud conversations, whereas IEMs reduce all noise equally by physically blocking your ear canal.

Due to the noise isolation, IEMs allow you to listen to music at lower volumes, thereby reducing the risk of ear damage. Volumes at 70 decibels and below are rated safe for constant exposure, but as typical advice, it is recommended that you turn down the volume as low as possible while still being able to

hear the music.

Reduction of “micro-phonics”, which are the vibrations transmitted through the wire of your earphones when they are moved, resulting in those annoying rustling noises. By wearing IEMs over the ear, the vibrations are dampened by a great amount.

Improved sound quality can be achieved with a proper fit. The wavelengths of frequencies in the range of 10 to 13 kHz are short enough that acoustic resonance can occur between the earphone output and eardrum when inserted insufficiently deep, causing the symptom known as “sibilance” (a harsh spike in volume at higher frequencies). In addition, subbass (the rumble at frequencies < ~100 Hz) quantity is greatly improved by a proper seal. For example, the apple earpods lose up to 25 decibels in the subbass due to their more open design. Given that a change in 2-3 decibels can

be noticeable in critical listening, this difference is extremely obvious in certain songs (for example Lorde “Royals” and Hans Zimmer “Why so serious?”).

Many new models come with modular cables, allowing a replacement if they are damaged. They can also be attached to a bluetooth module to turn them into wireless IEMs.

However with all their benefits, over-ear IEMs also come with certain drawbacks:

Getting a proper fit can be difficult and time-consuming, but usually it is easy to tell when you have achieved it, as the amount of noise isolation and sound clarity jumps to a new level. To achieve this, different tips may have to be tried until the best one is found. A popular (but more expensive) option is using memory foam tips (In the below picture, 3rd from left), which compress to fit in the ear and then expand to fill the ear canal. These often come standard with higher end IEMs. Some IEMs may also be too physically large for smaller ears and this can be difficult to tell when purchasing online.

A deep fit using triple flanges (below, 3rd from right) may be uncomfortable to those with sensitive ears, and a shallower fit will provide a smaller (but still good) amount of noise isolation.

Personally over the last 6 months I have been using the Shure SE846 (RRP: £829) along with dual-flange silicone tips (below, 2nd from the left), resulting in incredible noise isolation and sound quality on the go. Without going too much into the technical details, the special feature of these IEMs is that they have certain technology which allows a clearer delivery of sounds below 90Hz, resulting in a feeling of having miniature subwoofers inserted into your ears, in addition to filters which can vary the sound by a small amount.

When they are properly in place:

- *The ambient noise of an empty room sounds “loud” in comparison*
- *With music playing, a busy street is inaudible, and the underground is barely audible. Plane noise is virtually inaudible and only the vibration can be felt.*
- *Roads have to be triple checked before crossing.*
- *Annoyed parents have to be dealt with for not responding to calls across the room.*

Now, good IEMs don’t have to cost an arm and leg, as they can range from as little as £10 to as much as £3000. At a premium cost, you can also get IEMs that are

custom silicone moulded to the shape of your ear, for increased comfort. However, these require a visit to the Audiologist and can take weeks to make and deliver, and may not fit anymore within a few years as the ears are still growing and changing in the majority of young adults.

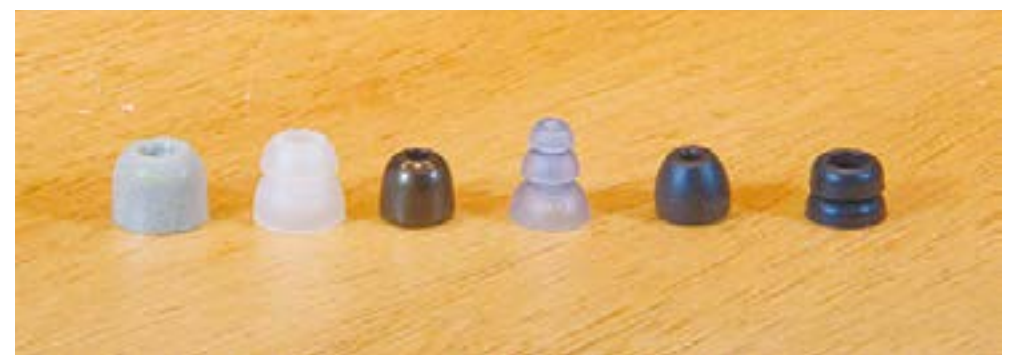
Several companies in the past year have been working on creating 3D printed custom moulds out of 3D scans, or even phone pictures, in order to speed up the process, but this is still a relatively new technology.

If you’ve come this far, and are willing to give up a few days worth of coffee for an improved listening experience, unfortunately there are few universal recommendations. Each person’s sound and fit preferences vary. It can be worth visiting one of London’s audio shops and see what they have in store to demo.

Otherwise, many new brands from China have been offering great value IEMs for around £10 to £30, but delivery from Aliexpress can take a few weeks. Some are also available from Amazon at a markup.

Some choices available directly from Amazon:

KZ ATE (£13), MEE M6 Pro (£25), Shure SE215 (£90), RHA MA750 (£80), FiiO FH1 (£80).



A variety of ear tips are available that should satisfy everyone's ears // *Innerfidelity*



#leadthechange

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ARTS

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ENO chorus// Donald Cooper

Gandhi opera *Satyagraha* returns to London

Philip Glass' iconic work offers a unique opportunity to experience contemporary opera at its finest.

ARTS

SATYAGRAHA



Where? London Coliseum
When? *Satyagraha* is at the London Coliseum for 7 performances – until 27th February
How Much? from £24

Anmol Patel
Arts Writer

This year brings with it the highly anticipated third revival of Philip Glass's iconic *Satyagraha*, an epic opera based on Mahatma Gandhi's memoir *My Experiments with Truth*. Since its UK premiere 11 years ago, which broke box office records for 20th century opera, *Satyagraha*, which follows the beginnings of Gandhi's political activism based on principles of civil disobedience and non-violence in South Africa, has sustained its status as the most popular contemporary work to be performed by English National Opera.

The production is

directed by Phelim McDermott and designed by Julian Crouch, co-founders of theatre company *Improbable*. The scenery and puppetry on stage is manipulated with mastery, however conductor Karen Kamensek, a Glass specialist, commands her orchestra with precision and steadiness, which at times eclipses the happenings on stage.

The libretto is sung in Sanskrit, based on excerpts from the *Bhagavad Gita*, without surtitles. Occasionally, quotations are projected onto the stage, providing introspective material for the audience rather than narrative guidance. Undeniably, it is a work that requires you to rewatch it in order to peel back the layers of meaning.

Glass composed a trilogy of operas based on individuals who changed the world, of which *Satyagraha* is one. *Einstein on the Beach* (1976) is the first and *Akhmaten* (1984) the last.

Set in South Africa between 1896 and 1913, *Satyagraha* – the truth force – explores Gandhi's peaceful resistance

against the discrimination he observed. In a world where violence and social discrimination remain ever-relevant, we turn to Gandhi's idea of 'truth-force' and Tolstoy's 'universal love' for solace.

The concept of *satyagraha* is often misunderstood to be limited to

“Distinguished tenor Toby Spence is a worthy successor to Alan Oke”

passive resistance. One of the first scenes in the opera is at Tolstoy farm, where Gandhi and his allies form a commune and commit to not only work on the commune, but also on their own spiritual development. They vow to resist the enemy, but do so from a place of love, this commitment, they declare, is the spirit of 'satyagraha'.

Stillness descends over the London Coliseum,

only to be interrupted by the repeating motifs of the cello. Toby Spence's powerful voice adds to the crescendo and the stage gradually comes to life. The distinguished tenor is a worthy successor to Alan Oke who retired from the role of M.K. Gandhi, one he had held since the 2007 premiere, Toby Spence, distinguished London-based tenor flawlessly preserves the legacy. His grounded voice provides constancy on the ever-changing stage. In his role as Arjuna, the prince at the heart of the Hindu epic *Mahabharata*, Eddie Wade's booming baritone voice harmonises beautifully with Spence's as they meditatively chant in Sanskrit.

Each act is inspired by one of the three icons of *Satyagraha* – Gandhi's inspiration Leo Tolstoy, his contemporary and confidante Rabindranath Tagore, and the man who carried Gandhi's legacy during the American Civil Rights movement, Martin Luther King Jr. In grounding the opera in these individuals, Glass is able to appreciate the conti-

nunity of the principles of *satyagraha* through time, place, culture and person.

The first act, aptly named *Tolstoy*, reminds us of the essential bond between Russian novelist and a young Gandhi, who founded his ideas about non-violence on Tolstoy's theories on universal love. Tolstoy's letters to Gandhi were a source of reassurance and counselling to the young leader. This relationship defines the eternal nature of 'truth force' that spans across nations.

The second act is inspired by Indian poet and philosopher Rabindranath Tagore, who earned the 1913 Nobel Prize for literature. He sits in an alcove above the stage, allowing the audience to acknowledge the long relationship between himself and Gandhi. Act II is filled with pivotal scenes that give it a more dramatic tone than the first act. The presence of Mrs Alexander (Sarah Pring), the wife of the Durban police superintendent who defended Gandhi from a mob, provides the most climactic scene of the act. The mezzo soprano

dominates the stage with her presence; Pring's performance is powerfully emotive: when the momentum she creates is lost, the audience is left demoralised by the apparent defeat of the "good" forces of the world.

Glass's music has historically been a source of controversy amongst audiences. Akin to Steve Reich, the pioneer of minimalism, some consider Glass's compositions too monotonous, repetitive and almost chafing. However, in *Satyagraha*, his minimalist approach, which he prefers to describe as "music with repetitive structure" could not be better suited to complement and enhance the prevailing theme of the 'truth force'. Glass' Buddhist beliefs echo throughout the performance, reflected by the intensely meditative chanting of excerpts from the *Bhagavad Gita*.

Satyagraha offers a unique and rare opportunity to experience contemporary opera at its finest.

MUSIC

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A brief, mostly wrong history of the lo-fi aesthetic

How can something that sounds so bad in principle sound so very good in practice? Felix investigates.

MUSIC

Henry Eshbaugh

Music Editor

In a world far before the age of high-fidelity recording, there was the gramophone. Recordings from the era are near-inaudible; the band plays as loudly as possible, so as to make the recording as clear as can be. The sound is marked by tinniness and an unmistakable crackling sound, as the needle sensing the audio encoded on cylinders of wax skated over random bumps and dips that *weren't supposed to be there*.

Fast forward forty years. Barriers were falling. A 'lo-fi' hit had already charted; Johnny Ace's 'My Song', recorded in 15 minutes in a radio station, hit #1 on the R&B charts in 1953. And, as people began to gravitate towards new genres that eschewed studio time, the necessary compromises of recording in less-than-ideal circumstances caused a sea change in aesthetics palatable to the common audience.

Well, maybe not to all the ears of the time. The Beach Boys released a trio of albums in 1967 and 1968 (*Smiley Smile*, *Wild Honey*, and *Friends*), recorded in Brian Wilson's makeshift home studio. Now packaged in the "Bedroom Tapes," the albums were the first properly lo-fi (as far as production is concerned) in existence.

In the ensuing decade, little headway was made. Artists like Paul McCartney and J.W. Farquhar recorded on portable equipment, but such projects saw little cultural acclaim. The lo-fi aesthetic belonged to the punks at this point – nobody else was too bothered about it.

But the lo-fi aesthetic lived on. The rise of punk, grunge, and shoegaze in the 80s and 90s brought a revival to the sound, with renowned bands like Operation Ivy, Slowdive, and Nirvana all experimenting with low fidelity production to some extent or another. And oddly enough, there was some *folk* around, too.

The late 80s saw the formation of Neutral

Milk Hotel, arguably the most recognizable act in the genre. If you haven't already, treat yourself to 1999's *In the Aeroplane Over the Sea*, a disorienting barrage – nay, masterwork – of eclectic instrumentation, abstract lyricism, and a raw, distorted passion. The album has become a cultural icon, a touchstone among fellow music nerds when I lived in the States. Largely a continuation of their earlier work (their 1996 debut *On Avery Island*: fantastic btw). Neutral Milk Hotel blended a folk-punk sensibility with something more profound, and that magic glue is the lo-fi aesthetic that allows such abstract lyrics to feel close, personal, confessional.

Speaking of personal, confessional lyricism, there's more folk to bring up. Through the 80s, John Darnielle was recovering from a rough home life, taking methamphetamine, working as a psychiatric nurse, and playing guitar. In 1991, he went off to college, studied English, and started recording his guitar playing into his boombox. These tapes became the first Mountain Goats releases; since then a fecund poet, Darnielle's distorted voice can be found nurturing disgruntled, literary-minded twenty-somethings late into the night, lyrics peppered with pathos.

Emo came into its own at about this time, and *boy* did they pick up big on the sound. Bands like Sunny Day Real Estate and Modest Mouse took the subtle grit and ran with it. Nay, emo *became* lo-fi, to the point where even relatively new acts like Elvis Depressedly connect to the genre essentially through their down vibes

and lo-fi sound, breaking nearly entirely in terms of instrumentation and licks. And while I'm still (obliged to be) talking about emo, I must mention Brand New, whose later albums dip into the aesthetic quite readily. I should also mention Jesse Lacey allegedly jerked it in front of teenagers over Skype though, so don't give them your ad revenue. Or, really, don't listen to emo, because there's nothing more aggravatingly grating to me than listening to music with the emotional depth of a wet rag. Hate mail will be forwarded to my recycling bin.

