



# Felix

The Student Newspaper of Imperial College London

## NEWS



So, you think you know me...?

PAGE 3

## COMMENT



Where is the line?

PAGE 10

## LIBERATION



National Student Pride 2019: More Pride, Less Prejudice

PAGE 33

## SPORT



Immortals Charge to a 40-0 win

PAGE 40



## h-bar hit by College cuts

*The evening bar food offering at h-bar will be axed from 1<sup>st</sup> March following continued cuts to Campus services*

### NEWS

**Andy Djaba**  
*Editor-in-Chief*

**S**taff and post-graduate students have been left disgruntled

following the announcement that the popular h-bar will be ceasing its evening bar food service.

The decision, which was taken by College, means that, from Friday 1<sup>st</sup> March, food will no longer be available in h-bar after 7pm. This

change is the latest in a slew of recent changes to Campus services..

h-bar, which is Imperial's postgraduate pub and bar, is run as a joint venture between Imperial College and the Union, with the food offering provided by College and the drinks provided by the

Union. The decision to cut the post-supper offering was allegedly made due to approximately "£20k loss a month". However, College has come into criticism from the student body and affected staff for the sudden nature of this announcement, the apparent lack of transparency

and student consultation, and for taking another decision based on a financial criteria rather than the students' experience.

"It's a financial loss – we lose money on it but it's a service to the students. The h bar in general loses us money."

*Felix* can reveal that

The  
**Leadership  
Elections**  
2019

**STAND** for a position  
and lead the change!

[imperialcollegeunion.org/elections](http://imperialcollegeunion.org/elections)

Details inside



# EDITORIAL

**CONTENTS**

**EDITORIAL** 2

**NEWS** 3-5

**POLITICS** 6-9

**COMMENT** 10-13

**SCIENCE** 14-15

**BOOKS** 16

**FILM** 17-19

**ARTS** 22-27

**MUSIC** 28

**FOOD** 29

**SUSTAINABILITY** 30-31

**INVESTMENT** 32

**LIBERATION** 33

**HANGMAN** 36-37

**PUZZLES** 38

**SPORT** 39-40

## What a mess

Andy Djaba – Felix Editor



This week has been bizarre. In a week which saw Shamima Begum's British citizenship revoked, Jussie Smollet charged with beating himself up and other quite big stories in the mainstream News and media, it's been a surprisingly quiet News week for *Felix*. When I say "what a mess" in the title of this Editorial, I am referring to the front page story about the decision to cut the evening bar food service at h-bar. It's a real shitshow and I'll get on to addressing that in due course. But first, my week in review...

This week I had the pleasure of starring as a guest on *Felix* Comment Editor and Social Boi, Charlie Titmuss' radio show, "Face for Radio". Special shoutout to Charlie, I can't overstate how much time, effort and dedication he puts in to helping me get the paper out every week. As Social Boi, he is also instrumental in engendering a spirit of togetherness within the *Felix* Family. Anyway, Charlie has become one of my favourite people to have a discussion with and my guest slot on "Face for

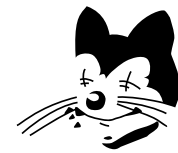
Radio" was an absolute pleasure. I would invite him on my own show, "2 Gs in a Pod" (shameless plug!) but he might not be quite the right fit for my show.

Anyway, on to the mess that is navigating the levels of bureaucracy that exist between the Union and College. I must admit, as I've said many times before, for four years here as an undergraduate student, I took absolutely no interest in the Union or College. As an employee here, I can't say that has changed much. Although I am naturally more involved

in the affairs of the Union and College, by virtue of my current role, there is a clear misunderstanding that is prevalent at all levels of the management in both the College and the Union. This misunderstanding is highlighted by the decision to cut the food offering in h-bar. It is another example of a decision being taken without student consultation and is indicative of the fact that those making the decisions continue to fail to realise that the university should prioritise the interests of its staff and students above all else. The manner in which the

decision was made - lack of student consultation, differing stories from both the College and Union sides and (seemingly) unbeknownst to the sabbatical officers - is frankly unacceptable. The fact that the sabbatical officers were only made aware of the decision a week before it was initially supposed to come into effect merely serves to further highlight the chasm between SMG and the Sabbs. Furthermore, it screams to me that College doesn't respect the Sabbs as colleagues and equals when the university's bottom line is in question. How are the Sabbs meant to effect meaningful change if they're not given a seat at the table (word to Solange) when decisions like this are made? Anyway, don't mind me. I just make my paper, sip my tea and mind my business...

Section of the Week goes to the Arts Section. I crashed one of the Arts Editor socials and had a brilliant time. It warms my heart to see how much they're enjoying working on the paper and their dedication shines through with yet another stellar week for Arts! Congrats and thanks for saving me with the extra pages



### The Felix Team

- Editor-in-Chief**  
Andy Djaba
- Deputy Editor**  
Joanna Wormald
- News Editor**  
Joanna Wormald
- Politics Editors**  
Avirup Banerjee  
Divyeni Vanniasagaram  
Juan Rubio Gorrochategui
- Comment Editors**  
Aida Manzano Kharman  
Charlie Titmuss
- Science Editors**  
Rosie Dutt  
Eyad Abuelgasim  
Henry Alman  
Sânziana Foia
- Tech Editor**  
Krihika Balaji  
Haaris Asghar
- Arts Editors**  
Claire Chan  
Helen Money-Kyrle  
Vaishnavi Gnananathan
- Books Editors**  
JJ Cheng
- Music Editors**  
Simran Kukran  
Adrian LaMoury  
Henry Eshbaugh  
Asad Raja
- Film Editors**  
Mikhail Demtchenko  
Sung Soo Moon  
Aidan Chan
- Investment Editor**  
Tom Alston
- Food Editors**  
Eva Tadros  
Julia Dąbrowska
- Travel Editor**  
Joana Correia
- Sustainability Editors**  
Artur Donaldson  
Monami Miyamoto
- Puzzles Editors**  
Lisa Hey  
Lorenzo Silvestri
- Sports Editor**  
Imraj Singh  
Fergus Johnson
- Copy Editors**  
Rhidian Thomas  
Shivan Parmar  
Jia Qi Tan  
Shervin Sabeghi  
Isabelle Zhang

# NEWS

news.felix@imperial.ac.uk

## College settles bursary saga

### NEWS

**Isabelle Zhang**  
*News Writer*

The 2015-2016 cohort bursary scheme saga is coming to a patchy end, with affected students having been contacted on Monday 18<sup>th</sup> February about new available opportunities being funded.

The affected students were notified of the opportunities that they would be eligible for, funded by the £250,000 set aside by the College. These include Undergraduate Research Opportunities Programs (UROPs), Careers

services, and overseas electives for medical students.

However, this correspondence comes with almost a month's delay from the initial announcement of the secured £250,000 funding during the 22nd January Union Council meeting, adding insult to injury to what has been perceived as sub-standard management of the situation.

The Imperial Bursary, settled by the College and the Union two years prior to the entry of students receiving them, is given to undergraduate home students with annual household incomes of up to £60,000. Because of a 2013 government decision to make the

National Scholarship Program unavailable to undergraduate students, the bursary scheme for students entering in 2015 saw a £500,000 drop in funding. The College and Union decided to reduce the financial support packages for students under the £35,000 - £60,000 income bracket. However, in 2014, when the College and Union decided to increase the bursary for students entering in 2016, they overlooked any further reimbursement for the 2015 cohort.

These "unintended consequences" saw the 2015 cohort left with less funding than the cohorts either side of it; these students received lower bursaries than those who had

Household income	2014 and before	2015	2016 and after
£35,001 - £40,000	£3,800	£2,800	£4,000
£40,001 - £45,000	£3,100	£1,200	£4,000
£45,001 - £50,000	£2,400	£900	£4,000
£50,001 - £55,000	£1,600	£600	£3,000
£55,001 - £60,000	£900	£500	£2,000

"The 2015 cohort left with less funding than the cohorts either side of it" // Isabelle Zhang

enrolled a year earlier and a year later. According to the 2018 Imperial College Union Bursary Survey, the bursary was "essential" to the living costs of 71% of respondents, and to the accommodation costs of 63% of respondents. The 2015 bursary scheme is estimated to have effected around 200 undergraduate students. Many of these

students have already graduated or are in their final year, and the College has come under criticism for taking until now to reimburse their financial provision.

A member of staff commented on the inadequate 2015-2016 bursary scheme management, "I was mortified to read the article on the student

support packages that were lower a few years ago, and how the college just played the long game to obfuscate until most of the affected students were out of the system. What a piss weak way to deal with mistakes. So often the case at Imperial."

## h-bar hit by College cuts

### NEWS

(cont.)

the elected Sabbatical officers were not consulted prior to the decision being made and were only notified on Friday 8<sup>th</sup> February, despite the obvious implications that such a decision will have on the Union's drink sales. In a statement provided to *Felix* on behalf of Imperial College Union, Rob Tomkies (Union President), said:

"The Union only received a week's notice that the food service in h-bar was being cut by College. We are extremely disappointed at the lack of any form of consultation or conversation with the Union before this decision was made. h-bar is one of the few specifically

postgraduate and staff social spaces on campus and, as such, the effect that this will have on the community is unacceptable. In the mean-time the Union is looking at how to minimise the impact of their decision and ensure that h-bar remains a key part of the post graduate social community. The bottom line is our postgraduates make up half our membership, we're committed to building our offering and how we support them going forward and we're not going to let a College decision unduly impact that."