Then, the 2000s dawned. Godspeed You! Black Emperor made selective use of lo-fi to add texture over their rock-kitted orchestra, featuring field recordings (and a chilling bagpipe recording off *F#A#*). Indie went down a lo-fi rabbit hole, as did the rap game (E1-P and the Def Jux guys).

And electronica. Chillwave and glo-fi emerged in the late noughts, and while it was hype for a time, it soon died down. *Or did it?* An offshoot of the above revolves around J-Dilla or Nujabes-style beats, oft referred to simply as "lo-fi hip hop," taking samples of jazz songs and looping them over a funk break. Cop a jhfly album, it's worth it.

Oh, and vaporwave, I guess. But that's a meme anyways, so whatever.

Lo-fi techniques are varied. Many artists will blend the hiss of vinyl back into their music for a warm and nostalgic mood. Others roll off the highs, yielding a mellower, muted sound. Some crank gain and seethe white noise. Punk bands go for



I saw this art painted on a pair of sneakers once. // Merge

a DIY sound to match the ethos of the music; Godspeed uses it to build a setting. Folk bands use rough equipment to cultivate an air of honesty and sincerity. When contextualized, the lo-fi aesthetic lends the artist a powerful creative tool – and its effect on the listener.

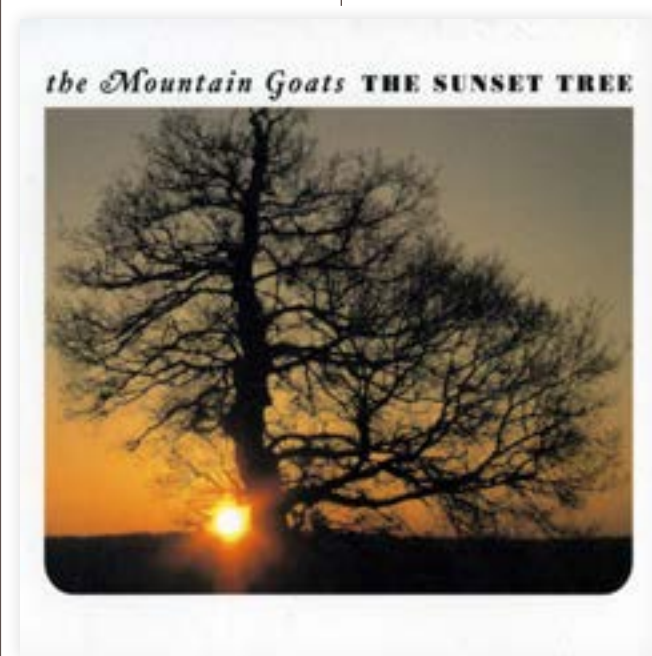
So, um, *why?* What is it exactly that makes lo-fi so appealing, from Mac DeMarco to FIDLAR? In my pretentious opinion, lo-fi breaks the fourth wall. Most music is recorded to remove any imperfection

in the process of recording, to capture the music and nothing else. The specifics of the recording are inconsequential. Contrast this to lo-fi, which confronts the listener with the nitty-gritty of the album being assembled in the *very fabric of the album*; the experience becomes much more personal and raw. This closeness, often bolstered by room acoustics, gives lo-fi its intimacy.

Fuck it, let's all go back to the wax.



Shockingly, this is OG lo-fi. // Capitol



Believe it or not, this is the OG // 4AD

MUSIC

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The lights are on, but nobody's home

Despite rare glimmers of genius, the latest effort by soft rock outfit Rhye is disappointingly lackluster.

MUSIC

BLOOD



Artist: Rhye. **Label:** Loma Vista. **Top Tracks:** Phoenix; Count To Five; Taste. **For Fans Of:** Jessie Ware; Sade; Sampha. *42 minutes*

Suraj G

Music Writer

The duo consisting of Mike Milosh and Robin Braun, known together as Rhye, would in 2013 release *Woman*. *Woman* aggressively dealt with the softer parts of life and love. Bold in its message, but delivered with a fragile gentleness, almost soft to the touch; *Woman* did little to avoid the comparisons

to Sade. Milosh's ethereal, androgynous vocal melodies paired with lush production on pieces such as 'Open' and 'The Fall' would proceed to create an internet frenzy, garnering critical acclaim from most publications.

It wasn't until early 2017 that Braun would proceed to leave the group, leaving Rhye a solo project with Milosh and a backing band, centered around its live performances. *Blood*, under the command of Milosh, continues what was started on *Woman*. In terms of musicianship, it's a direct step up from the studio experiment that was their previous album. Each note and measure is calculated, crisp and precise. Played in a mellow and deliberate manner, every

pulse of music oozes with sexiness, calming the nerves with an unforetold sophistication. The atmosphere that is intricately sculpted, song by song, is admirable. Despite this, however, it is soon evident that the album is all style, and woefully little substance.

The Nicolas Winding Refn of albums, *Blood* has oodles of production and instrumental flourish, but nothing more concrete to back it up, rendering it emasculated and stripped of identity. Agreeable at best, the worst parts of soft pop music come to light over the course of 42 minutes. Music you could, without much thought, nod your head along to in moments of vacuous serenity, with little to no engagement of any

critical faculties. The lack of emotive and powerful songs like 'Open' from Rhye's debut also makes for a consistently plain, and disappointingly inoffensive album. The only exception to this rule is track nine, 'Phoenix'. Embracing a groove, Rhye venture out of their comfort zone, creatively reworking funk motifs. Milosh chants, "Oh my god", as the bassline takes on a life of its own.

Though the album never reaches the somewhat more lofty heights of the band's debut, it offers a few decent songs sprinkled here and there, making the listening experience at least marginally pleasant. Almost ironically, *Blood* seems to be trying its best to emulate *Woman*,



By far the cheekiest thing on this record // Loma Vista

whereas it undeniably has the potential to forgo the clichés of its soft rock roots and be something more wild and free. Something with a mind of

its own. With some sort of personality. Come on, Mike. Get it together. We know you can do better than that.

Modern Lore is an instant classic

MUSIC

MODERN LORE



Artist: The Julian Lage Trio. **Label:** Mac Avenue Records. **Top Tracks:** The Rambler, Roger the Dodger, Earth Science. **For Fans Of:** Jim Hall, Wes Montgomery, BB King. *43 minutes*

Henry Eshbaugh

Music Editor

Thirty years into his life, twenty-five years into his guitar-playing career, and two years into his time as a bandleader, Julian Lage has returned with his most mature album yet. Playing the darling Telecaster that gave *Arclight* its wonderful fuzzy feel, and supported by bassist Scott

Colley and drummer Kenny Wollesen (legends in their own right), Lage flings from fret to fret, fingers frolicking in the twilight between full tube clipping and the classic clarity of more conventional jazz guitar. Lage is a wizard of intonation; his control over the guitar is tight enough to be able to seemingly pile on and back off the fuzz at a moment's notice by subtly switching up his strumming technique. The work in the details is *stunning*.

And while Lage deftly modulates his tone by playing on this boundary, the real credit to his skill as a guitarist is the sheer apparent ease with which he plays. Lage throws up strange chord voicings and makes great melodic jumps in rapid

succession, stopping only for an incidental bend or arpeggio, before whisking away on yet another lovely jaunt deep into the realms of music theory I

don't understand.

Colley and Wollesen are no slouches either. You might recognize them: Wollesen has toured with Tom Waits, Norah

Jones, and Sex Mob, while Colley has spent time with Herbie Hancock and Jim Hall. Lage is the only member of the trio without a Wikipedia page.

In fact, the story is quite sweet - apparently, Lage grew up watching jazz jams at Yoshi's; at the time, Colley and Wollesen played in the house band, backing touring soloists. Eventually, they played together, and so the happy trio was born.

Vibes on the album range from a rustic ramble ("Wordsmith") to Ornette Coleman-esque free jazz (the fantastic track "Earth Science"). Every track is distinct and worthwhile. "The Rambler" rocks, "Look Book" hits a chirpy stride and plants itself there, and "Roger the Dodger"

ambles whimsically in the verse and grooves hard through the refrain. Blues and rock serve as *motifs* on this album; Lage bends genres into patterns that stand testament to his sheer musicality.

And yet, Lage has matured. This is his sophomore effort as bandleader, and one that paints him as becoming more comfortable with the role, more agile and willing to play with new ideas. He feels more personable, more expressive, more rhythmically coy. *Arclight* wasn't a bad album by any stretch of the imagination - but it is no terrible thing to have the sophomore LP trump the first stab.

To close on, I'm left keen for the great things in the trio's future. Onwards and upwards, lads.



The illegibility is part of the art, man // Mac Avenue

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BB

2018

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Heat 2	15 February	Reynolds
Heat 3	22 February	Metric
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3 bands each heat to determine the champion
Winner of each heat decided on the night by audience vote
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Diversity at the Oscars – how far have we come?

We take a look back through the last hundred years of the Academy Awards to see what has changed.

FILM

Mark Aduol
Film Editor

Before 1962, Hollywood didn't make many films about race. This made some moviegoers unhappy. So, they put down their popcorn, picked up their picket signs and marched over to Hollywood Boulevard demanding that film studio executives increase the racial diversity of characters in their films. The executives listened and over the next few years, racially-diverse classics such as *Lawrence of Arabia*, *To Kill a Mockingbird* and *Guess Who's Coming to Dinner* were greenlit by film producers. Hollywood had increased the heterogeneity of characters on the big screen and so the protesters put down their picket signs and went back home.

And for a while, people were happy. But then they decided that even though

Hollywood had widened the representation of different ethnic groups on the big screen, they often portrayed these groups in an unfavourable light. So, in the early 1970s, they once again decided to take their anger to the streets of Hollywood. One of the activists at this time was Marlon Brando – regularly regarded as one of the greatest actors of the 20th century and particularly famous for his portrayal of Vito Corleone in *The Godfather* (1972). Having just won an Academy Award for his performance in the film, Brando declined to accept his prize “owing

to the poor treatment of Native Americans in the film industry”. Instead, the Native American activist, Sacheen Littlefeather, who represented Brando at the awards ceremony, used the opportunity to deliver a fiery rebuke of the Academy of Motion Pictures and Arts.

That speech was not an isolated event, it sparked a wave of diversity protests that have been troubling the Hollywood elite ever since. Much of the criticism regarding the portrayal of non-white characters in Hollywood productions began to centre around the concept of the “white-saviour” film – a cinematic trope in which a white protagonist is portrayed as a messianic figure who attains moral enlightenment after sacrificing a comfortable livelihood in order to (physically or morally) rescue characters of colour.

Despite the protests, the white-saviour narrative gained popularity amongst audiences. The film that kicked-off the genre was



“People generally see what they look for” // Universal International Pictures

the 1962 cinematic adaptation of Harper Lee's *To Kill a Mockingbird* – a story where a white lawyer unsuccessfully defends unfairly accused black clients but nonetheless, receives praise for his efforts. Even though the film was successful, it was only until the late 1980s and early 1990s that the genre really took off. During this period, white-saviour stories were released frequently enough for almost every film in the genre to be recognized as an instance of a more specific narrative.

There was the story about the white coach that leads inner-city sports teams to championship success (*Wildcats* [1986], *Sunset Park* [1996], *Glory Road* [2006]); the story about a white teacher that sacrifices a comfortable life in order to educate underprivileged non-white students (*The Principal* [1987], *Dangerous Minds* [1995], *Finding Forrester* [2000]); the story about white adventurers that rescue a benevolent society from hostile invaders (*Dances with Wolves* [1990], *Gran Torino* [2008], *Avatar* [2009]); and in homage to Harper Lee's epic, the story about the white lawyer that defends unjustly accused African-Americans (*A Time*

To Kill [1996], *Amistad* [1997]).

Not all these films succeeded, but the ones that did were often branded by film critics as earnest attempts to start a conversation on race in an industry that throughout its history, had failed to capture the real-life experiences of non-white communities in the United States. Nonetheless, a few critics contended that while such films did succeed in crafting more racially-diverse landscapes, they often did so at the expense of the very characters that they were meant to be about. The claim is that by depicting non-whites as dependent on whites, such films only reinforce the preconceived bias that non-white characters cannot be the agents of their own destiny. To give an example, in her review of the Academy

“The Academy – largely, white old men in their 60s – had weathered this type of storm before”

Award-winning film, *The Blind Side* (2009), in which a white woman rescues a black teenager from an impoverished childhood and supports him throughout his high school and college years, Melissa Anderson, former senior film critic at *The Village Voice*, stated that “the movie peddles the most insidious kind of racism, one in which whiteys are virtuous saviours, coming to the rescue of African-Americans who become superfluous in narratives that are supposed to be about them.”

That view seems to have become more popular over time, so much so that it is now the norm amongst the liberal intelligentsia of Hollywood. This being the case, the white-saviour genre seems to be slowly going out of fashion in favour of films that portray people of colour as their own heroes – for instance, in Ava DuVernay's *Selma* (2014), Theodore Melfi's *Hidden Figures* (2016) and Marvel's upcoming feature, *Black Panther* (2018).