Speaking to *Felix*, Jane Neary, Director of Campus Services in the College, responded to the criticism, saying: "That service is not a College service, it's a service to the Union to supplement their bar service; I've axed

a service to the Union that they no longer say they can afford."

**"It's a university - it should be run in the interests of the students, staff, etc., not in the interest of profit"**

Jane also claims that this decision should come as no shock, given that discussions between College and the Union have been ongoing for the past eight months. The fact that the sabbatical

officers were not privy to these discussions once again highlights an apparent disconnect between the College and the Union and, within the Union, a stark disconnect between the sabbatical officers and the Senior Management Group (SMG) within the Union.

College has been accused of using its "power and wealth to destroy h-bar" and demonstrating "once again that it has absolutely no regard for the satisfaction of students and staff, and continues to act as a profit-driven business, exploiting its students", to which Jane responded: "Quite the opposite, I'm trying to keep our bit going even though it's costing us money. We do a lot behind the scenes to help that service because I believe in it but, after the supper finishes, it is a Union space."

Jane continued, claiming that the following was

put to the Union: "We're selling your product, this product is now no longer affordable. Do you want to pay more for this product, either by charging the end-user, or do you want to subsidise the chef, because it's not cost-effective?"

The decision was allegedly then taken following the Union declining to meet the College halfway.

When questioned on why students were not engaged prior to the decision being made, Jane replied: "Because it wasn't our service. The service wasn't to the students, the service was to the Union because it was there to supplement their beer service. It wasn't a college service. The college service is the supper service." This response has been criticised due to the perception that stopping the service to the Union will, by extension, ultimately deprive the student body of said

service.

The "supper service" refers to the buffet service which is available from 5-7pm and has been extended such that it is now on offer from Monday to Friday. h-bar users are also now allowed to bring any foods / get take away delivered into the bar.

Discussions between the Union and College are ongoing, in an attempt to arrive at a suitable contingency plan until something more permanent can be agreed. It has been suggested that the Union could use the shared kitchen to provide Imperial College Union food at h-bar, which could "make the bar/restaurant thrive". This option is under consideration.

Disgruntled staff and students are being encouraged to sign a student-led online petition attempting to overturn the decision prior to it coming into effect next Friday.

**The designer baby debate**

The Power To Control Your Own Evolution, with Robert Winston, Tom Whipple, Gunes Taylor and Inga Prokopenko.

Sir Alexander Fleming Building, G16  
Tuesday, February 26, 2019  
5pm - 7pm  
Food and drink included

Book your space via the Imperial College website.

**THE TIMES THE SUNDAY TIMES**  
Know your times

Robert Winston, Gunes Taylor, Tom Whipple, Inga Prokopenko



## NEWS

news.felix@imperial.ac.uk

## So, you think you know me...?

## NEWS

## ICSM RAG Fashion Show Team 19

You Know My Name (YKMN) Campaign

## What we're doing

The ICSM RAG 'You Know My Name' Fashion Show 2019, held at The Clapham Grand on 12<sup>th</sup> March, is the most exuberant fundraising event hosted by the Medical School. The evening entails a decadent display of unique fashion, donated by twelve up-and-coming designers, and modelled by very own students.

The night delights its six-hundred strong audience through a multitude of arts; from Fashion, to Music, to Dance to extraordinary entertainment. The students of Imperial unite to experience an incredibly beautiful display of creativity whilst also fundraising for two charities selected by ICSM RAG; Child Action and Community Action Nepal. Whether somebody is involved in the production of the show, or simply buys a ticket to enjoy it from the stalls,

an astonishing amount of effort is expended prior to and during the evening, to ensure a huge amount is raised in aid of the chosen causes.

## The Models

Whilst the successful, 12-year-running Fashion Show primarily focuses on the links between fashion, entertainment and student-led fundraising, there are several other aspects that come with partaking in a production of its magnitude. As with any student-led event involving a large number of young people, ensuring the large variety of needs of those involved are correctly mitigated for is absolutely essential.

## "I don't think I'm what you're looking for"

A Fashion Show has students walking down a runway in front of their cheering peers and colleagues. Boosts of confidence come in the form of bright lights and camera flashes, and the commendations following the show could provide enough affirmation to last until the Summer. However, something that may not be immediately

obvious to the excitable audience is that the outward confidence observed for the ten second catwalk may not be a reflection of how the model is actually feeling while walking down it.

## "I might wait for next year when I've had a chance to go to the gym"

There are a whole host of different reasons as to why people want to take part in Fashion Show. However, the assumption that all of those auditioning and taking part were already filled to the brim with self-confidence and wanted to get involved just to show off that fact, was one we were clearly wrong about. To the Fashion Show committee, it has already become clear that the build-up of Fashion Show, through the audition process up until the last rehearsal, invites a conversation about self-confidence and self-doubt amongst the students.

## "I know I said I wanted to do it but, truthfully... I just don't feel confident enough"

Year on Year, the ICSM RAG Fashion Show contributes an amazing donation towards the elected charities. However, we've now realised that this

year, our committee wants to benefit our Student Population beyond the current offering of the opportunity to watch and enjoy the Fashion Show.

## Why we're doing it

Confidence comes from within, but it is so often influenced by external factors, social norms and stereotypes. The Fashion Show Theme, 'You Know My Name', was chosen to depict a very real and easy mistake that all of us are guilty of making at some time or another. We are taught not to judge a book by its cover throughout our lives but, somehow, it is a bias we are all at risk of succumbing to.

## "Looking at everyone walking this year, there isn't one look that defines everyone"

The opportunity to engage in honest and open exchanges pertaining to self-confidence and self-doubt is one that we should nurture. Members of the Fashion Show Team have gained valuable insights about the fine balance between these constructs after speaking to the students of Imperial College about their thoughts about walking down the catwalk. Professional models and actors are given tools and techniques for overcoming image concerns, stage fright and opening night nerves. However, at our amateur level, perhaps it's time for the students of Imperial College to take the self-awareness

conversation one step further and to inspire one another to be sensitive to the fact that what meets the surface isn't always telling of what's beneath.



#YKMNCampaign // Avi Kaura

confidence, celebrate individuality and create an authentic network of unity amongst those involved in and attending this year's Fashion Show. We would like to reassure our student population that insecurities are commonplace and something that many of us struggle with. The #YKMNCampaign aims to get students sharing their own personal perspectives and experiences regarding confidence, the purpose of this being to break down the barriers people have to feeling comfortable in their own unique identities.

## How we're doing it

This year, we are launching the 'You Know My Name' Campaign (#YKMNCampaign) to encourage a conversation. We want to dispel some of the myths surrounding who our models are, and what's brought them to getting involved, and let people see Fashion Show for what it truly is: a fantastic experience for all of those who are taking part! During the campaign, models will be sharing their personal experiences on their social media, humanising their take on the show and revealing their motivations for taking part.

In a somewhat tumultuous environment, an open and honest Online Campaign by our models seeks to promote personal

## NEWS

news.felix@imperial.ac.uk

## Mental Health: A New Perspective

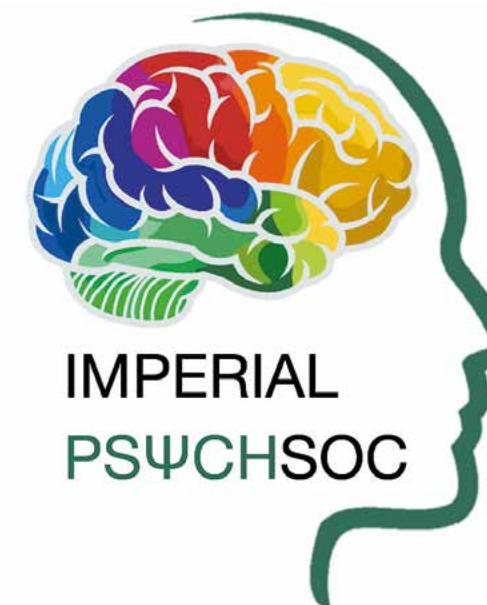
## NEWS

## ICSM Psychiatry Society

ICSM Psychiatry Society announces its 2019 Spring Conference - Mental Health: A New Perspective. Taking place on Saturday 2<sup>nd</sup> March from 10.30am - 4.30pm in the Sir Alexander Fleming Building, this unique conference promises to explore the theme of Stigma and Mental Health, bringing together practitioners and world leaders in research to discuss the latest understanding of mental health disorders and changing perceptions of mental health. Lunch, refreshments and certificates of attendance will also be provided!

Delegates will also have the opportunity to submit and observe art work, through an art exhibition exploring the theme of Mental Health, and find out what a career in Psychiatry entails. Imperial and non-Imperial students, both Medics and Non-Medics, are welcome! Whether you're a student, academic, or simply interested in learning more about Psychiatry and mental health, this conference has something for you! Link to register and purchase tickets: <http://bit.ly/TICKET2019>

This announcement comes following the Psychiatry Society's Art Therapy Workshop on Friday 22<sup>nd</sup> February.



ICSM PSYCHIATRY SOCIETY  
SPRING CONFERENCE 2019



# Mental Health: A New Perspective

2ND MARCH 2019 . 10AM - 4:30PM  
SIR ALEXANDER FLEMING BUILDING



YKMN

ICSMRFS 2019

'You Know My Name' Fashion Show // ICSM RAG





## The Independent Group? No thanks

Politics writer **Ansh Bhatnagar** thinks that the small group of MPs that left the Labour party have committed themselves to a failed ideology that was popular prior to the 2008 financial crash. They're certainly not deserving of his support.

### POLITICS

**Ansh Bhatnagar**  
Politics Writer

On Monday morning, a group of 7 Labour MPs took the unprecedented step of leaving the Labour Party and forming a new centrist "party", taking the incredibly bland name of 'The Independent Group'. Except it was not unprecedented at all – most of these MPs, such as their ringleader Chuka Umunna, have been vocally and visibly opposed to the Labour Party ever since 2015, when Jeremy Corbyn achieved a landslide victory in the leadership election. They were also part of the 2016 coup when the Parliamentary Labour Party (PLP) forced Corbyn into another leadership election, which he won with an increased vote share. The leaks

**"The leaks about a new centrist have been going round for months. This is unsurprising"**

about a new centrist party have been going around for months so this came to nobody's surprise. So why did they join with three ex-Conservatives and leave Labour?



Big Chukas, yet another dead meme // Wikimedia

Their official Statement of Independence cites that they believe "none of today's political parties are fit to provide the leadership and direction needed by our country". They say their aim is to pursue "evidence-based" policies not based on ideology. Such a display of ignorance would be quite shocking for seasoned politicians if it didn't fit in with the usual centrist talking points. All politicians are led by ideology, and according to the statement theirs is an ideology of Blair and Clinton's Third Way from the 90s, of a "social market economy"

and a pro-war, pro-intervention military state. They believe that a bit of regulation and welfare on an otherwise neoliberal capitalist system is enough to combat the issues of rising inequality, economic exploitation, homelessness and climate change. Angela Smith, one of the seven, has been a supporter of Thatcher's water privatisation, having vested interests in the industry. They even draw from Conservative talking points, claiming that opportunity is the way for individuals to leave poverty, rather than committing to eliminat-

ing poverty altogether. The verdict is clear; it is fundamentally a capitalist ideology that fails to address its inherent contradictions. To claim that they are not led by ideology is contradictory to the rest of their statement and intellectually dishonest.

This is why I say good riddance. As a Labour member I am not interested in sharing a party with politicians cosying up to Tory MPs and those who believe that the 2017 manifesto is "too radical", because it really isn't. It is the bare minimum that this country needs and

policy by policy is what the public overwhelmingly back. The UK centre ground is in favour of an end to austerity and social democracy: having the wealthy pay their fair share, having strong public services with universal healthcare and free education from cradle to grave, and taking water, energy, gas, the buses, the railways etc back into public ownership so profits can be reinvested into making our experiences better, cheaper, and greener. It is in favour of bold solutions to fight the climate crisis facing us today. The centre ground

is with Labour's 2017 manifesto and that would be just the start of the political revolution that needs to take place in post-2008 austerity Britain.

These MPs stood on that manifesto of hope, and each one of them increased their vote shares in the 2017 General Election, securing their jobs as MPs earning more than £77k per annum. They stood wearing the red rosette, committed to implementing these policies and supporting

**"These MPs wore the red rosette and committed the policies promised by a future Labour government"**

the future Labour government. They benefitted off the money the party and trade unions poured into their campaigns, as well as the hard-working activists who door-knocked and canvassed for them – ordinary citizens suffering under a Tory government but volunteering their own time to get Labour candidates elected. Their constituents voted for a Labour MP standing on the 2017 manifesto, and by resigning their Labour membership to form a coalition with the Tories, they have betrayed each and every one of their voters and past supporters

who got them these jobs. They refuse to stand down as MPs and call by-elections to campaign honestly on their new platforms. That's a personal sacrifice they are not willing to make for their new politics. Instead they have formed a political grouping, 'The Independent Group': it is asking for donations, asking for people to sign up, it is speaking as one voice – in short, acting like a political party. However, they have not registered as a political party, but instead as a private company that does not have to disclose its donors. Every action they've taken is shady and dodgy, and shows they lack any conviction in their own political beliefs.

The conversation wouldn't be complete without mentioning another reason that these MPs cite for leaving: the problem of antisemitism in the Labour Party. Luciana Berger is a

**"We have to talk about anti-semitism in the Labour party"**

Jewish woman who is one of these MPs and has faced disgusting abuse from some members of the party online and in her constituency, and her leaving with antisemitism as one of her reasons serves as a real wake up call for the Party's disciplinary processes, which need to be stricter and swifter in combatting antisemitism. Even one Jewish member leaving the party due to antisemitism is too many, and Labour needs to urgently improve its processes and embark on a programme of political education to ensure those members realise the damage they do when they use antisemitic



He probably doesn't look this happy atm // Wikimedia

tropes, and especially how left-wing views regarding the Israel-Palestine conflict can sometimes become too accommodating in the fringes. Momentum, the successor of Jeremy Corbyn's leadership campaign, has done some excellent work producing educational videos that reach the very minority that espouses this racist rhetoric; but we need the Party to take inspiration from them and listen to Jewish members in order to truly eradicate antisemitism from our movement. The other MPs cite antisemitism as a reason

for them leaving as well, claiming that this new "party" will be a socially progressive voice. However, this claim quickly collapsed a mere 3 hours after the launch, with the group being embroiled in a racist scandal – Angela Smith went on national TV and referred to ethnic minorities as people with a "funny tinge". Smith issued a weak non-apology later, apologising for "any offence caused" and claiming she misspoke. For 1/7th of the membership of a new 'anti-racist' party to promote racist rhetoric within three hours

of launching must be some sort of record. None of the other six MPs denounced

**"The group was quickly embroiled in a racist scandal, on national television"**

the comment, with Chris Leslie saying in response to the hypocrisy that their leaving wasn't just about

before the Labour Party investigations into them could be completed. Among the seven is also Gavin Shaker, who threatened to resign from the Shadow Cabinet if the Labour Party supported gay marriage – in the end he abstained on it. It is evident that 'The Independent Group' are not a socially progressive group by any measure.

Labour, while not perfect, is still the best vehicle for any sort of progressive politics. With a mass membership of half a million making it the largest party in Europe, it is backed and funded by ordinary people from all over the country. Due to the massive ongoing democratisation project, it has become the only party where ordinary working people can take part in politics and make their voice heard – where members are valued and not just treated like a campaigning tool.

Unfortunately, it is clear that The Independent Group is just another regressive Third Way tribute act from the 90s, trying to resurrect a zombie politics that has long been dead. They claim to oppose a right-wing Tory Brexit, but by standing against the Labour Party they have made that outcome much more likely, risking the country facing a disastrous no deal Brexit because of their opportunism. Ultimately, they will fail like the SDP before them and merge with the Liberal Democrats, but until then, they are only assisting the Tories in their pursuit of a tax haven austerity Britain.

antisemitism, but about policy as well. Choosing to conveniently brush aside antisemitism when it suits them, to the point of not even mentioning it on their official Statement of Independence despite mentioning it in their televised speeches, makes their commitment to anti-racism questionable at best and a cynical political lie at worst.

There are also rumours that the group will welcome ex-Labour MPs John Woodcock and Ivan Lewis, both formally accused of sexual harassment and resigned



# POLITICS

felix@imperial.ac.uk



## Brexit to end the NHS: Hypochondria or the real deal?

### POLITICS

**Rhiju Chatterjee**

*Comment Writer*

**B**orn in 1948, the NHS has survived through a lot. However, like many other 70 year olds, the NHS is facing multiple chronic issues that cannot be fixed with a simple operation. Patients are waiting longer and longer to see a doctor, both in GP practices and A&Es. This is due to a multitude of reasons, ranging from inadequate recruitment and chronic underfunding, to an aging population with more complex healthcare needs. It is largely agreed that the current NHS model is not sustainable.

Intrinsic efforts to improve the health of the NHS, termed ‘efficiency savings’, have helped a bit, but have not reached the ambitious targets set by the government. Instead, the government has resorted to bullying junior doctors and nurses, squeezing out every ounce of their collective good will. Overworked, underpaid, and morale at its nadir; the system is creaking at the seams. Surely any acute changes to the delicate balance currently keeping the NHS together would lead to its demise. Enter stage right: Brexit.

During the referendum campaign in 2016, Brexit was touted as the saviour for the NHS. Brexiteers recommended taking the money



“No one is held accountable for running a ‘Save our NHS’ movement which may eventually ‘End our NHS’” // Pixabay

we would normally give the EU and reinvesting it to improve our health services. Furthermore, they proposed that regaining control of the borders would prevent ‘health tourists’ and ‘economic migrants’ from entering our country, and would therefore reduce the strain on our public services. Both of these claims were the basis of the ‘Save our NHS’ campaign run by Vote Leave.