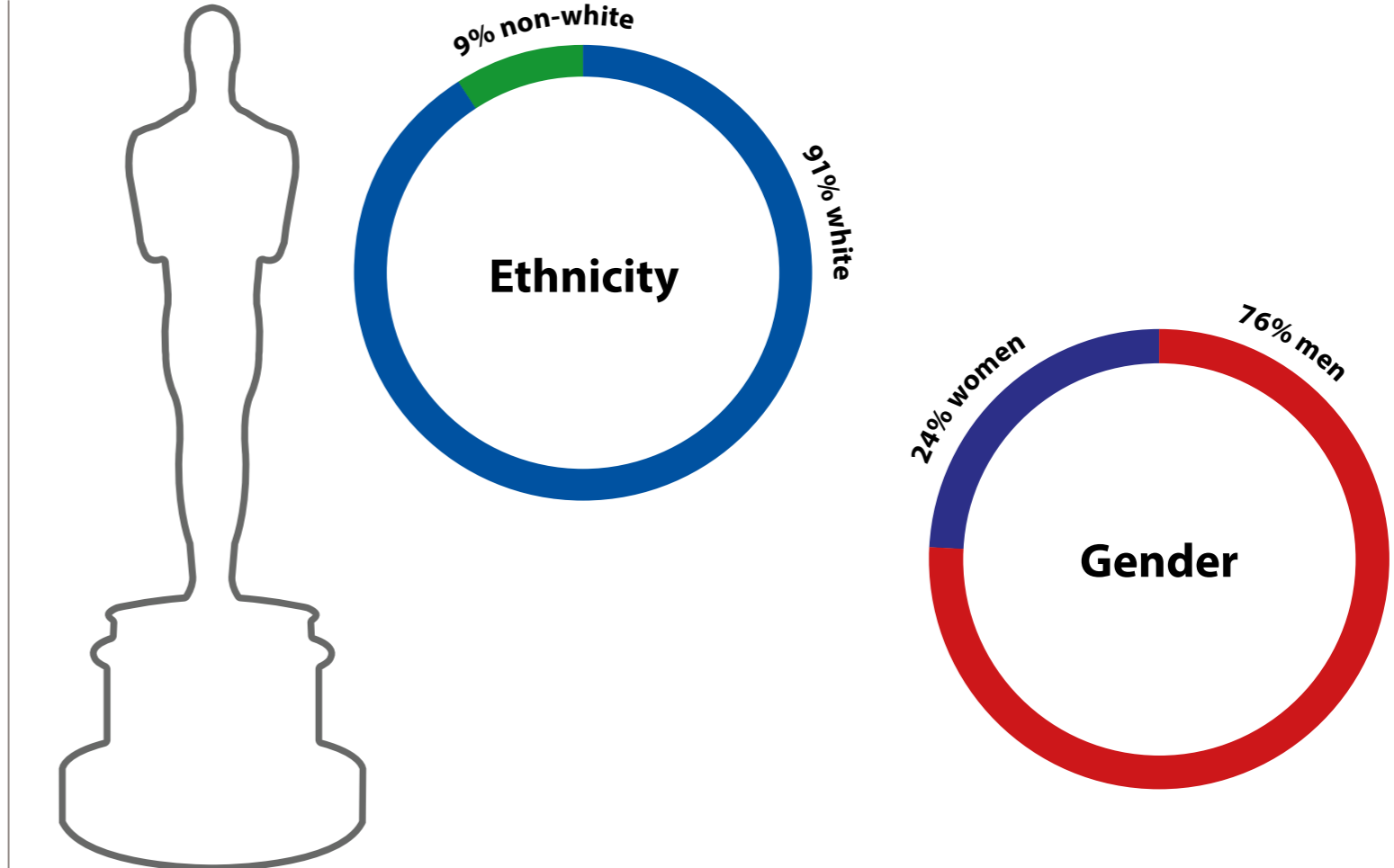
Indeed, the backlash against white-saviour movies has been so intense that even the seemingly innocuous musicals, *La La Land* (2016) and *The Greatest Showman* (2017)

have been accused of belonging to the genre. Last year, *La La Land* was the early front-runner in the race for the Best Picture Oscar at the 89th Academy Awards, but after a few critics lamented the lack of African-Americans in a film that sees a white man save jazz, the movie quickly lost momentum and eventually, the race.

Instead, *Moonlight* (2017) became the first film with an all-black cast to win Best Picture; and even more notably, the ceremony had the most black winners of any Academy Awards, ever. That is partly a result of the fact that over the previous two years, the Academy had come under a new wave of more intense scrutiny for the lack of racial diversity among the nominees in major categories. It wasn't something new to them; the Academy – largely, white old men in their 60s – had weathered this type of storm before.

But unlike previous waves, this time, the younger, conventionally successful, yet disenfranchised Hollywood actors and directors leading the charge had armies of Twitter followers behind them to champion their cause. As soon as the nominations for the 87th and 88th Academy Awards were announced, hashtags like #OscarsSoWhite and #WhiteOscars began making rounds amongst the keyboard activists of the Twittersphere. Though, going by the triumph of *Moonlight* at the last year's awards, it appears that this brand of crowd-sourced criticism has left a mark.

Certainly, there is nothing wrong with having a more diverse pool of nominees at the Oscars, but if that comes at the expense of artistically superior films, then in a way, it is a loss for the art of film altogether. In such a world, the Oscars are reduced to nothing more



Current make-up of the Academy // Felix

than a game of identity politics that ignores artistic masterpieces and instead rewards the most vocal identitarian movements. Take, for example, the newly-minted hashtag #LatinosLeftOut. The hashtag, coined in response to the lack of Hispanic film-makers among the recently announced Oscar nominees, is yet another example of how representation-through-Oscar-nomination is damaging the future of film. By shaping the entire conversation on film industry diversity around the metric of Oscar success, the Hollywood elite have constructed a zero-sum game that is trapping them in a vortex of never-ending diversity protests. For a black actor to win, a Hispanic one must lose; for a female director to win, a male one must lose, for a thematically-familiar film to succeed, a more contemporary one may have to fail. It's getting to a point where future awards nomination processes may depend more on activism

against under-representation than the artistic merits of a film.

When Ava DuVernay's *Selma* missed out on Best Picture at the 87th Academy Awards and F. Gary Gray's *Straight Outta Compton* wasn't nominated for the same prize the following year, several liberal media outlets castigated the Academy for ignoring black actors. However, the problem with such an assessment is that it appears to fly in the face of the numbers. African-Americans constitute 12.6% of the U.S. population and since 2000, 10% of Oscar nominations have gone black actors. Assuming that most black actors in Hollywood are indeed, African-Americans, then it appears that black actors are not really being ignored by the Academy.

The media pundits protesting under-representation of different groups at the Oscars seem to be overly concerned with whether a film director is black or white, female or male, Asian or Hispanic,

young or old. An artistic purist would say that such factors shouldn't have much to do with a film's chances of Oscar success. Ava DuVernay's omission in the Best Director category at the 87th Awards should not be viewed through the lens of whether the academy ignored her because she is black and female but should instead be recognized as a unique instance of a good film-maker that was not awarded the recognition she deserved. Not unlike several other actors, screenwriters, and directors that have been snubbed by the Academy after producing outstanding work. And this leads to my last point. There is no industry on the face of the Earth that celebrates itself as much as Hollywood. Awards season typically kicks off around November with the Gotham awards and then drags on for a further three months, culminating with the Oscars at the end of February. Between those two events, the eventual Best Picture winner can

expect to acquire well over a hundred nominations at major and semi-major awards ceremonies, winning roughly half of them.

But what is it about such films that make them worthy of that coveted prize of Best Picture? What magic lies between those opening and closing credits that is strong enough to draw the universal admiration of the academy? Well, almost

“The Oscars seem to be overly concerned with whether a film director is black or white, female or male, Asian or Hispanic, young or old”

by definition, artworks do not lend themselves to objective assessment; everybody will have their own unique opinion regarding the best films of the year and those differences in opinion are likely to result in some heated argument among film critics, professional film-makers and media pundits, alike. Some will praise the summer staple of superhero-heavy blockbusters, others will brand them infantile garbage; some will sing the praises of avant-garde novelties, others will dismiss them as fashionable nonsense – there is rarely consensus in art. Even as I write this piece, there are about four films that still have a realistic shot at this year's Best Picture prize, so perhaps the best way of determining whether a film is Oscar-worthy, is to simply try to make the Academy more representative of the wider Hollywood film industry. Once that's done, let the chips fall where they may.



Moonlight, starring Janelle Monáe and Mahershala Ali, was the first all-black cast to win Best Picture // Wikimedia

FILM

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Phantom Thread: A haunting masterpiece

Sir Daniel Day-Lewis bows out on a high as Paul Thomas Anderson returns with the best film of the year.

FILM PHANTOM THREAD



Dir: Paul Thomas Anderson.
Script: Paul Thomas Anderson. **Starring:** Daniel Day-Lewis, Vicky Krieps, Lesley Manville, Richard Graham. *130 minutes*

Ashley Luckyram
Film Editor

Though he excelled as a young actor in the National Youth Theatre, in 1975 Daniel Day-Lewis made a decision that almost deprived us of some of the very greatest performances ever seen on screen. Then an unruly 18 year old, Day-Lewis elected not to pursue the arts, instead applying for a five year apprenticeship as a cabinet-maker. Fortunately for cinephiles everywhere, he was rejected due to lack of experience. Instead he was accepted at the Bristol Old Vic Theatre School, and the rest is history. Day-Lewis' passion for the crafts is well known – a dedicated woodworker, he also once worked as a road-cobbler in Tuscany for 18 months during one of his notoriously long lay-offs between acting jobs. He uses this love to aid his portrayal in *Phantom Thread* of a fastidious haute couture dressmaker in the high society glamour of 1950s London as he heads into his longest lay-off of all: retirement.

The couturier at the centre of this tale is the wonderfully named Reynolds Woodcock. He operates a fashion salon from his towering Georgian townhouse in Fitzroy Square that



Everywhere you look, there's a hem // Universal Pictures

very closely resembles the Saville Row house of Sir Hardy Amies, the man behind the crisp, understated looks of the

“Anderson’s screenplay is endlessly surprising, weaving in directions one never predicts”

Queen’s early reign. As ever with Anderson, his lead is an amalgamation of a number of fascinating true life figures. In *The Master*, Lancaster Dodd was a mashup of L. Ron Hubbard and John Steinbeck; here, Woodcock is drawn from the likes of Cristóbal Balenciaga, Christian Dior, and Charles James. As Reynolds goes about his day with extreme

routine and superstition – including silent breakfasts – his sister Cyril, played by the wonderful Lesley Manville with icy aplomb, tends to both his pernickety needs and the logistical side of the business. Early on, Reynolds takes a trip to the country for some rest from his exhaustingly procedural life, where he meets young immigrant waitress Alma, giving her the sexiest breakfast order ever on screen. He is instantly taken by her, early on telling her “I feel I’ve been looking for you for a very long time”, and whisks her back to his London lair after a peculiar first date.

To delve into the plot any further would be a miscarriage of justice. Anderson’s screenplay is endlessly surprising, weaving in directions one could never predict as Reynolds and Alma battle for control over their lives, with Cyril – Reynold’s old so-and-so as he affectionately refers to her – watching over

with an eagle eye. The film ensues like a dark fairy tale, most closely resembling *Rebecca*, but comparable in different ways to *Sunset Boulevard*, *All About Eve*, and *The Red Shoes*. It is haunted, paying tribute to the likes of Kubrick, Hitchcock, and the Brothers Grimm at different times, and yet it is incredibly funny. In particular Manville delivers her put downs with a razor sharp tongue, in some of the most memorable lines of an astonishingly quotable film, especially considering Anderson’s intense appreciation of moments of quiet and silence. The whole picture sees technical masters at the top of their game. Aside from Anderson’s writing and directing, and the remarkable performances of Day-Lewis, Manville, and relative newcomer Krieps (who commendably holds her own against one of the finest actors ever to grace the screen), Anderson also serves as his own cine-

matographer, conjuring pristine shots from the shadowy corners of the town house, adding to the gothic feel of the picture. Jonny Greenwood’s score is a thing of beauty, mixing muted, creepy piano with soaring, romantic strings; meanwhile Dylan Tichenor’s editing is clean and rhythmic. The costume design and production design, from Mark Bridges and Mark Tildesley respectively, are simply sublime.

Anderson, like Day-Lewis, was a tremendous young talent, having achieved more in his twenties than many great directors do in their entire careers. He is a filmmaker synonymous with great American stories, particularly those set in his home state of California: a megalomaniac oil baron going head to head with a young, charismatic preacher at the turn of the 20th century; the beginnings of a scientology-like cult in a United States suffering from an identity crisis

post-war; a young man desperately crying out for a family and finding one in the Los Angeles porn scene in the late seventies. Departing his home state for the first time ever, he is at the peak of his powers, eschewing the vast landscapes of the Valley for his most intimate film yet. Both Anderson and Day-Lewis are obsessively driven, reclusive men, only focused on the work, and never seeking fame or celebrity, making their combination the only one that could have worked so well in bringing the world of Reynolds Woodcock to life. Where they differ is on their desire to continue working. Day-Lewis is quite possibly burnt out from the undeniably demanding way in which he becomes the great men he portrays. On the other hand, Anderson, who has never held another job than being a filmmaker, insists that he will go on making films as long as he is allowed to. Long may he continue.