As attractive as the Vote Leave claims are, they wilfully ignore the benefits of staying in the EU. This is becoming increasingly clear as authorities are preparing for a ‘no-deal’ Brexit, since negotiations between the EU and UK government continue to

break down. A ‘no-deal’ Brexit could lead to a 10% decrease in UK GDP in 15 years. Even if a deal is made, it is still not forecasted to benefit GDP in the long run. Since the health of the NHS mirrors the strength of the economy, the NHS will struggle for the foreseeable future due to Brexit. However, Brexiteers argue that this is not accurate as economic forecasts are frequently wrong, citing the example that the economy is currently growing despite forecasts predicting a post-referendum recession. Nonetheless, the one thing that can be agreed is that ‘no-deal’ would be the worst outcome economically.

Forecasted economic growth also depends on

changes in EU migration policy. Currently around 130,000 doctors, nurses and care-workers are recruited from the EU. In 2018, there was a 17.6% decrease in EU workers joining the NHS and 15.3% increase of EU workers leaving the NHS. The National Institute of Economic and Social Research predicts there will be 10,000 extra nursing vacancies due to a lack of EU workers by 2021. Additionally, by 2025 they predict that there will be a gap of up to 70,000 workers in social care. This is clearly not ideal considering the importance of nurses and social workers in managing our ageing and growing population. However this has been deemed “fear-monger-

ing” by Brexiteers, who claim the predictions are based on flawed assumptions and claim Britain will still be open for business after Brexit. Indeed, doctors and nurses are now excluded from the cap on tier 2 visas for skilled workers. Unfortunately, this exception does not include social workers, and, hence, alternative ways for recruiting social workers will need to be sought, especially if no deal is struck with the EU.

Leaving the customs union with no deal could have ‘catastrophic’ effects on our access to medications as around half of our medicines go through the EU before reaching the UK according to the Association of the British Pharmaceu-

tical Industry. Consequently, the Department of Health has revealed that they have started to stockpile 6 weeks’ worth of prescription medications as a contingency plan. For medical items with shorter shelf-lives (such as radioactive isotopes used in nuclear medicine), plans have been made for these to be transported in by air at short notice. All of these measures are fairly expensive to the taxpayer and could cost up to £2 billion according to the Remain campaign group, Best for Britain. Stockpiling drugs seems to paint an image of an apocalyptic-like scenario and is an illustration of how dangerous Brexit really is. During the campaign, situations like these were labelled as ‘Project Fear’ but, 33 months later, it is really happening- it’s the ‘real deal’.

It seems Brexit was sold to the public based on misinformation and lies. Therefore one could argue that the “informed consent” declared by the public in the advisory referendum is not valid, as the benefits and risks were not appropriately explained. As a consequence of this wilful deception, the health of the NHS has deteriorated. In medico-legal terms, this would be classified criminal battery and can result in a jail sentence. In political terms, this is classified as ‘campaigning’, so no one is held accountable for running a ‘Save our NHS’ movement which may eventually ‘End our NHS’.

# POLITICS

felix@imperial.ac.uk



## The Labour defections - a Tory perspective

Politics writer **Calum Drysdale** argues that the last thing the Tories should do about the Labour defections is crow.

### POLITICS

#### Calum Drysdale

Politics Writer

On Monday seven Labour MPs announced that they were leaving the Labour party in protest at Jeremy Corbyn's leadership and his refusal to act on anti-Semitism present within the party. This has drawn inevitable comparisons with the Social Democrat Party, a group of four former ministers who resigned in 1981, in response to the Labour party's shift to the left. The SDP has long been a scare story in British politics for those considering setting up their own party. While

they managed to gain 25% of the vote in 1983 they gained only 23 MPs and the party ended up merging with the Liberal Party to form the Liberal Democrats.

The #LabourSplit has drawn comment from the more twitter-minded of Tory supporters who have indulged in some heavy schadenfreude. They should not be so quick and should look to the keeping of their own house before they stir elsewhere. While the seven MPs, now styled as "The Independent Group" are, with the exception of Chuka Umunna and Luciana Berger, not well known to the general public, most of them have held shadow cabinet

positions. In the games of Westminster their actions could be the start of something far greater than a new SDP.

The society we live in now is far less class stratified than it was in the early 80's. While wealth disparity has grown, studies have shown that the manual or lower-paid social bracket has shrunk enormously with 81% of Britons employed in service work in 2011. This makes the old models for political parties and their raisons d'être outdated. Labour was meant to represent the workers while the Tories fought for the middle and upper classes. These divisions are no longer relevant as

Brexit has shown time and time again.

This is why the Independent Group may just be more than just a flash in the pan. Only one Conservative MP ended up joining the SDP. Considering the time period, while Thatcher was waning in relevance and popularity she still went on to run the country for another nine years. The Tory party of today, a spectrum of Brexiteers and Remainers of every shade, is a far cry from that age of relative unity.

The constant Brexit votes have made a mockery of whipping (ensuring that MPs follow a party line) as MPs vote time and again against their parties, acquiring a taste for rebel-

lion. This has allowed centrist MPs, walking through the lobbies of the House of Commons, to spot those other members from across the aisle whose liberal, urban politics line up significantly better with their own than those of other party members and critically, their party leadership.

Theresa May is not Margaret Thatcher, she does not command the respect or loyalty of her MPs. Now that the first step has been taken by others I would not be surprised if Tory Remainers fling off the millstone necklace of the Tory brand and look for something that offers them a way out of the current mess.

**"May is not Thatcher - she does not command the respect of loyalty of her MPs"**

Article written  
19/02/19

As of 20/02/19, three Tory MPs and one additional Labour MP have defected.

## The designer baby debate

The Power To Control Your Own Evolution,  
with Robert Winston, Tom Whipple,  
Gunes Taylor and Inga Prokopenko.

Book your space via the Imperial College website.

Sir Alexander Fleming Building, G16  
Tuesday, February 26, 2019  
5pm - 7pm  
Food and drink included



Robert  
Winston



Gunes  
Taylor



Tom  
Whipple



Inga  
Prokopenko



## COMMENT

comment.felix@imperial.ac.uk



## Where is the line?

*Amidst ever increasing living costs and in spite of their huge surplus, the university continues to make cut after cut. When are we going to tell them enough is enough?*

## COMMENT

Abhijay Sood

Comment Writer

With only a week's notice, College has told us they're shutting the pub menu food service in h-bar. This is the latest in a long line of cuts: they've hiked up the fee at Ethos, they came after the SCR breakfast and the pool at St. Mary's, and they've raised the price of food on campus and rent in halls every year. While this might not be their most egregious decision, for me it's the straw that's broken the camel's back.

Their justification for this change is that the food service was costing College around £20k a month to maintain. It is unclear as to whether this figure includes the rent College "charges itself" to use the kitchen space, as they do for labs in departments. It is also unclear whether this is net of College's share of the profits from drinks sales, which are divided with the Union. In other words, they may be overstating their costs and understating their profits: we've yet to be presented with clear numbers in writing.

However, even if we were to take their £20k figure at face value, an effective subsidy of under a quarter of a million pounds per year is small change on the scale of the institution. Last year, we ran an £80m surplus, and hold in reserve £1.6bn.



**"Withdrawing this service in manner which could soon lead to the bar being closed entirely is irresponsible" // Imperial College London**

Nobody's arguing that we have an unlimited amount of money to spend: we need to be financially solvent. But we are a university, not a corporation. We have a duty to be motivated by considerations beyond the bottom line.

h-bar is one of the few outlets on campus dedicated to postgrads; where staff and students are often seen dining together. For a university that struggles to engender a sense of community, particularly between its staff and students, withdrawing this service in a manner which could soon lead

to the bar being closed entirely - consider what'll happen to drinks sales once the food is gone - is irresponsible. Supporting such a service, the beneficiaries of which are otherwise under-served, at the cost of some tiny fraction of our surplus (if indeed this is the case), is by no means disproportionate.

The other troubling aspect of College's decision is in how it was communicated. Despite their claim that conversations with the Union have been ongoing for eight months, the sabbatical officers didn't know anything

until after College had already decided to cut the service a week or two ago, and the bar staff had no idea until even more recently. Given that the bar has historically been run jointly (food by the College, drinks by the Union) with any profits shared, this unilateral move is outrageous and demonstrative of the lack of respect the decision-makers here hold for the Union and, by extension, the student body.

I believe that this decision should be halted until a more thorough dialogue has taken place between

all relevant parties. This includes (but is not limited to) College management, the Union, graduate students and staff. The service need not remain unchanged, but we should not allow decisions like this to be made unilaterally and sprung on us at the last minute, not as students and especially not as partners. That's no way to run a large organisation.

This may not affect all of us directly, but we have to draw the line somewhere. If you, like me, are sick of the university making these kinds of decisions over

our heads - without proper forethought and to the exclusion of the people that are affected by them - I would urge you to contact the Provost, Ian Walmsley, at [provost@imperial.ac.uk](mailto:provost@imperial.ac.uk), and ask him to halt this. It would be extremely helpful if you encouraged your staff members to do the same: senior management are more likely to listen to them than us. Beyond that, please sign the online petition at [tiny.cc/hbar](http://tiny.cc/hbar) and let the university know they cannot keep making these decisions with impunity.



## COMMENT

comment.felix@imperial.ac.uk



## COMMENT

**Divyen  
Vanniasegaram**  
*Politics Editor*

Liam Neeson, whilst promoting his latest film, described a story of how a friend of his had been raped by a black man and how, following this, he wanted to kill a black man to avenge his friend. This is undeniably racist; he saw black men as indistinguishable and, therefore, killing any black man would do. This plays into a wider narrative of black people, men in particular, being viewed as aggressive, violent and savage criminals. Sadly, these kinds of views are far more common than they should be and, whilst there has been progress, it has been painstakingly slow. A key question that we need to answer is what to do when confronted with these individuals?

Neeson has been widely condemned for having held these views, and rightly so. Any form of racism needs to be challenged. However, there is a risk of forming a mob mentality. This incident happened 40 years ago and Neeson has expressed his regret for holding these views and has made it clear he does not hold them now. It is essential that people who have these views can seek and obtain redemption. The logical consequence if we don't is a world in which a significant minority of the population is casti-

## What to do with a man like Neeson?

*In the wake of the scandal surrounding Liam Neeson we must reflect on what to do with racists and bigots to make society work for all of us.*



I have a particular set of skills // Wikimedia

gated and excluded from society with no hope of truly participating in it. What is the benefit of trying to reform if you know that you'll still be called racist over something you can no longer do anything about? These individuals' views will only harden and persist, sewing further division and hatred. Far better is to have an open dialogue about why people hold these views

and ultimately why they are wrong. This is a process that Neeson has probably gone through considering he has since changed his views but, since he has made this public, it would be good for him to discuss the journey he has been on. There is no obligation on him to do so but, having recognised the mistakes that he has made, he is in the perfect position

to help others take the same steps. We should ultimately champion individuals who are able to better themselves this way, not because it is a desirable path to take but as a beacon for racists to show them there is a way out of their antiquated views and into the 21<sup>st</sup> century.

We can belligerently scream at the top of our lungs calling out racists

and the like but it's important to understand the social situation people find themselves in. Neeson grew up during the troubles in Ireland where, if a Catholic were killed, revenge would be taken by attacking a member of the Protestant community regardless of whether that individual was involved or not. This naturally doesn't excuse racist behaviour, but we are all products of our environments and to bring about real change, this is a fundamental aspect that needs to be addressed. What Neeson said should be used as an opportunity to talk about the persecution that ethnic minorities, and in particular black men, still face today. Even in the UK, the system appears to be stacked against them. From rates of poverty to harsher criminal sentences to the court of public opinion, black men are often put at a significant disadvantage to their white counterparts. This is entrenched in the UK system, going back decades and will take concerted effort to change. The Windrush scandal is a case in point. It's highly unlikely that we would even be having this problem if it involved white migrants rather than black.

An example of where change should be possible is Shannon Gabriel, the West Indian cricketer, who was recently banned for four matches for throwing homophobic abuse in the way of England's cricket captain, Joe Root. He has since released a

letter explaining what happened from his point of view and how he now recognises it was a mistake. He will serve his punishment and, hopefully afterwards, will never use that kind of abuse on or off a cricket pitch. I also hope that he won't be tarnished as homophobic for the rest of his career when he has shown clear contrition for his horrendous actions. Racists should face justice in whatever form; actions should have consequences. Beyond this, they should have the ability to be reintegrated into society. Society has a role for facilitating this and a world in which there are fewer racists is a world we must all aspire towards.

Those of us who are liberal and fundamentally believe that people should be able to be who they are, whether this is to do with their sexual orientation, religion, ethnicity, etc., without the risk of attack and persecution will prevail over bigotry. However, we must be careful to avoid being entirely intolerant of intolerance for we run the risk of making a bad situation worse. We live in a deeply divided world which can feel like a powder keg ready to explode. The only way to bridge this growing divide is through dialogue and showing that there is a path to redemption.



## COMMENT

comment.felix@imperial.ac.uk



## Is Universal Basic Income the real solution to poverty?

*A two-year experiment in one form of Universal Basic Income (UBI) has just come to a close and its results have set both the UBI fans and critics twittering. Calum Drysdale explores both the results of the Finland experiment and what this might mean for UBI in the future.*

## COMMENT

**Calum Drysdale**

*Comment Writer*

Before I begin I should clarify some terms. The Finland experiment cannot truly be called an experiment in Universal Base Income. UBI is the idea that the government should give each of its citizens a 'basic' form of income. It has been picked up by both the left and the right with both the Green party and The Adam Smith Institute (an influential centre right think tank) advocating on its behalf. While ideology varies, UBI has attracted a certain utopian miasma, being heralded as the solution to everything from homelessness to automation caused job loss to an overly complicated welfare system. The two-year experiment in Finland that has just concluded was not a form of UBI. Rather than giving money to a truly random selection of people across the demographic, socio-economic and cultural range of the country, unemployed citizens between 25 and 58 were provided with €560 (£475) per month on top of any other forms of welfare. However, while limited, it provides a very good case study for the policy.

Unfortunately for the utopianists, the results were not unequivocally positive. While the sample group has reported higher levels of both physical and mental wellbeing, unemployment figures did



Free money for everyone?// DIEM 25

not vary from the control group.

While the limited nature of the study limits what conclusions we can draw, it does cause us to think about what we want from a social welfare program. The Finland experiment was not renewed due to a perceived lack of success. The desired reduction in unemployment, claimed to be one of the major benefits of UBI, failed to materialise. However, how can we measure the success of a program that caused its recipients to have "less stress symptoms as well as less difficulties to concentrate and less health problems than the control group". Advocates argue that this increase in quality of life is priceless.

Other studies conducted elsewhere have had more positive results. GiveDirectly, a charity that provides direct cash payments to extremely poor people in countries such as Kenya and Uganda, claims that cash transfers have had a positive impact in both the long and short term, leading to big reductions in HIV/AIDS infection rates and low birth weight while not causing an increase in the purchase of temptation goods such as alcohol or tobacco.

A key difference between these programs is their scale. GiveDirectly gave Kenyans \$25 a month on top of any other income, which, in a country where the poverty line is \$57 a month, rep-

resents a fairly major sum. In contrast, the Finnish study gave €560 per month. In a country where the average wage is €3470 per month. Obviously, these numbers are not directly comparable but I hope they demonstrate my point that the money paid to the Kenyans, many of whom had income sources other than welfare, is of a different scale to the money paid to the unemployed Finnish.

I think what can be taken from this is that, while giving money to anyone is going to make them happier, it is not going to act as a panacea. People are usually unemployed due to underlying issues such as a lack of education or chronic health problems. These

people often need more than just cash. They need active help from the state rather than hands off and impersonal cash. Here we arrive at my own personal bugbear about UBI.

I believe that any program that funnels money towards the poor and unemployed would have a similarly positive effect. For me, UBI has two major flaws. Firstly, rather like free university tuition, UBI is a poisoned chalice that is regressive rather than progressive. Whilst you can argue that giving money to the middle classes is going to improve their lot, it is extremely inefficient. Why give money to people that do not need it when it could be better spent? In this capacity, UBI is

a way of sweetening the medicine of welfare in the eyes of the middle classes by making it seem fair and balanced as everyone receives the same amount. The money would be a boost to those who know how to handle money and not those, like the unemployed or homeless, that have a proven bad track record.

However, just like the poll tax that charges everyone the same flat amount, UBI is extremely regressive. As an extension of this, the argument made by right-wing advocates of UBI, that it would reduce the bureaucracy of welfare, is a narrow minded one. By limiting welfare exclusively to UBI the state would be failing in its duty to provide for its poorest members.

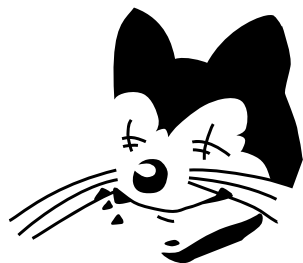
Secondly, if UBI is intended as a replacement of the safety net and as an answer to the problems brought on by automation, it will raise important questions about the responsibilities of the state to its people. Should the government keep funding social services, the NHS and jobseekers if every citizen has, in theory, the means to live?

UBI is, to me, a blunt instrument to a complicated problem. The British Universal Credit system, that aims to simplify the benefit system, is far more efficient, even if it has been hamstrung by Tory ideologues.



# COMMENT

comment.felix@imperial.ac.uk



## The long road to recovery

*An anonymous author writes about the struggle of recovering from an eating disorder.*

### COMMENT

**Anonymous**  
*Comment Writer*

**T**his isn't what I expected recovery to look like. For over ten years, I've battled with an eating disorder, and I'm starting to realise that

**"After ten years, this is not what I expected recovery to look like"**

recovery might not have an end to it. For now, it

seems like it's a dynamic process, with an equilibrium that shifts left or right depending on the environment. I suppose it says a lot that my inclination is to imagine it as an A-Level chemistry problem, but that's Imperial for you. I always knew that therapy would be hard, and adjusting to life after therapy would be difficult, but I wasn't prepared when I was knocked by a death in the family. I was so sure I was winning the war until I turned my back to focus on something else.