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BOOKS

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Felix recommends Valentine's reads...

Three suggestions for books to set the tone for the holiday through their depictions of romantic love in its many forms.

Written on the Body by Jeanette Winterson

The first question is, who is the narrator? She or he is never named, and their gender never revealed. "Why is the measure of love loss?" asks the opening sentence, and throughout the book we are taken through the narrator's clandestine relationship with a married woman, a passionate, convention-defying love affair. As might be expected, their lover's husband, a doctor, comes in the way, and reveals to the narrator that their lover has leukaemia, a fact that she has been concealing from the narrator. Using his status as a doctor,

he forces the narrator to leave his wife by saying that he cannot have them around while he supervises her treatment. The narrator leaves, and we are taken through the whirlwind of her grief and ways to cope, with the text interspersed with narrative descriptions of anatomical body parts as an extended metaphor for love and loss: "Shattered like a fan no-one suspects your shoulder blade of wings." *Written on the Body* is a (sometimes excessive) lyrical journey through the anatomy of passion, love and loss. – **Jingjie Cheng**

Crush by Richard Siken

Infatuation teeters into obsession and destruction in Richard Siken's appropriately titled poetry collection *Crush*. The collection which won Siken the Yale Younger Poet's Prize in 2004 was lauded by the competition judge Louise Gluck as the kind of book that "restored to poetry that sense of crucial moment and crucial utterance which may indeed be the great genius of the form". From vivid, visceral imagery rooted in fast motorbikes, handguns, pills and violence, Siken crafts a series of poems that explore tenderness and gayness in a world of murderous,

suicidal homophobia and toxic masculinity - "You're in a car with a beautiful boy...And you feel like you've done something terrible, like ...shoveled yourself a grave in the dirt...and you're trying not to tell him that you love him...but he reaches over and he touches you, like a prayer for which no words exist, and you feel your heart taking root in your body". Alternating between the first and second person, Siken's writing is ferocious with a vital force; these are poems that linger in the mind long after you've turned the last page. – **Indira Mallik**

*Essays in Love* by Alain de Botton

Written when he was 21, Alain de Botton's classic musing on romance and relationships is an insightful dissection of the anatomy of a romantic relationship. The story follows the unnamed narrator and his relationship with Chloe, from the point where they met sitting next to each other on a plane to infatuation, to the gradual decline and breakdown of their relationship. On the way, the narrator muses about various aspects and theories behind romantic love and its associated pitfalls, illustrated with

specific events that appear insignificant but are ultimately telling and uncomfortably familiar to anyone who has been in a relationship before. For example, the narrator writes about the 'Jesus complex' - the tendency for one to feel virtuous in the face of suffering, the feeling of superiority over one's oppressors. It is with this attitude that he faces Chloe's eventual rejection, as a way to move beyond his helpless, needy state before. This is a book that may be uncanny to people who have experienced relationships, but therefore also incredibly enlightening. – **Jingjie Cheng**

BOOKS

books.felix@imperial.ac.uk

...or the books to help you to forget about romance

For those who are content with their own company, or just want to avoid all the sentimental nonsense on the 14th this year.

The Lonely City by Olivia Laing

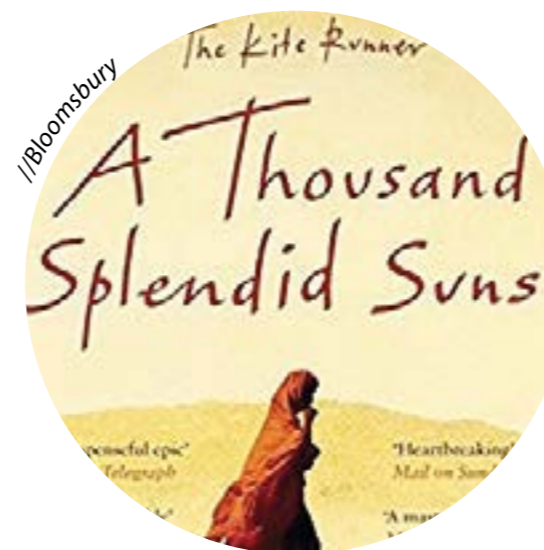
Everyone gets lonely sometimes, and holiday periods with their ubiquitous, aggressive marketing geared towards couples, or families can feel isolating for many. Part memoir, part thesis, Laing wrote *The Lonely City* after a break-up. She travelled to New York alone to seek solace in the work of artists whose work to different degrees have been defined by the particular brand of loneliness that arises in metropolitan cities, where despite physical proximity to millions, one can easily go days without having a conversation - let alone

one that is truly meaningful or fosters kinship. In this lyrical, life-affirming book Laing explores the complex factors that lead to urban loneliness using the work of Edward Hopper, Andy Warhol, and David Wojnarowicz amongst others as a foundation - it is an ode to their art, and a call to arms to forge a more connected world. Laing is an empathetic, thoughtful author with a talent for crafting perfect, deceptively simple sentences. Not only does *The Lonely City* deal with important issues, it is a joy to read - it should be required reading. – **Indira Mallik**

Reveries of a Solitary Walker by Jean Jacques Rousseau

This recommendation is a shout-out to the folks out there who have normalised their loneliness, those who on Valentine's day are no longer bitter about their relationship status, but are just having a quiet evening by themselves. Unpublished at the time of his death, Jean Jacques Rousseau, through a series of ten 'walks' (both physically and contemplatively), documents his musings and introspection during his last days of life, attempting to derive some catharsis from his perceived ill-treatment and disregard

from others. We start with a bitter and lonely Rousseau, expressing his despair at the way his work and person was perceived by his fellow men. This morphs into an elegant review of himself (introspection) and of society at large (nature of people) and the tension between the joy and sorrow of isolation. Whilst it can be painful to vicariously engage with these reveries, it sheds light on how Rousseau and by extension the reader engage with the nexus between actions or inactions and our inner thoughts and unhappiness. – **Pavan Inguva**

*A Thousand Splendid Suns* by Khaled Hosseini

There is romance in *A Thousand Splendid Suns* and it is both heart-warming and gut-wrenching, but nowhere near as powerful as the friendship of the two female protagonists. Mariam and Laila start their lives in different families, both of which are lost to the girls at an early age. When Mariam's abusive husband takes Laila as his second wife, it seems their situations may never improve. As if matters couldn't be any worse, they live in war-torn Afghanistan. The plot sometimes seems like a never-ending barrage of hardship and pain. Still,

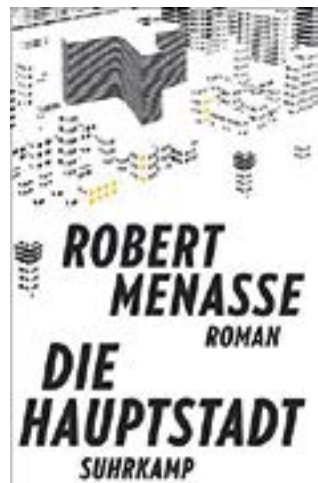
the joyful moments would not be so momentous without the suffering. Even when they seem broken, any love-life unobtainable, equality a myth, the women help each other to persist through their mutual love of Laila's children and each other. Without Mariam, the novel would be a normal romance or lost love and longing. But Mariam exists and cannot be removed from Laila's being. She is a reminder that true love need not be romantic and that great strength can be found through friendship; her character has stayed with me for many years. – **Alice Peberdy**

BOOKS

books.felix@imperial.ac.uk

Menasse's ruminations on pigs and politics in the European Union

The Capital contains a fearless depiction of the variety of people who occupy the European continent and the impact which the EU can have throughout time.



BOOKS

Clemens Jakubec

Books writer

Is it possible to write a novel about the European Union? Not just a book about the history of the European Union with boring facts and figures about its multiple conventions and contracts, but a proper novel with characters that could symbolise the European Union. That is the question that Robert Menasse asked himself (in 2010) and without further ado moved to Brussels in 2010 to find out about the people who run the EU and to be at the heart of a machinery that defines a whole continent. The result of all this was the novel *The Capital*, which earned him the German Book Prize in 2017. It truly is a unique novel, which circles around Brussels, Europe, nationalism and politics.

Brussels is the heart of the European Union and it is also the heart of the story. Actually, there are five different, loosely connected stories, which run parallel to each other.

Each one has its own protagonists and sheds light on everyday life in the European capital from a different perspective. The central story follows bureaucrat Martin Sussman who works at the EU commission's head office for culture. His ambitious boss Fenia Xenopoulou, a young Cypriot greek woman, wants to rise in the hierarchy of the European Commission and is determined to demonstrate her competence by organising a celebration to honour the 60-year anniversary of the European Commission. However, very soon all the people involved in project have to realize that things don't come their way and that there are some forces within the EU working against them, which they cannot control.

Another story follows David de Vriend, a Jewish Auschwitz survivor, who has just moved into a retirement home. He struggles with the past and the present, especially as the past slowly slips away from his memory and he appears to be a lone survivor of a long lost past. The other three storylines introduce the reader into the world of a polish hitman of the Catholic church, a renegade police officer trying to solve a murder case off his own bat and a Viennese professor of economics, who comes to the realisation his generation born in the fifties and sixties is more revolutionary than today's youth. These stories are perfectly chosen to provide a very personal inside view of how the EU and Brussels work.

"Caution – Tories can contain traces of pork!" This is one of the many political references littered all across the book. Menasse is not afraid to point his finger at all the political issues on the European continent. He manages to span an arc over nations, cultures and history, but at the same time presents an inside view of the EU and its people with all their strengths and weaknesses.

"Menasse is not afraid to point his finger at all the political issues on the European continent"

A special role is played by Brussels itself, the place where the bulk of the story takes place. There are hardly any descriptions of places in the book, instead streets, squares and tube stations are just called by their name, which makes it hard for anybody who has never travelled to Brussels to form a mental image of the scenery. Nevertheless, the one mental image of the city that manifests itself is that of a huge mess, a maze of construction sites bathed in noise, where incessant demonstrations and an overwhelming presence of the police create an atmosphere which occasionally resembles

civil war scenarios. Brussels is a modern day Babylon, where people from all over the continent, speaking dozens of different languages try to create something truly great in the midst of an enormous confusion. Menasse illustrates this by using characters from a variety of backgrounds, rich, poor, old and young. He throws quotes and passages in Polish, Greek, French, Dutch, Czech and many other European languages.

One symbol stands out above all and runs through all the storylines: the pig. The book starts with the mysterious sighting of a pig roaming the streets of central Brussels. Like

a ghost the pig shows up again and again. This pig, which is so out of place in a city like Brussels, becomes a sensation, especially as not even the police are able to catch it. Menasse also uses the pork industry to tell a story about the dealings of agricultural lobbyists in the EU.

Menasse draws concrete conclusions out of the current state of the Union, albeit not always positive ones. It is paramount for the EU to improve its public image and to reconnect with the European population. He puts a human face on the European Union and attempts to build a bridge between the personal

Europe, which we experience in our everyday lives, and the impersonal institution that is the European Union. One of the themes that define the book is a recollection of the original values of the EU, written down in the founding contracts of the European Commission, in particular the absolute determination to prevent atrocities akin to the ones that tore Europe apart in the first half of the 19th century from happening again. Menasse urges the reader to think carefully about the past, the present and the future and to not be blinded by short sighted interests. The future can be bright, if we don't forget the past.



Robert Menasse, author of *The Capital* and resident of Brussels // DPA

TELEVISION

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Getting tickets can show you how your favourite TV shows are made // Wikimedia

Behind the curtain of Hollywood

If you head to Los Angeles, as well as seeing the Hollywood sign, you should try and check out the filming of a TV show, to glimpse the machine behind the magic.

TV

Edita Pileckytė

Travel Editor

Before visiting Los Angeles, I had heard numerous stories of how utterly disappointing the city is since “there’s nothing to do there”. But if you are determined to make the most of your trip, you can always find something interesting – for instance, besides the usual tourist spots, you can visit one of the famous talk shows to be given a first-hand experience of how things work off-screen. When I was in LA, I went to the *Jimmy Kimmel Live* show and it was indeed one of the highlights of my trip!

Somewhat surprisingly, you can’t really buy tickets to such shows – instead, you enter a competition by registering your details online and telling them

why you’d like to win. If you’re lucky, you’ll receive the tickets to your email account for free. We applied for a couple of shows on different days and won 2 tickets to *Jimmy Kimmel Live*, but only found out the line up a few days before the recording – actor Larry David and animal trainer Dave Salmoni.

On the day of the show, we received an email saying we had been upgraded to priority tickets. That meant we were one of the first people to enter the venue, which is located in the very centre of the Hollywood Boulevard, with Jimmy Kimmel’s star just at its doorsteps. As we were waiting outside in the queue, the staff members approached us one by one to check our tickets and explained some basic rules – from the moment we entered the venue, taking pictures or videos was strictly

prohibited. We were also asked to leave our bags at the entrance. Besides the priority and regular ticket holders, there were several people without tickets, waiting to join the audience should any seats remain unfilled.

Upon entering the actual studio, the audience members were seated by the crew based on their preference. The rules of the show were then explained, and we soon realized that all the clapping and chanting from the audience is staged: we were asked to follow two signs – “Applause” and “Stop clapping” – that were hanging from the ceiling and would light up throughout the show. When Kimmel entered the stage, our clapping and shouting was supposed to be so loud that it was impossible to hear him for the first 15 seconds. We were then asked to gradually fade out when the “Stop Clapping” sign

lit up, rather than ending suddenly, to make it sound more realistic on TV.