The enemy came into my territory, and I retreated back to the restriction I knew best. For a while it was almost nostalgic, the familiar hazy head of starvation dulled my sadness and made the grief softer; the same purpose it has served for my anxiety and

depression in the past.

The scariest thing about being used to a winning equilibrium was just that, I got used to it. The fight became less exhausting and almost unconscious, and it was so easy to get

**"After I felt healthy again, skipping breakfast here and there didn't feel dangerous"**

complacent. Skipping breakfast here and there didn't feel dangerous, I was using the logic: "Healthy people do that all

the time and I'm healthy now too!". It turns out that all I was doing was tempting the beast to rear its ugly head.

Everyone around me got used to me being okay too, so the thought of coming clean about this is terrifying. I fear the day people will get bored of the vicious cycle of relapse and recovery, rolling their eyes because "aren't you done with that all yet?". It also feels somewhat insincere to admit that this is still a thing. That all this time, even when things have been good, I have had thoughts like "my friends don't want to see me today because I'm fat.", "That interview didn't go well because I'm fat.", "I deserved to be groped by that creep on the tube because I'm fat.". It's embarrassing to reveal

this level of nonsense going on in my brain, and that I've succumbed to it again. Logically I know that none of these things are related to being fat. The fact that I am far from any definition of fat is besides the point. I am also wary of people pitying me, or being repelled by my absurdity. I wonder if I'll be subject to the same type of judgement and misunderstanding that I react to other maladaptive coping mechanisms with. "Why doesn't he just stop drinking alcohol? He knows it's not a healthy way to deal with his problems".

I have relapsed before, but all I have to hold onto is that each successive knock is easier to deal with. Fighting my way through every stumble is like training my army to

be able to respond quicker when it finds itself on the back foot, or building up a buffer solution to keep

**"The fact that I am far from any definition of fat is besides the point"**

things stable when my environment becomes sour. Or so I tell myself, anyway.

## The designer baby debate

The Power To Control Your Own Evolution, with Robert Winston, Tom Whipple, Gunes Taylor and Inga Prokopenko.

Book your space via the Imperial College website.

Sir Alexander Fleming Building, G16  
Tuesday, February 26, 2019  
5pm - 7pm  
Food and drink included

  
Robert Winston

  
Gunes Taylor

  
Tom Whipple

  
Inga Prokopenko

THE TIMES  
THE SUNDAY TIMES  
Know your times



## Can machine learning predict ovarian cancer survival?

*Machine learning software can lead the way towards more personalised medicine, predicting patient outcomes with significantly more accuracy than current methods*

## SCIENCE

**Henry Alman**  
*Science Editor*

Researchers at Imperial College London and the University of Melbourne have created new machine learning software that can forecast the survival rates and response to treatments of patients with ovarian cancer.

The software has been able to predict the prognosis of patients with ovarian cancer significantly more accurately than current methods. It can also predict what treatment would be most effective for patients following diagnosis, paving the way for more personalised

medicine.

Ovarian cancer is the sixth most common cancer in women, with 6,000 new cases every year in the UK. However, the long-term survival rate is just 35-40 per cent, as the disease is often only diagnosed in later stages once symptoms such as bloating are noticeable.

Professor Eric Aboagye, lead author and Professor of Cancer Pharmacology and Molecular Imaging at Imperial, said:

“There is an urgent need to find new ways to treat the disease. Our technology is able to give clinicians more detailed and accurate information on how patients are likely to respond to different treatments, which could enable them to make better and more targeted

treatment decisions.”

Doctors currently diagnose ovarian cancer in a number of ways: including a blood test to look for a substance called CA125 – an indication of cancer – followed by a CT scan that uses x-rays and a computer to create detailed pictures of the ovarian tumour. This helps clinicians know how far the disease has spread and determines the type of treatment patients receive, such as surgery and chemotherapy.

However, the scans cannot give clinicians detailed insight into patients’ likely overall outcomes or the probable effect of a therapeutic intervention. The new software aims to address these problems.

The trial used a mathematical software tool called TEXLab to identify the aggressiveness of tumours in CT scans and tissue samples from 364 women with ovarian cancer between 2004 and 2015. It examined four biological characteristics of the tumours which significantly influence overall survival – structure, shape, size and genetic makeup – to assess the patients’ prognosis. The patients were then given a score known as Radiomic Prognostic Vector (RPV) which indicates how severe the disease is.

The researchers then compared the results with blood tests and current prognostic scores used by doctors to estimate survival probability. They found that the software was up to four times more

accurate for predicting deaths from ovarian cancer than standard methods.

The hope, therefore, is that the technology can be used to stratify ovarian cancer patients into groups based on the subtle differences in the texture of their cancer on CT scans, rather than classification based on what type of cancer they have

or how advanced it is.

The team also found that five per cent of patients with high RPV scores had a life expectancy of less than two years. High RPV was also associated with chemotherapy resistance and poor surgical outcomes, suggesting that RPV can be used as a potential biomarker to predict how patients would respond to treatments.

The researchers are also planning to carry out a larger study to see how accurately the software can predict the outcomes of surgery and drug therapies for individual patients, adding further powerful tools for doctors to use.

**“The software was four times more accurate for predicting deaths than standard methods”**

## Lack of sleep is not necessarily fatal for flies

*New research has found that the life expectancy of flies are barely affected by sleep deprivation - could the same be true for humans?*

## SCIENCE

**Henry Alman**  
*Science Editor*

Male flies kept awake do not die earlier than those allowed to sleep, leading researchers to question whether sleep is essential for staying alive. Whilst this study was in flies, the team speculate that if sleep is not essential for life in the same way food is, then it is possible that their results could apply across the animal kingdom – including in humans.

They also found that female flies die on average only three days earlier out of a 40-50 day average lifespan.

Dr Giorgio Gilestro, from the Department of Life Sciences at Imperial, said: “For food, we have calories that are ‘vital’ to keep us alive and calories that are ‘useful’ to help us function well. It might be that sleep is only ‘useful’: it would still be difficult for us to function without it, but not necessarily fatal.”

Previous experiments have shown that some animals die when deprived of sleep, but the studies are unclear about exactly

why this is. The researchers behind the new study, published in *Science Advances*, suggest that the way the experiments were run could mean the animals died of stress due to the methods of keeping them awake.

To keep the flies awake, the researchers kept each fly in a tube linked to an automatic monitoring system. If the system detected no movement for 20 seconds, then the tube rotated, waking the fly up. This system allowed the team to experiment with hundreds of flies at once, giving them a better understanding of the average response to sleep

deprivation.

The researchers note that while male flies did not die earlier without sleep under lab conditions, in the wild lack of sleep would cause knock-on effects that would put them at greater risk from predators or competition.

Dr Gilestro added: “Lack of sleep could make it hard for them to function properly and safely, just as a lack of sleep might cause a sleep-deprived human to crash their car.”

“It’s not that there are no consequences to not sleeping, but our study has made us question whether sleep deprivation alone causes death.”

During their experiments, the team also found that, even while sleep deprived, the flies followed ‘normal’ patterns of activity. Flies are usually more active at dawn and dusk, and even when they hadn’t had any sleep for many days in a row, this was still the case.

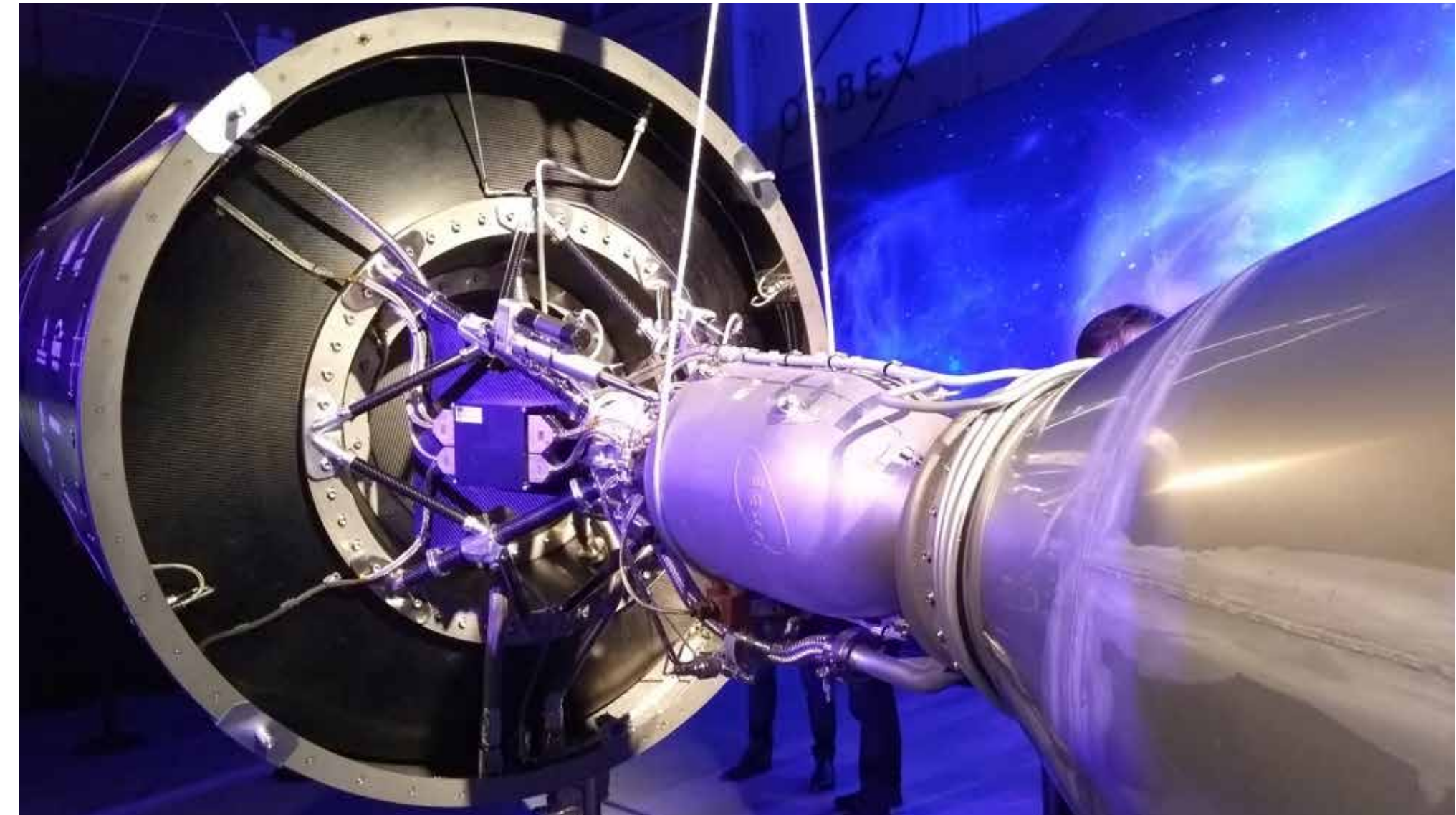
The researchers say this shows that the flies are not building up a ‘sleep debt’ – they do not necessarily get sleepier the longer they stay awake, but keep to relatively normal patterns of activity. This suggests the pressure to sleep is controlled more strongly by the time or day than by the amount of sleep taken.

This was further shown when flies that had been deprived were allowed to sleep again. They slept a little longer for a day or two but returned to normal patterns quickly, instead of immediately catching up on all the sleep they had lost with one extremely long sleep.

Future experiments will continue to investigate the effects of sleep deprivation on flies’ mental performance.

## The return of British rockets

*Imperial College Space Society attends the unveiling of Orbex’s new 3D-printed upper stage rocket*



A new rocket engine, fully 3D-printed, adorns the business end of the new upper stage // Will Harradence

## SCIENCE

**Will Harradence**  
*Imperial College Space Society*

In a dark and spacious room, with upbeat music accompanying a blue-lit bar, a crowd was gathering to await the latest product reveal from a hot British start-up. As the CEO took the stage, they were ushered to their seats, and a mass of cameras turned to face him. After an enthusiastic speech, he turned with a flourish as the curtain behind him dropped to reveal the sleek black shape of... a rocket.

British start-up Orbex has revealed new flight hardware at the opening of their production facility in Forres, Scotland. The upper stage rocket which was revealed is part of the company’s Prime launch vehicle, which is set to become the first British-built rocket to launch to space in 50 years. The event featured speeches from the president of the Royal Aeronautical Society, Scottish partners, and the head of the UK Space Agency, who noted a predicted 30,000 new jobs in the industry over the next 10 years. Imperial College Space Society (previously ICSEDS) was

also represented at the event, receiving a mention from CEO Chris Larmour. Presenters stressed the importance and strength of the UK space industry, the new opportunities afforded by recent technological breakthroughs, and the rise of commercial launch companies worldwide.

The small-satellite movement, which favours multiple cheap satellites as a replacement for larger conventional ones, has finally made it to the UK. With uncertainty about the future relationship with European launch providers, the UK government is keen to support

homegrown launch capability. Orbex is one of several start-ups looking to capitalise on this new opportunity, but is the first to demonstrate full-scale hardware.

Prime features the most powerful 3D printed

**“the UK government is keen to support homegrown launch capability”**

engine ever built, as well as an innovative propellant tank system that Orbex claims reduces the weight of the rocket by approximately 30%. The rocket also sports the largest payload bay size of any in its class, which Orbex says will be attractive to satellite operators. The rocket runs on bio-propane and liquid oxygen, reducing the carbon footprint of a launch, and will feature a rapid de-orbiting system to reduce its contribution to space junk. When completed, it is expected to launch from the new Scottish spaceport in Sutherland, and will

compete with similar small launchers such as Rocket Labs’ Electron. Launch services are expected to commence in 2021.

*Imperial College Space Society is supported by Orbex, receiving funds for our aerospace design projects including high powered rocketry and rocket engine design. The society also runs guest lectures and Q&A sessions with researchers and companies at the leading edge of this new era in space.*



# BOOKS

books.felix@imperial.ac.uk

## A trip down memory lane: two mini reviews

Over the Christmas break, Books writer Pavan Inguva revisited some old book purchases - and realised the timelessness of themes and inclinations.

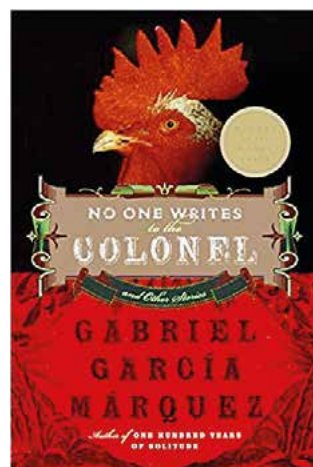
### BOOKS

**Pavan Inguva**  
Books Writer

Before starting at Imperial, I took a short holiday to India to visit friends and family. For those of you who don't know, India is an amazing place to buy books. You can get original prints of many books for a fraction of the price compared to any western country. Obviously I took this chance to stock up. I did not however have the time to read many of them. Fast forward to Christmas break this academic year, when the parents summoned me to go home, I took the chance to browse through my bookshelf. This invoked a remarkable sense of nostalgia. It has been more than three years since I had a proper look at my own little collection. I was both surprised and saddened to see how much more I read before starting university. That said, this was a fantastic opportunity to review how my own thoughts and literary tastes have evolved over the past couple of years. I decided to bring back two relatively short books, both titles I purchased in 2015 or earlier and have yet to read. Quite frankly, considering how busy final year can be, I thought it would be a miracle if I could finish them during term time, yet here we are! This review therefore is to me a mix of sharing

how I felt about these two books and an oddly therapeutic exercise in retrospection. Both titles are fairly straightforward reads that would take a leisurely afternoon.

*No One Writes to the Colonel* by Gabriel Garcia Marquez

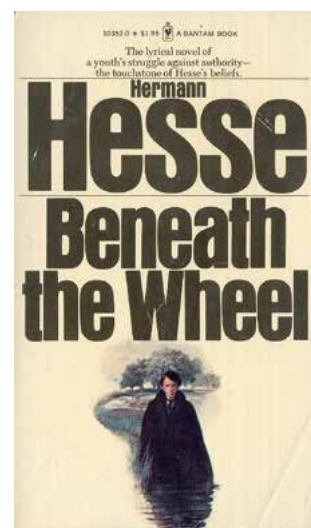


Marquez, who won the 1982 Nobel prize for Literature, is more well-known for his other works such as *One Hundred Years of Solitude* and *Love in the Time of Cholera*. This story is set in the 1940s, where a nameless retired and impoverished Colonel is struggling to make ends meet. He dutifully awaits his military pension which was supposed to have arrived many a moon ago. The title of this book comes from the line said by the postmaster to the Colonel as he distributes the mail to the villagers: "No one writes to the Colonel!". His asthmatic wife knows all the better that it is not coming and, by the time we are

introduced to the characters, there is almost nothing of value they own except for a prized fighting cock. The cock is the last thing they own that belonged to their son who was executed for distributing subversive literature. We are led down the mildly depressing path where the Colonel gradually realises the futility of his hope in both his pension coming and of the cock yielding the desired returns. This work departs from Marquez's style of magic realism, but it still is remarkably effective in shedding light on the human psyche and response to circumstances beyond our control. I say this because, whilst reading this book, images of a dusty Indian village from a soap opera pop into mind; people ostensibly behave in a similar manner when faced with comparably adverse circumstances.