“Everything was carefully planned, down to the last detail”

The show itself was much shorter than the waiting and preparation time, and, though I believe it was shown on TV that same night, it wasn’t in fact “live”. Three cameras filmed the stage and the audience from different angles, and there were four parts of filming with short breaks in between. Since the filming happened while Hurricane Irma was hitting Florida, the show was mostly focussed on that. Kimmel firstly had a live chat with the actor Kristen

Bell, who was helping out elderly people who had been relocated from a retirement home to her hotel in Florida. News reports on the hurricane were then shown, before Jimmy moved on to interviewing the guests – Larry David introduced his upcoming TV series, while Dave Salmoni brought some extra-venomous snakes, and a few other animals. During one of the breaks between filming, Kimmel remained on stage and had an off-the-record conversation with an audience member who had fled Florida to escape the hurricane. He seemed genuinely interested and concerned with the situation. During other breaks, another crew member chatted with the audience, keeping us entertained by asking questions and giving out some prizes.

Finally, after the show, we were invited to listen to the rapper 21 Savage, who performed on the stage

outside the studio. Not being huge fans, we left after two songs, but there were people outside the venue, peeping through the holes in the fence and trying to get a glimpse of the performance.

It was very interesting to see how such successful shows work, with everything being carefully planned, down to the last detail. It was also surprising to realise that the show needed the audience more than the audience needed the show. So if you’re interested in showbiz or find yourself in LA with ‘nothing to do’, I would strongly recommend visiting one of these talk shows – you’ll get a sneak peek of how things work backstage and might even see some of your favourite celebrities. After all, Hollywood is famous for its film industry, and is so much more than just stars on the pavement or the sign on the hill.

GAMES

games.felix@imperial.ac.uk

Cute girls with a twist: *Doki Doki Literature Club*

Doki Doki Literature Club is a game whose psychological twist will leave you reeling.

GAMES

DOKI DOKI LITERATURE CLUB



Studio: Team Salvato.
Director: Dan Salvato.
Genre: Visual-novel
Platforms: Microsoft Windows, macOS, Linux

Saad Ahmed
Games Editor

From the title and cute picture alone, you're probably thinking that this is some anime-styled dating simulator and are judging both me, and my life choices. Let me assure you, this game is literally not what you expect; if you choose to experience it, you'll be in for a wild, freaky and mind-bending ride.

First, let's get two major points down. First of all, this game is

short, it'll only take you around four-five hours to complete; maybe three if you're a fast reader. Second of all, this game is absolutely free. Yes, you read that right. The producer was well aware most people like yourself would probably dismiss a game that appears cute and innocent on the surface. Hence why he made this free to download from both steam and the game's website. Hopefully these reasons are enough for you to at least begrudgingly install the game and see for yourself what it's about.

Once you load up the game, you're greeted to a content warning, advising you not to play if you're below thirteen or are emotionally sensitive. Given the home screen and the charming music, this seems unusual and curious. You dismiss it for the time and start playing. For the first two hours or so, the game plays like a

fairly light-hearted and joyful visual novel. You join a high school literature club and yes, you have the option of 'dating' some of the characters. For what it's worth, this part of the game is sweet

"This game is literally not what you expect"

and charming, making you let your guard down and get involved in the story and atmosphere.

Then, almost out of the blue, an event takes place which I guarantee will shock you. In fact, it startled everyone who has played this game. The game builds up to it really well, with foreboding dialogue and a slow drop in music intensity. It is honestly a very 'What the

F-' moment, made brilliant by the fact that it just shows up when you're not really expecting it.

After this point, the game shows its true colours and begins to take a more dark and trippy direction. The game does a great job showcasing its true nature with features like visual glitches, characters acting stranger and the music becoming distorted, all of which put you on the edge. At one point, you even lose control of the mouse and the game forces you towards a certain option. Things begin to go more and more out of control, literally and figuratively, with almost psychotropic plot developments which both haunt and intrigue you.

Another noteworthy thing is the clever way the game breaks the fourth wall at times. At various points, files show up in your game's file directory which reference events



Just Monika // Team Salvato

that have happened or foreshadow developments to come. At a certain point, you actually have to delete a file in order to progress in the game. The story also develops in a way that you'll need to reinstall it to play again.

This is a psychologically thrilling game that no one was expecting, but

all its players enjoyed. It might be actual game-play-lite but that only makes it more accessible to people and doesn't take away from the experience in the slightest. I thoroughly recommend playing this game, especially if you like a unique story; just make sure you don't do it on a bad day.

New Year, New News!

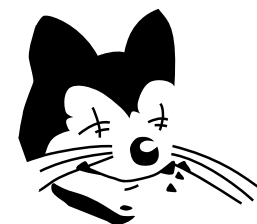
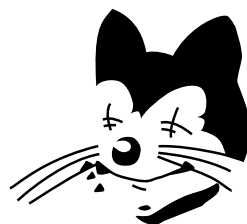
Felix are setting up a weekly newsletter, delivered straight to your inbox. Get all the best news, culture and sports every week.

Get the cat on the go!



Felix

WEEKLY





Student Support Fund

If you suddenly find yourself in **financial difficulties** or experience an unexpected change in circumstances, you may be eligible to apply for **emergency financial help** through the Student Support Fund.

**CONTACT THE STUDENT
FINANCIAL SUPPORT TEAM
TO FIND OUT MORE:**

+44 (0)20 7594 9014

Student Hub, Level 3,
Sherfield Building

www.imperial.ac.uk/fees-and-funding

TRAVEL

travel.felix@imperial.ac.uk

Kicking off the year with the toughest trail in Europe

*Just before the start of this academic year, a group of keen geologists visited Corsica to complete the toughest trail in Europe, with financial support from the IC Exploration Board. One of the team members, **Georgios Chatzitheoklitos**, shares their experience of getting the funding and preparing for the adventure.*

TRAVEL

Georgios Chatzitheoklitos
Travel Writer

How it all started...

Being an overly excited prospective student, I was reading all the emails sent by the college. There I stumbled upon the Imperial College Exploration Board and learned about all the student expeditions to various exotic places that the Board had previously supported. Any Imperial student can present a proposal for an adventurous expedition abroad and if approved, the Board will provide financial assistance. The Board consists of senior academics from all departments who meet twice a year, in December and February, to consider student proposals. The proposals have to include the budget, itinerary, training schedule, and risk assessment, and are then judged based on their viability and preparation.

Dream team search

In winter 2017, the time was running out as the deadline for the proposal submissions was approaching, and many ideas were floating around. But since Georgios had recently been to a Corsican restaurant and Max was reading about the toughest trail in Europe, the decision on the destination came about naturally: the GR20, a 180km 15-day transverse in Corsica, a French island. It was the perfect choice: safe, cheap to travel to, and most importantly would grant us huge bragging rights!

Now we just had to find people that were willing and able to spend three weeks of their summer in the rugged mountains, then plan everything, and write a report! Even though we were introverted freshers and didn't know our coursemates very well, it wasn't hard to assemble the team. Carla was sitting next to the boys in lectures and was fascinated by the beautiful pictures of the mountains

they were google-searching. Georgios had heard rumours that Diane was a keen climber, while Carla suspected that Harry would be into it because he wore really cool hiking gear to lectures every day. Max invited Jake and Albert as well who, after helping us with the proposal, were informed by their doctors that they weren't allowed to put that much stress on their knees.

But finally, the combined efforts of seven students who were very close to the deadline produced, as always, spectacular results. We were pleasantly surprised to learn that the Board wanted us to present our proposal to them. The surprise turned into stress as we learned who the Board was composed of: lots of senior academics, with two of them from our department, and students who led successful expeditions in the past. After being grilled for 20 minutes (which felt like ages), all we had to do was wait.



The team met in Toulon, Southern France // Georgios Chatzitheoklitos

We were slightly disappointed as we didn't think we'd convinced them... However, in spring 2017, the long-awaited email finally arrived, and it was positive! They were going to cover almost half of our expenses, including insurance and first aid training. Without such a massive amount of support, it would've been impossible to do the GR20.

Preparation

Even though we were almost half a year away from the trip start date, there was a lot to prepare – equipment, plane/ferry/train/bus tickets (since all of us were going to leave from a different place), and accommodation on the island. Also, in summer 2017, to ensure our new kit was up to scratch and the group's fitness was good enough, Max organised a weekend trip to the Brecon Beacons, a mountain range in Wales, where he had planned a 50km route over two days.

Unfortunately, on the first day, Max's leather boots caused him problems to such extent that we decided not to continue the hike. Instead, we tested out the tents, sleeping bags, and sleeping mats in Carla's back garden: we were then confident that our kit was fit for the trail, since it survived a night in the rainy wilderness of Swindon. The attempted training weekend in Wales was still a useful experience because Max bought a new pair of fabric boots which didn't cause him a single blister during the entire length of the GR20.

Off to Corsica!

In September 2017, starting from all around Europe, we began our long journey to Corsica. After 36 hours of travelling and four means of transport, we finally arrived. We were all annoyed after sleeping on the ferry but little did we know that it would be the most comfortable sleep for the next

15 days! We visited the last affordable supermarket we could find (where we forgot to buy cooking gas...) and went to our Airbnb to prepare for the big day. The first thing to arouse our curiosity was that Diane's rucksack felt like a sack of bricks. This was closely seconded by the mystery of how Georgios's bag with six (yes, 6!) t-shirts, seven pairs of underwear, and a glass bottle of Cognac did not feel like a sack of bricks! And although there was excitement and anticipation in the air, we were also anxious as we didn't know how the hell we'd manage to walk the toughest trail in Europe!

Further adventures

In the next article: the team steers off the trail to climb the highest peak of the island and gets followed by 80 Belgian paratroopers, and the reason behind Diane's heavy rucksack is revealed! So stay tuned.



Our reaction after seeing the mountains we were to climb // Georgios Chatzitheoklitos

CLUBS & SOCIETIES

felix.clubsandsocieties@imperial.ac.uk

ICSF DO PICOSOC!

After an exciting year of festive socials, leaky libraries, and trips to see some of the biggest film releases in decades, Imperial College Science Fiction and Fantasy Society (ICSF) is finally approaching their biggest event of the year. Bringing together over 100 fans of science fiction and fantasy from within Imperial and without, the 35th annual Picocon – our very own science fiction convention – will happen on Saturday the 17th of February.

This year, ICSF is playing host to the creative partnership of Paul Stewart and Chris Riddell, whose most notable creations include *The Edge Chronicles* series and *Muddle Earth*; the award winning and multi-talented Emma Newman, who has worked with both novels and audiobook narration; and the eternal favourite Ben Aaronovitch, whose work includes two *Doctor Who* serials, several spin-off novels, and his

best-selling series *Rivers of London*. Featuring talks from our guests of honour and a panel event where you can put your own questions to the assembled authors, this year's con promises to cover diverse topics from the written and spoken word to illustration and the silver screen. There's also an opportunity to smash some truly reprehensible merchandise with a giant hammer and a bucket of liquid nitrogen whilst being egged on by Stuart Ashen, as well as to contribute money to charity in order to stop people reading sections of *There's a Bitcoin in my Butt and He is Handsome*. The day is rounded off by a pub quiz featuring an edible prize, and definitely no fish duels take place.

The Picocon subcommittee is currently looking for volunteers to help run the event, so if you fancy free entry in exchange for a few hours of moving tables around, get in touch with the chair of the subcommittee at picocon@icsf.co.uk.



ICSF chilling out in the Science Fiction Library, which can be found in the West Basement of Beit Quad – come visit!

//ICSF

Tickets (£10 for students) are available on the Union Website, but if you can't buy online

they're available at the door outside Blackett on Saturday morning. The event is open to all, and as always tickets are cheaper for society members – membership also comes with the ability to borrow any of our 10,000 books or 600 DVDs (including work by all of this year's guests of honour) from our dedicated library, which is located off Beit Quad and is open every weekday

for further details of our events. We hope to see you at the con or around the library!

Connor Winzar

§

FEMSOC TACKLE SEXUAL VIOLENCE

1 in 5 women aged 16 - 59 has experienced some form of sexual violence since the age of 16.

It's finally gaining attention in the news, but what can we, as students, do to make a difference? Join IC FemSoc and share your ideas, whether it's ways of raising awareness, changing policy, or practical solutions to make people feel safer. Join a group of like-minded people and join forces to work on ideas to make a difference.

FemSoc has run several events this year, including an introduction to feminism, a TED-talk event and, our first collaboration of the year, a discussion with the new Kinky Klub on feminism

and kink. We're a relentlessly sex-positive society, famous for handing out free condoms and dental dams at Freshers' Fair and at our events. But talking about sexism is impossible without talking about sexual assault and violence, especially when it's been so prevalent in the news. This is the first of several events planned by IC FemSoc to look at how we, as Imperial students, can make a tangible difference. Being the hotbed of innovation that it is, we're sure Imperial is the perfect place to start coming-up with new and innovative ways to tackle sexual assault. So come along to 630 Blackett on 12th February at 6.00pm and join like-minded people to come-up with ways to tackle this problem and help them become a reality.

Vaishnavi
Gnanananthan

“The Picocon subcommittee is currently looking for volunteers to help run the event”

lunchtime. We also run subsidised cinema trips for our members, as well as regular free movie evenings in the library – join our Facebook group



LIBERATION

icu-lgbt@imperial.ac.uk

LGBT History Month: Why is it important?

LGBT History Month gives us a chance to look at how far things have come, and how far we have left to go.

LIBERATION

Alessio Incitti

LGBT+ Officer
(he/him/his)

Sophie Quinn

Liberation Writer
(she/her/hers)

If you've wondered why the Queen's Tower is lit up in rainbow colours, it's because Imperial is currently celebrating LGBT (Lesbian, Gay, Bisexual, Transgender) History Month – an annual observance of the history and experiences of LGBT people that aims to promote acceptance and raise awareness of the issues faced by this community.

This year's theme is 'Geography: Mapping the World'. Looking back on 2017, the good news is that ten more countries legalised same-sex marriage. However, the LGBT+ community also suffered severe attacks in countless parts of the world, with an extreme example being the abduction and torture of over 100 men, at least three of whom were killed, in the Chechen Republic of Russia on the basis of their perceived sexual orientation. This was not an isolated incident, as discrimination against LGBT+ people is institutionalised in Russia – activists' requests to hold rallies are frequently rejected by officials and when these events occur it is not uncommon for participants to be targeted by homophobic attacks.

In October, Human Rights Watch reported the

arrest and torture of gay and bisexual men by police in Azerbaijan. Similar institutional crackdowns occurred in Indonesia and Egypt only last year. Furthermore, the widespread misunderstanding of transgender people, and the lack of recognition of the separation of gender identity and sexual orientation, imply that the trans community is also very likely to be persecuted or otherwise abused under such anti-gay laws.

Nonetheless, it must be

“There is no place in the world where full equality has been reached”

recognised that LGBT+ people worldwide face extreme daily oppression that goes unreported. This is reflected by the fact that engaging in same-sex relations remains criminalised in 72 countries, and is punishable by death in at least four of these. Most countries do not allow trans people to change their name and gender from those assigned at birth and only a few recognise non-binary people.

It is estimated that a quarter of the world's population believes that being LGBT should be a crime.

In light of this, it is evident that there is still an enormous amount of work left to do, not only to achieve equality for



Queen's Tower all lit up // Imperial

the LGBT+ community, but to attain fundamental human rights.

Since the decriminalisation of homosexuality in 1967, the UK has implemented further laws to advance LGBT+ rights, including protection against discrimination in employment, allowing transgender people to change their name and legal gender, and the legalisation of same-sex marriage. However, improvements still need to be made. For example, the UK's Gender Recognition Act still involves a highly medicalised process and does not recognise non-binary people. Moreover, trans youth are extremely under-represented in society and are frequently attacked in the media to the point that almost half of trans pupils in the UK have attempted suicide.

In fact, schools are still not safe spaces for trans

and LGB people, and current sex education is not inclusive of LGBT+ issues. According to recent data from Stonewall, many LGBT+ people face significant challenges in all areas, with 45% of LGBT+ students facing bullying for their sexual orientation or gender identity and 25% of transgender people feeling obliged to switch jobs as a result of harassment and bullying.

There is no place in the world where full equality has been reached. It is an ongoing battle where rollbacks often happen.

This is why it is so important to acknowledge the contributions LGBT+ people have made to society in the face of systemic oppression and to honour those who have committed their lives to securing a better future for the LGBT+ community.

Here's what I'm up to at the moment!

LIBERATION

Alessio Incitti

LGBT+ Officer
(he/him/his)



As part of LGBT History Month, IQ (Imperial College LGBT+) and I are running a series of events throughout February.

This weekend you can join IQ at the National Student Pride, one of the biggest student events of the year, featuring Courtney Act.

If you would like to learn more about LGBT history, Lola Phoenix is coming to Imperial on the 13th for their talk on the Stonewall Riots, Marsha P. Johnson, Sylvia Rivera, and more. IQ will provide snacks, and there will be an opportunity for a Q&A at the end!

Also, don't miss out on the very first LGBT+ careers fair at Imperial on the 22nd.

Have a look at imperialcollegeunion.org/lgbthm for upcoming events later this month.

In the last few months, through consultations with students and staff from different departments, I have identified several things College should be pushed to implement to improve the LGBT+ student experience. Besides more gender-neutral facilities – which is an issue I have been working on this year and that is currently being considered by College – these include specialised wellbeing and careers support for LGBT+ students and the use of inclusive language in lectures, resources, and communications. A major long-term goal is trans-inclusive training for senior tutors and key members of staff. Considerable steps in the right direction were made this year with the drafting of a College policy aimed at supporting trans students. Trans-inclusive training is something I am raising with College senior members of staff at the moment, but that will probably require further lobbying efforts in the next years.



STAND

imperialcollegeunion.org/elections

#leadthechange

Be a Liberation & Community Officer

Liberation & Community Officers play a special role at Imperial. They help ensure the voices of under-represented students are heard and celebrated, and that their needs are factored into decision making at College and the Union. There are eight positions in this category, each representing a different group of students, but they all work together, along with their members, and the Deputy President (Welfare), to improve and enrich the student experience. Stand for any of the following positions:

LGBT+ Officer	International Officer
BME Officer	Disabled Officer
Mental Health Officer	Ethics & Environment Officer
Gender Equality Officer	Interfaith Officer

If you'd like to have a chat about these roles, you can find contact information for current postholders at imperialcollegeunion.org/liberation.

Student Volunteering Week



Get ready to stretch your volunteering muscle and make a difference in the lives of others with Student Volunteering Week 2018! Student Volunteering Week runs from 19 - 23 February and features a range of activities to celebrate Imperial student volunteers, as well as provide opportunities for even more students to get involved. There'll be stalls, training sessions and more.

Find out more and sign up for events and activities when the schedule goes live at imperialcollegeunion.org/volunteering or send us an email at volunteering@imperial.ac.uk to find out more.

Timetable

Nominations close: 23:59, Sunday 25 February
Candidates meeting: Noon, Monday 26 February
Training for candidates: 26 February - 2 March
Manifesto deadline: 17:00, Thursday 1 March
Candidates revealed and campaigning begins: Noon, Friday 2 March
Voting opens: Friday 2 March
Voting closes: Friday 9 March
Results Party: Evening, Friday 9 March

Stand for a position now at imperialcollegeunion.org/elections.

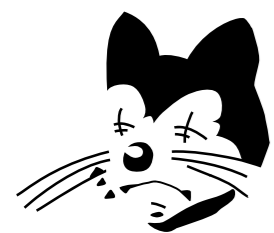
Spring Carnival



We're still feeling the chill, but with spring just round the corner, it's the perfect time to get your tickets for Spring Carnival 2018. The Spring Carnival is a great way to spend your last evening of term, and say goodbye to both winter and Imperial before you set sail for the Easter break!

This year's event is sea themed and will take place at The Union on 23 March. Tickets go on sale from today, 9 February at 12:00 at imperialcollegeunion.org/springcarnival18.

They'll be sold in tiers, so buy early to get the best priced tickets!



Hangman



Hangman's impression of the portal // Imperial College

Opening library doors creates accidental portal to hell

HANGMAN

Negafelix
Editor-in-Chief

A portal to a hellish dimension was opened this week after Central Library staff opened both sets of doors.

Students were left upset and traumatised earlier this week by a hell-portal to the Netherworld, which opened after both sets of Central Library doors were opened at once.

On Tuesday morning, library staff inadvertently opened both sets of doors,

leading out from the main entrance onto Queens' Lawn. About five minutes after this, students in the Wolfson Suite reported hearing demonic voices coming through their computer sound systems, while several Central Library cafe staff members spontaneously combusted. By midday, a hole had developed in the fabric of space-time, through which effluxed rivers of blood.

While the majority of the library staff fled and/or were sucked into the portal, a few remained working, despite the rising temperatures, which rendered the new climate control measures ineffectual. "I told them not to open both sets of doors,"

Caroline Foley, Head of Library Maintenance Services, told *Hangman*, "it's written in the new employee handbook that doing so establishes a connection with the demonic realm, but I know some staff never bother reading through the fine print."

Kieran Laughlan, Vice Provost (Purgatorial Services), spoke to *Hangman* about the incident: "earlier this week, staff members accidentally created a portal to a hellish dimension. The College quickly got the situation under control, and have erected a cordon around the area. Students will be able to enter the library through the side entrance, and we apologise for any disruption to their studies.

Imperial takes the health and safety of staff and students as its highest priority, and we will be taking steps to ensure no more students are possessed."

Student opinion on the portal to hell was divided: "I think it is an exciting addition to the campus," said Tom Smith, a second-year biologist, "people always say that Imperial students never really care about anything, so it's good to have something that gets them talking." Caroline Lombard, a final year chemical engineer, was less impressed: "I just think it's really unfair of them to open the hell-portal now. I've got exams coming up, and a really important coursework deadline, as well as

interviews at KPMG next week. How am I supposed to get any work done when demonic voices keep screaming I'm going to burn in eternal torment?"

"One student told Hangman 'I've got exams, but how am I supposed to focus with demons screaming at me?'"

I got enough of that at Sunday school"

One student entered the portal on Wednesday night, after losing an odds-on at Sports Night, and was found wandering around the Huxley Building naked early Thursday morning. Speaking to *Hangman*, he described his experience: "I didn't think anything would happen, but I suddenly found myself transported to an intense inferno. There were hundreds upon hundreds of people, all packed together, twisting in eternal torment. I initially thought I was in Metric, but the music was much better. I don't really know how I made it out."

Levels 4 and 5 remain open.

HANGMAN

negafelix@imperial.ac.uk

Public school student says "I actually worked, like, super hard to be here"

HANGMAN

Negafelix
Editor-in-Chief

Oscar Scrimmens feels the current debate on access to higher education is a personal attack on his background.

A student at Imperial who attended public school has told Hangman that he "really deserves to be here", and "actually worked,

like, super hard."

Oscar Scrimmens, a third-year medical student who attended Harrow School before coming to Imperial, made these comments to Hangman following the release of data showing that the College has reduced its uptake of state school pupils. Scrimmens said that the growing debate over privilege in higher education felt like a "personal attack" on his right to study at Imperial.

"I just think that a lot of people are now looking at me, and thinking 'does he really deserve to be here, or did he just swan

his way in', and it's super unfair," Scrimmens told Hangman. "I actually put in so much time and effort to get where I am today – just as much hard work as someone who went to state school. I would spend hours with my tutor each evening, going over interview prep and fostering a sense of entitlement and overblown confidence – I really put in hard work, and to hear people say I'm only where I am because I'm rich is really hurtful."

When asked whether he thought there was a problem with inequality at Imperial, Scrimmens told Hangman: "obviously I

think that we should have a more equal society, and I'm willing to go along with that, provided I don't have to examine or interrogate my own practices, habits, or worldview."

The comments come amid an increasing focus on widening access to university. Earlier this week a group of students assembled on Queen's Lawn in protest of the findings that Imperial is the most unequal university in terms of admissions, carrying signs saying "eat the rich", "get the poshos out", and – for some reason – "bring back SCR breakfasts".



Maybe if we don't talk about inequality, it will go away? // CC

Scrimmens' comments had a mixed reaction among fellow students: "I don't think he shouldn't be here because he's

posh," one coursemate told *Hangman*, "I think he shouldn't be here because he's a fucking twat."



ARIES

This week you're the milk in the *Felix* office fridge, and you're always off.



TAURUS

This week you download a food waste app, and manage to score 34 boxes of out of date mince pies. Christmas never ends.



GEMINI

This week you're looking forward to spending this Valentine's Day at home, with your 23 cats.



CANCER

This week you decide to boycott Valentine's Day, which is a sickening example of capitalist exploitation and greedy monetisation of emotions. Then you get a tinder match and simmer down.



LEO

This week you try and introduce some variation into your love-life in anticipation of Valentine's Day. You use your left hand.



VIRGO

This week you're debating whether or not to run in the big elections, but are worried it might reveal your fundamental unlikability.



LIBRA

This week you're assembling your Valentine's Day playlist. So far it's mainly Sufjan Stevens played loud enough to drown out the sound of you crying into your pillow.



SCORPIO

This week your hair dryer gives up the ghost. On the bright side, your boiler has also broken, so you won't be showering for a while anyway.



SAGITTARIUS

This week you plan to pop the question to your girlfriend of four years on Valentine's Day. Then she orders straight fries in the Union. You call it off.



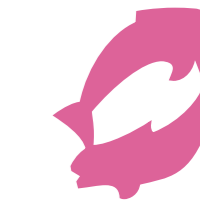
CAPRICORN

This week you're a sabbatical officer, and you're desperately trying to think of what manifesto promises you can claim to have fulfilled before you finish your time in office.



AQUARIUS

This week you decide to keep ordering coffees until that cute barista at the SCR cafe notices you. You get taken to ChelWest A&E with severe palpitations.



PISCES

This week you're the Horoscopes Writer, and you wonder how many of these need to be about dying alone before someone stages an intervention.

SPORTS

sport.felix@imperial.ac.uk

For BUCS sake!

Rain, mud, Oasis, face paint, baking, and a river crossing on ICXCAC's trip to BUCS XC.

SPORTS

Aymeric Regnier
ICXCAC

Last weekend, ICXCAC took on the BUCS Cross-Country Championships, along with other universities from all around the UK. Imperial fielded a staggering 63 runners – ICXCAC's largest BUCS team to date and the largest of all teams competing on Saturday!

The club's members awoke early on Saturday morning, fuelled by the carb-loading from the night before, and dreadingly made their way to Beit for the scheduled 8:30am departure to Uxbridge – the home of hosts Brunel – leaving enough time to apply the obligatory matching face paint, complete a range of challenges involving cocoa powder, and get the team's spirits up.

When the athletes arrived in Uxbridge, they made their way to the

Hillingdon House Farm Sports Ground, directed by their megaphone-wielding secretary-turned-DJ and rocking some Britpop classics.

“The club members woke early, fuelled by the carb-loading from the night before”

Once the team had arrived at the course, they set up camp with their new club flag flying high and quickly went on a walking tour of the course. Starting in a field, the course began with two kilometers of mild cross-country conditions before ascending the notorious 'ski slope': a slippery, steep, and narrow section that makes even the most hardened runner question their motivation for running. Further along the course the legendary

river-crossing awaited them, and the lap ended with a final kilometer through the woods.

The first event of the day was the women's race, which began at noon. After a brief warm-up, and with the drizzle still falling, Imperial's 25-strong women's team headed to the starting line where a mighty 718 competitors had lined up. Overall, Imperial's women posted some very strong performances in the 6.5km race with Sarah Johnson leading the team home in 37th position, followed by Georgia Curry in 98th. Hyde Park Relays organiser Kate Olding then came in 118th, followed by Sarah Grover in 131st, Women's Captain Anna Lawson in 159th, Amy Davila in 185th, along with the whole of the women's team who all ran fantastically and achieved amazing results individually and as a team.

The race schedule was action-packed and, with the crowd still breathless from the women's race, the men's A race was



The slippery path the runners had to go through // ICXCAC

ready to begin with 360 runners lining up this time. This race was the day's longest: the runners faced a brutal 10km of hardcore cross-country running with the mud becoming harder and harder to run on. Overall, ICXCAC performed outstandingly in yet another race as club-legend Chris Olley inspired his teammates by finishing in a spectacular 2nd place, followed closely by 10km -road-specialist Luke Caldwell in an excellent 6th place. The team was rounded off by Oliver Newton coming in 81st, Nikhil Faulkner in 129th, Harry Scriven in 142nd, and Trail Captain Henry Hart in 167th.

Finally, it was time for the men's B race, which fielded nearly 600 runners. Slightly shorter than the men's A race, the 7.9km race was in undoubtedly the poorest conditions of the day meaning it would not be a pleasure cruise: not a single patch of dry ground or grass could be seen throughout the course and the rain continued to pour. For this reason, the team was as cheerful and motivated as ever as they went on to encourage the

28 final Imperial runners throughout their grueling race. Overall the team completed the course with great results, with Daniel Ayers in 141st, Club Secretary Fergus Johnson in 155th, Kirill Mikhaylov in 182nd, Men's Captain Lewis Jackson in 187th, Duncan Hunter in 215th, Edmund Jones in 286th, and all the rest of the men's B team that took part in this tough race: showing all the other universities what ICXCAC are capable of!

After these outstanding performances, the team got together for the traditional post-racing baking binge, featuring muffins, meringues, macarons, and avocado bread among other millennial delicacies.

Following this, the awards ceremony began, and as Chris Olley received his medal, Imperial probably should have won gold for the huge cheer that was provided.

From there, the squad headed in the local pub's direction, to enjoy a well-earned rest as well as the joys of electric heating. After a few refreshing beverages, it was time

to take the bus towards a local curry house, where the sturdy runners would refuel with an all-you-can-eat buffet.

After returning to Uxbridge and befriending the Bristol and Nottingham teams in the pub, the runners headed to the much-anticipated BUCS after-party at Brunel's Student Union. After making it past some rather unwelcoming bouncers, the Student Union offered four rooms of music, including a Silent Disco, giving ICXCAC the chance to show its skills on the dancefloor late into the night.

The next morning, those who managed to wake up early enough made it to Men's Captain Lewis Jackson's house for a Sunday breakfast "run", although the run was almost entirely replaced with Oasis and toast.

All in all, Imperial could not have asked for a better day out – outstanding performances and undeniable banter: ICXCAC at its finest.

To find out more about Cross Country and Athletics email run@ic.ac.uk.



The Men's B Team // ICXCAC

SPORTS

sport.felix@imperial.ac.uk

eSports Varsity tournament sees Imperial dominating

Imperial achieved victory over UCL in a number of games, with an excitable crowd on both sides.

SPORTS

eSports Captains
IC eSports Society

The second annual eSports Varsity made a triumphant return last week, seeing Imperial take home the trophy after seeing off UCL in a series of matches. Over the course of numerous matches, across seven different games, players from both sides experienced joy, anguish, and success, in a gripping day of gaming.

The day started with a Bo5 series of *Overwatch* – the crowd favourite.

Despite a bit of a shaky start, a substitution was made after the first loss and Imperial came out with a bang, taking all 3 games with significant margins. The *Overwatch* competitive pool has grown rapidly over the year, with four Imperial teams (of 7-8 players each) looking to participate in the coming season of the National University eSports League (NUEL). Part of this increase in number is due to the

standard of playing demonstrated at Varsity by the 1st team, who are currently comprised only of players ranked Master or Grandmaster (top 3% and 1% of the game). They train quite often and rigorously, and discuss strategies in detail. Clearly, their efforts did not go to waste as they showed UCL who was boss. The MVP was Raymond “Lood” Li, the captain of the team.

In the Starcraft 2

“The day started with *Overwatch* – a crowd favourite”

matches Imperial made short work of UCL, winning four out of the five matches, across games that included all races. The matches were casted by IC alumni, who were able to provide stellar support from the sidelines, ensuring a tension-filled experience for all those watching.

Imperial came into the *League of Legends* matches with a sense of having something to prove, after their team was placed lower than UCL’s a few months ago in the NUEL. They seemed to take UCL’s team by surprise when they won the first two games within an hour – a rather speedy turn of events considering matches usually last 40 minute apiece. Imperial showed a great deal of coordination and overall skill, going for a vision-oriented strategy that saw them placing more than double the number of wards placed by UCL. The MVP went to Chris “Carniflexin” Swain for his stellar performance across Ryze and Azir. Chris and his team will also be participating in a LoL tournament against Cambridge this coming week. As a medic who transferred from Cambridge to Imperial, it will be interesting to see how Chris fares against his alma mater!

This sense of needing to prove something continued in the *Counter Strike: Global Offensive* match, which was played



This is what peak performance looks like // IC eSports

on the map de_inferno – the same map where UCL beat Imperial last year in a best-of-two tournament. Only one match was played this time, but that was long enough for Imperial to stake their claim, playing a solid terrorist side in the first half, and facing down a UCL side reluctant to be defeated in the second. Overall the match went to ICL, with the final score standing at 16-8.

There was less of a sense of needing to prove something in the *Rocket League* matches, but nev-

“There was one match of *DoTA*, but both teams made sure it was worth watching”

ertheless Imperial dominated in the best-of-five tournament, winning 3:1 – an impressive comeback

after the first match went convincingly to UCL. Two close games ran into overtime, but the players were all very friendly, helped out by a great shoutcaster highlighting every “Calculated” shot and whipping the crowd into a frenzy.

The matches across the rest of the day highlighted some of the skills of the highest-performing players at Imperial and UCL. Both teams had a top-1000 player in Europe for their *Hearthstone* matches, which were carried by UCL after an unlucky turn of events. The casters again managed to get everyone pumped, and there was a great energy among the spectators. This energy could also be found in the *Super Smash Bros Melee* matches, in which UCL entered with an advantage, having had more frequent practice in tournaments. After not taking the first match too seriously, however, UCL realised what a threat Imperial could be, and carried the next two matches. The final match delivered a raucous turn of events,

as Imperial very nearly made a comeback, taking none continuous stocks – not quite enough to win the match, but more than enough to leave us on the edge of our seats.

There was only time to play one match of *DoTA*, but both teams made sure it was worth watching. UCL entered the match with two top 1000 in Europe players, while Imperial had one former top-1000 on their side. Picking hero, Imperial managed to hold their own at the beginning of the game, but a couple of bad choices meant things snowballed, and the victory went to UCL.

While naturally highlighting the skills of players across both sides, the eSports varsity also went a long way in showcasing the importance of getting in great casters, and how the audience members really made the day one to remember – no wonder tickets were sold out! Keep an eye out next year, when Imperial will head to UCL for away matches, and will be keen to defend their title.

SPORTS

sport.felix@imperial.ac.uk

Tough loss for 1st XV against Sussex

SPORTS

Nick Ustaran-Anderegg
ICURFC Press Officer

36
Sussex
1st XV

5
Imperial
1st XV

Last Wednesday saw Imperial 1st XV take on the University of Sussex for the second time this season. Last time these teams met Sussex won comfortably, so Imperial were keen for this not to be a repeat. Immediately, Imperial imposed themselves on the game and held most of the possession in the first ten minutes. Sussex were constantly under pressure. Windy conditions meant kicking for touch was difficult for us,

and Sussex were able to counterattack effectively. They would have scored a couple of times, had Josh Pope not been there to make some try saving tackles. Not all heroes wear capes. Eventually, via some lucky offloads, Sussex were able to run in a try down the wing.

“Imperial imposed themselves on the game and held most of the possession in the first ten minutes”

However, Imperial came back fighting and some well-timed passes by prop Amin Omarouyache allowed Nick ‘The

Colonel’ Ustaran-Anderegg and try-saver Josh Pope to make some yards. Mounting pressure and strong carries from the likes of Jerome Hallett and Ali Zaboronsky led to Sussex giving away penalties on their try line. We opted for the corner, and a lineout maul was easily driven over Sussex’s line with Toby Simpson at the back of it. Toby later made it clear to me in the union bar that he likes it when I mention his tries in match reports. After forcing his way over the try line, Toby eloquently placed the ball down in Sussex’s try area with the precision of a surgeon and the elegance of a ballerina, to earn five points for his team. Still in awe of Toby’s try, a lapse in concentration from Imperial meant Sussex were able to score another try on the stroke of half time, making the score 9-5 to them. Imperial were very



Scrum, Scrum, Scrum // ICURFC

busy in defence for the majority of the second half and did everything they could to find a way back into the game. Sussex kept possession and did not let us find a rhythm. Martin Head, at this point still undefeated in an arm wrestle (RIP), consistently knocked Sussex

back in defence and dragged players down by their ankles. Toby Daniels also put in some big hits and Oli Parker made some important tackles on his wing. Unfortunately, despite fighting until the very end, Imperial were unable to hold off Sussex in attack and conceded

three tries in the second half. The final score was 36-5. Whilst disappointing, the score line did not reflect the true nature of the match, which was tightly contested for all 80 minutes, and Imperial left with their heads held high. Sylvia is getting impatient.

ICURFC 2nd XV smash RUM(S)

SPORTS

Ifan Dafydd

Imperial 2nd XV Vice Captain

52
Imperial
2nd XV

12
RUMS 2nd
XV

Last Wednesday saw the mighty 2nd XV take on pesky medics from UCL (RUMS) at Fortress Harlington – the same team that they’d comfortably beaten 36-7 away just a couple of weeks previously. With the classic bitter cold wind swirling in the Fortress, the anticipation

of that night’s ACC on everyone’s minds and coach LJ with his standard “win this and go out and get smashed later” team talk, the scene was set. The match started perfectly for IC with some strong carries across the gain line sucking in the RUMS defence and leaving space out wide for Ifan Dafydd to go over in the corner for the first try of the match. Not long after, Harold Pinter crossed the whitewash after hitting a beautiful line through the midfield and with the pace of a back, second row Gianluigi Tosti also bagged a meat pie. By half time, Imperial were leading 19-0 and just one more try would secure them the bonus point. Early on in the second

half, after some pressure in the RUMS 22, it looked like Imperial were about to get this bonus point when Jack Fraser threw a beautifully weighted flat pass straight into the arms of a RUMS player who

“With the classic bitter cold wind swirling in the Fortress, the scene was set”

ran in a 90m interception try – always nice to give the opposition some hope I suppose. This slight hiccup was no worry for

the IC men though and the bonus point try was secured shortly afterwards. Tries came in thick and fast in the second half and at times it felt as if the RUMS defence was like Ifan’s hair – non-existent. Harold Pinter teased the RUMS defence further as he ran through the middle of three players, ball in one hand, and placed the ball right underneath the sticks. The second half also saw some big replacements come on and make an instant impact. Andreas Jesperson, who recently claimed he could play any position, showed that he could at least play on the wing by scoring a 50m try with his first touch of the ball. Later on that evening, he would tell this tale to a female in the

Union bar and she would fall in love with him. A small drop in concentration in the final minute of the game meant that RUMS got their second and final try in the match but that did not hamper the spirits of the IC boys too much who could already taste the victorious post-match port and pints.

“The boys could already taste the victory pints”

Eight tries were scored in total by the IC men that day, Ifan Dafydd, Harry Bradley (sorry, Brady) and

Gianluigi Tosti completed a hat-trick of hat-trick avoidances whilst Wilbur Sandoe and Andreas Jesperson got a meat pie each too. (Paddy) Jackson Fraser certainly brought his kicking boots with him too, successfully landing 6 of the 8 conversions in less than ideal kicking conditions. Coach LJ awarded two man of the match performances that day, one to Rob Lawrence who proved that turning up to trainings is actually pointless and the other to Ifan Dafydd who proved that you’re never too old to play. The final score, Imperial 52 – 12 RUMS, meant the team were now 9 points clear on top of the league and still undefeated. Sylvia was sung yet again.



eSports players in the zone // IC eSports

SPORTS

sport.felix@imperial.ac.uk

Watch out Anthony Joshua... You've got some competition!

They came, saw, and conquered – IC boxing has an fantastic result at BUCS championship bout.

SPORTS

Louisa Young
ICB publicity Secretary

Imperial College Boxing returns triumphant - winning Gold and Bronze in the National BUCS Championships. The competition had 180+ participants from 50+ universities and colleges across the U.K. including top sporting universities such as Loughborough and Nottingham. It was the first time that Imperial sent out any fighters and we came back with two national champions! Shows that us scientists and engineers really can put up a fight ey!

Three of IC Boxing's best, Aileen Cooney, Daniel Burridge and Spencer Song travelled to Staffordshire University last weekend for the three-day event. Accompanying them was Coach George Burton, ex-GB Olympic trainer, who has provided

a tremendous support, discipline and passed down a heck of a lot of boxing wisdom to everyone he has trained.

The event began on

"Cooney has a distinctive style, bursting with energy and fire"

Friday the 2nd followed by semi-finals and finals over the following two days. Burridge and Cooney made it through to semi-finals and finals, respectively, and an unfortunate disqualification made Song unable to continue through to the later stages.

Cooney, 24, from London/Ireland brought home Gold after an overriding win against Birmingham's Mairi Kerin in the semi's and a fiery, adrenaline-fuelled

finale against Sheffield Hallam's Dayna Antcliffe. Cooney's record now sits at a 100% win-rate of 4 bouts and 4 wins.

Cooney has a distinctive style, bursting with energy and fire. She stepped forward and gained control in the ring by pushing the pace and keeping her opponent on the back foot. She took

"The final round ended with a flurry of punches in the last 10 seconds of madness"

Antcliffe's body-shots as if they were nothing and just continued to throw combination after combination - ducking, dodging and ending with her powerful right hook. The final round ended with a flurry of punches



Daniel Burridge (Bronze medallist for Men's Open, 69-75kg, 11-20 bouts), Imperial Coach George Burton and Aileen Cooney (Gold medallist for Women's Novice, 54-57kg, <5bouts) // ICB

in the last 10 seconds of madness.

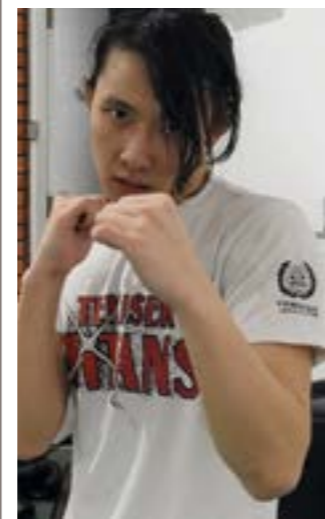
The judges made a Miss Universe style mistake, announcing the wrong winner before re-crowning Cooney as the true overall champion. (She was tremendously modest about the whole ordeal, even though it was indisputable that she had won the first two rounds).

Burridge, 19, from Chalfont St. Peter, Buckinghamshire, took home Bronze after stepping up his game in a tough fight against 25-year-old, 3-time BUCS boxing champion, Adinoyi Ozigi, from Nottingham Trent Uni. Burridge put up a good fight going toe-to-toe against such a formidable fighter. His resilience outshone any other competitor - managing to fight his way through two gruesomely exhausting 3-minute rounds before being technically KOed - all with a smile on his face. (Although a doctor

might say those punches just made him a bit loopy!)

Burridge still boasts an impressive record of 16 bouts. After only beginning his first year of Mechanical Engineering in October, he is looking to be one of the top prospects for IC Boxing Club.

Song, 22, from China, made a great start,



Spencer Song – representing Imperial College Boxing Club for the third time. Record 3 bouts, 1 win, 1 // ICB

winning the first round by a longshot of his fight vs Harry Pendered-Mazer from Loughborough. He is notorious for his smooth moves – and by that, I mean he's a constant moving target, so opponents find it near impossible to connect any punches to his face (nothing to do with his charming mannerisms).

Unfortunately, after the second round begun his long locks got in the way and the referee deemed it unsafe to continue, disqualifying Song for not having a 'fresh' enough trim. Coach George will be taking him to his local barbershop in Brixton before his next fight! Nonetheless, he fought extremely well and it was a real shame that he wasn't allowed to continue as he was looking to be a real contender in making it through to the final stages!

SPORTS

sport.felix@imperial.ac.uk

Turtle time – IC Sailing excelling in the boats and bars

The trip to Warwick was made worth it after a great night with "eliminator", and by them placing high in the rankings.

SPORTS

Marta Nunes De Abreu

ICSC member

Last weekend the Imperial College Sailing Club sent three teams of six sailors to compete at the Warwick Turtle hosted by the Warwick University Sailing Club. Most of the team members hopped on the minibus at 5 am Saturday morning, with the mission to beat the remaining members comfortably driving by car. Those on the minibus were instead graced with a fantastic music selection, the continuous chat provided by Aidan (our social sailor and second team captain, out of action due to being punched in the face by a Chelsea fan), but most importantly, a taste of Fraser's exemplary driving.

Upon our arrival to Draycote Water, we saw the morning breeze picking up. The wind conditions however were

the least of our concerns when we realised one of our second team's crews, Michal Wojnowski, was

"The cocktail masked a substantial amount of spirits under the flavour of orange squash and 'Blue Bolt' energy drink"

nowhere to be seen. It later transpired that he had a fun night out at Oxford, attempted to climb over the fence of Christ College and missed his ride to Warwick with the Oxford sailing team.

Despite this, racing had to go on. Third team crew, Radhika, temporarily joined second team (Imperial White) to race against our first team

(Imperial Blue) in the first race of the whole event. Luck wasn't on her side, however, as both her and Ariane from Imperial White ended up the water after capsizing soon after the rounding the second mark of the race. This was more than enough of an advantage for the Blues to finish in a winning combination with boats in 1st, 2nd and 3rd places. Apart from temperamental winds, our teams were also dealing with a biased umpire – Aidan, our injured second team captain was also umpiring the event, and in our opinion, did not do a very good job of it!

The day progressed as the teams battled strong winds and got used to racing in different conditions and competing against different teams. The racing finished for the day around mid-afternoon, when the sun had already set, and our sailing kit was sufficiently wet from hiking out on the boats, the persistent rain, and earlier capsizes.

As per usual, the



Imperial Red helm Chris Winters surveys the waters. // UWSC

evening social demanded the participants to show up in attributed costumes. Our teams brought their most improvised game in the disguises of; the 3 little pigs, blind mice and Pinocchio. The traditional curry meal served both as comfort food from an exhaustive day, and a place to start pre-ing for the night ahead. Shout out to Warwick University Sailing Club for providing us with copious amounts of their famous beverage aptly named "Eliminator".

Despite each sailor being allocated a generous 1 litre portion of the drink, many bottles were stolen from other teams and could be found hidden under the table. The cocktail masked a substantial amount of spirits under the flavour of orange squash and 'Blue Bolt' energy drink and our social sec, Aidan, made sure every sailor had a sufficient quantity of it before we left the curry house. The rest of the night comes in separate flashbacks to most of the team members, but everyone was sure to have had a splendid night out at Warwick.

Sunday morning didn't allow any time for a hangover, as the 3 teams had to wake up at 7.30 am for a bright and early start to sailing. The results from the previous day re-distributed our teams in different fleets; Imperial Blue were in Gold fleet aiming to get into finals, while Imperial White and Red were sailing in Bronze fleet and had more room to play new tactics whilst still getting positive results. With longer waits in between races due to even stronger wind conditions, some of our sailors were keen on getting more time on the water by joining other teams with missing members. Toby Freeland, one of Imperial White's helms, decided to sail with the Swansea alumni team. We unwittingly discovered on the water that he was sailing against Imperial Blue in the semi-finals match of the whole competition. This prompted calls of "you better capsize Toby" and "if you win a race you're not getting a ride back to London" from members of Imperial Blue. Luckily,

Imperial Blue easily breezed through the semi-finals but unfortunately lost to Magdalene College School in a closely fought finals with very strong winds and dubious decisions from the umpires to finish in a highly respectable second position overall.

The event was a fantastic way to get ready for BUSA Qualifiers (more

"ICSC finished in a highly respectable second position overall"

about that next week), and overall a weekend full of great sailing and socialising. Many thanks to the University of Warwick Sailing Club for organising the event and hosting our teams. See you all next year! Thank you Rooster Sailing for supplying our club with kit!



Joe Burgin and Calvin Chan battle strong winds to help Imperial Blue achieve a second position overall in the competition. // UWSC

SPORTS

sport.felix@imperial.ac.uk

IC Squash finishes 5th in the country

SPORTS

Patrick Brandl

ICS 1st Team

David Newman

ICS 1st Team

The men's 1st team finished their BUCS season 5th overall after beating Oxford, Newcastle and Sheffield at the weekend. The team travelled to Birmingham to compete in the BUCS Premier stage which took place on the 27th and 28th January. The rewards for a season's worth of tough training sessions were convincing wins against Oxford (5-0), Sheffield (4-1) and Newcastle (3-2).

Imperial lost to Oxford (2:3) back in November, while IC was playing without their strongest squad. For the season's deciding weekend,

Japan's Seigo Masuda (World Ranking 315) was able to join the team and bring with him a wealth of experience at the top of

"Japan's Seigo Masuda (World Ranking 315) was able to join IC"

the order. The team made a clean sweep in the eagerly anticipated re-match with Oxford, manifesting their ambition to finish top of their group. Sheffield lost convincingly to Imperial and, to add insult to injury, were the victims of a break in during the night at their rented accommodation. Our thoughts are with our fellow competitors as we look forward to a rematch

next season in less challenging circumstances.

The match against Newcastle was the highlight of the weekend, with IC Squash managing to come back from several matchballs down to pull off a tightly contested 3-2 win, despite Newcastle claiming more games overall. Marco Alves, who represented his native Portugal at junior level, soaked up intense pressure from his spirited opponent, who managed to draw level from two games down. Marco then showed his mental strength and technical quality in the decider to clinch victory in what was to be the deciding string. Men's 1st team captain Puvendren Subramaniam said: "It was a great weekend and it's nice to finish the season on a positive note. We need all the available support



Diverse Men's 1st team (from left to right): Puvendren Subramaniam (MAS), James McCouat (ENG), Marco Alves (POR), Seigo Masuda (JPN), Patrick Brandl (GER) // ICSC

from Sport Imperial, if we want to compete at the highest levels of squash in the BUCS setup". The University of Birmingham, UWE and the University of Nottingham played for the title of best squash team in the UK, with UWE claiming

the top spot. IC Squash will be competing in the prestigious Roehampton Cup over the weekend of the 3rd and 4th February and is looking forward to its first inaugural Doubles Tournament at Ethos on the 10th and 11th February.

Want to tone that physique but don't have much time for training? Then try Squash! Squash provides a full body workout in rapid time. Get in contact with IC Squash (or drop us an email squash@imperial.ac.uk) and give it a go!

Futsal – a lesser known IC success story

SPORTS

Alex Godfrey

Futsal Captain

10

Imperial
Futsal
1st Team

6

London
Met
1st Team

We headed into this crucial match against London Met knowing that we would likely have to win both of our remaining games to finish top and gain promotion. There was excitement from the first whistle, with captain Alex tapping the ball in from Ife's cutback in the first opening seconds. This quick goal was only



All smiles in the snow after a previous victory against Medway Uni. // ICUAFC Futsal

bettered by the eleven seconds it took Christian Eriksen to score against United the same evening. Before London Met could get into the game, futsal stalwarts Barry Allen (fastest man alive) and Ife had both added a

goal each to their tallies in the race to become our top scorer. Daniele de Rossi-wannabe Tommaso and vice-captain Josh Mendes both fired in from distance, and Alan finished off after a neat 1-2 with Alex, who got his

second goal by lashing in a rebound. Pleasingly, in this match we addressed our ongoing problem of not taking our first-half chances, leading 7-2 at the break (iz great success). We were not playing the expansive, rapid passing

game (for comparison see Barcelona 2010-11) that had been so effective in previous matches, because we simply did not need to. Klopp would have loved our gegenpressing,

"IC Futsal are now one step closer to promotion!"

closing down the opposition quickly, and winning the ball back high up the pitch, leading to many shooting chances. While it has been characteristic of our performances this season to grow stronger in the second half, in this game we lowered our intensity and lost control of the match.

Our magnificent keeper Alejandro (please don't leave us x), a futsal natural, was being worked hard as they pulled it back to 8-6, at which point we woke up again. Josh completed his hat-trick, and Will justified all the time spent trying flicks in training by finally scoring one in a match. Ed and Keidi got stuck into tackles and kept them at bay for the rest of the contest. For Ed's excellent defence he was award man of the match along with Josh whose hat-trick secured the game. The deserved victory puts us on five wins from six league matches, and we now await our final match against Queen Mary's. By the time that comes around, it is likely to be a head-to-head title decider.