**"The title of this book comes from the line said by the postmaster to the Colonel as he distributes the mail to the villagers: 'No one writes to the Colonel!'"**

*Beneath the Wheel* by Herman Hesse

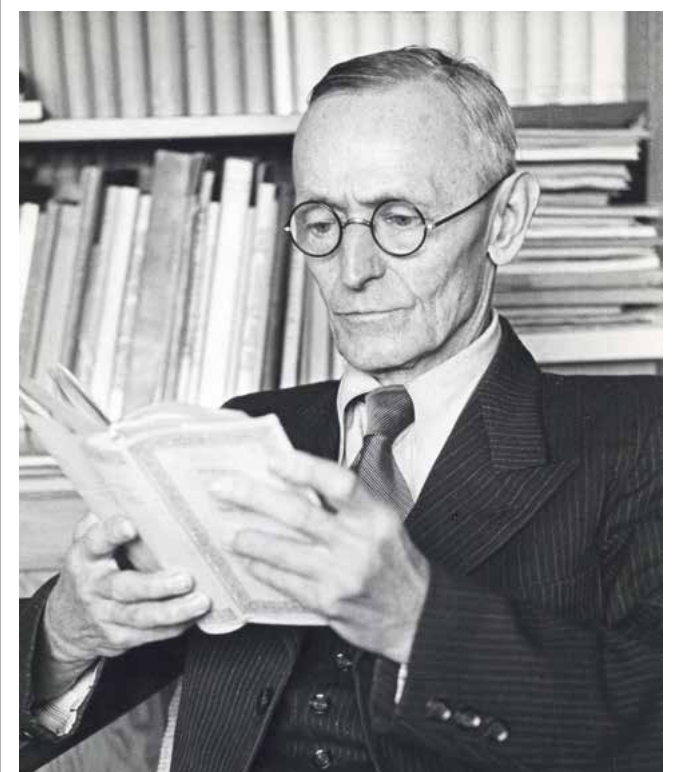


Before going to university, Hermann Hesse was one of my favourite authors. I enjoyed how many of Hesse's stories describe the inner turbulence of what it means to seek for the good life and what that constitutes. I hesitate to say that his work is well-suited for working through teenage existential angst because it is so much more than that, but you get my drift. I would highly recommend reading *Steppenwolf* and *The Glass Bead Game* as these are, in my opinion, two of his most profound works. Incidentally, he did win the Nobel prize for Literature in 1946. *Beneath the Wheel* is one of Hesse's earlier works and, having read many of his books in a random order, it was interesting to see themes present in later works taking shape here. Hans, a boy living in a small village near the Black Forest was identified as a capable student and correspondingly encour-

aged (read: pressured/led) to pursue further academic studies. Having performed exceedingly well in the state exam, he entered a prestigious academy. At each step, for having performed well, he was rewarded with more work. At the academy, Hans befriends a rebellious romantic and poet and gradually is exposed to worlds outside scholarship. Simultaneously, his academic performance declines and in a cascading series of setbacks, he drops out of the academy. Eventually, Hans becomes an apprentice mechanic and is gradually healed by nature and romance only to meet his unfortunate end after a jolly with his fellow apprentices. Whilst this plot may seem rather trite when read today, two points help mitigate this. Firstly, *Beneath the*

*Wheel* was written over a hundred years ago and the content remains relevant. Secondly, Hesse's sublime writing style still makes it an enjoyable and thought provoking read.

**"I hesitate to say that his work is well-suited for working through teenage existential angst because it is so much more than that"**



Herman Hesse // Wikimedia





*A Clockwork Orange (1971) // Warner Bros. Pictures*

## A Clockwork Orange: 50 years on.

*The Stanley Kubrick season comes to the BFI Southbank, running 1 April – 31 May 2019. The Shining, 2001: A Space Odyssey and A Clockwork Orange are among the films being rereleased on the big screen.*

### FILM

**Rowan Dixon**

*Film Writer*

Nearly 50 years since its initial release in 1971, *A Clockwork Orange* is being released again for the big screen. For 27 years it was next to impossible to watch it here in the UK after it was banned from being shown in cinemas in 1973, with several court hearings blaming the actions of some criminals partly on the violent nature of the film. In the US, however, it was critically acclaimed. Watching it now in 2019 I can see why. It is beautifully theatrical, more so than almost any other film I have ever watched; the theatre of the cinematography, the direction and the acting

is breathtaking. The film is narrated throughout by a guy called Alex, who has a zeal for the ultra violence. He lives in a dystopian Britain in the 1980s, spending his evenings with his three “droogs”: Georgie, Dim and Pete, drinking drug infused “milk-plus” and going around partaking in a bit of the old in out and ultra violence. The way these scenes are portrayed is why this film was pulled from British screens in the 70s and didn’t return until 1999.

Throughout the film there is a healthy serving of violence, slimy politicians, dodgy probation officers and a lot of dicks; maybe a few too many to be perfectly honest, though they do add a good helping of immature comedy to the film. Yet one thing which

sticks out even more than lollipop penises is the use of music throughout the film. The way music is used is nothing short of masterful; from making a threesome amusing, to adding even more drama to fight scenes. To the protagonist, Alex, music is also incredibly important as he has a deep love for Ludwig van Beethoven, something Kubrick uses throughout; not only as a plot device, but also to deliver specific political and moral messages.

Even though this film was made nearly 5 decades ago it remains incredibly relevant. Violence and crime in today’s society is just as problematic and disruptive as it was 50 years ago, and politicians are still being manipulative and ‘doing their best’ for the people. Fashion and technology have

moved on a bit, and so has medical testing, I would hope, but the underlying messages about morality and politics are just as relevant today as they were when the film was made, and when the book

**“The way music is used is nothing short of masterful; from making a threesome amusing, to adding even more drama to fight scenes.”**

it is based on was written. This, along with the fantastic acting, directing and script, is what makes this such a classic film. I’d argue that 50 years on, Kubrick’s *A Clockwork Orange* is a film which has yet to be surpassed.

I highly recommend watching it, not at home on an iPad or laptop, but on the big screen with popcorn in your lap and a drink at your side. This is truly where this film belongs and thankfully due to its re-release you will have that opportunity. Something I would like to point out is that some people may leave around halfway through as they believe the film is going to become ‘even more violent’ however, this is not the case, and it calms down in the second half. This is also where Kubrick ties the

whole film together with underlying messages, as well as where my favourite character is introduced, Barnes (the chief prison guard), who has a hilarious manner about him, and is very old school British. In the second half there is also the best prison scene I have ever seen in a film, better than anything from *Shawshank*, the highest regarded film ever (and that was set in its entirety in a prison!) As films go, this is one of the best; the acting, directing, sound and costume design are unparalleled and work really well together, unlike some films released recently.

*Find out more about the Kubrick season at [www.bfi.org.uk](http://www.bfi.org.uk)*



# FILM

film.felix@imperial.ac.uk

## Oscars 2019: Felix Film's take on the Winners, the



Waaaah, I want the Oscar too! // Scarlet Films

### Best Picture

**Academy Prediction:** Probably *Green Book* or *The Favourite*  
**What we want to win:** I'd want to see *Roma* win, personally; maybe it might; *BlacKkKlansman* probably would win if this was 10 years ago. Anything except a *Star is Born*.

but no "foreign language film" has ever won the award for Best Picture—could this be the year? Alfonso Cuarón's incredible film about a housemaid in 1970s Mexico City is thoroughly worthy. The safe choice is *BlacKkKlansman*, the story about a black undercover police officer infiltrating the Ku Klux Klan. It's impressively ballsy, zesty and unflinchingly humorous. A deserving film that's made with a fistful of passion. -SSM

The nominees for Best Picture are arguably the most diverse they have ever been, nominating films about people of colour and films featuring non-white actors in lead roles. One of the nominees is *Black Panther*, the first superhero film

to be nominated—but its inclusion has been controversial. Is the Academy blatantly ticking boxes for the wrong reasons? Perhaps. Does it actually stand a chance? Perhaps not. *Roma* certainly will leave the other nominees quaking in their seats,

And that's not all, an entry from renowned Wes Anderson, with *Isle of Dogs*, and the first non Studio Ghibli anime ever to be nominated for the category, *Mirai*, is coming up closely behind. With the "weakest" showing of the bunch being the sequel to *Wreck-it Ralph*, *Ralph Breaks the Internet*, which

itself is a fantastic family movie, and pretty flawless start to finish, it just puts into perspective just how high quality the nominees are this year. Although it would be nice to see *Mirai* dethrone Studio Ghibli as an Anime Oscar winner, it just doesn't quite hit the same high notes as *Enter the Spiderverse*, nor does it have the nostalgic hype that comes with *The Incredibles 2*. No matter which way it goes, it's safe to say it won't be a disappointing result. -MD

**Academy Prediction:** *Spiderman: Enter the Spiderverse* or *The Incredibles 2*.  
**What we want to win:** Any of them, although "The Boss Baby: Back in Business" was snubbed of a nom/win.

### Animated Feature Film



AAAAAAAAAAAAAAAAAAAAAAAAAAAAA // Sony Pictures

### Directing

**Academy Prediction:** Alfonso Cuarón or close second Yorgos Lanthimos  
**What we want to win:** Another case of if *BlacKkKlansman* was made 10 years ago Spike Lee would take it, otherwise it'll be nice to see Yorgos Lanthimos take it.

**A**lfonso Cuarón is surely the strongest candidate in the list of nominees, winning this category at the BAFTAs and at the Golden Globes. *Roma* was exceptionally directed—from the flare of fluidity in the way the camera scans the scene, to getting the incredible performances from the actors. Yorgos Lanthimos (*The Favourite*) could potentially grab a steal at the final hurdle, but he would need to sell his soul to Harvey Weinstein. And

**F**oreign language this year is not only picking up nominations in this category but all over the Oscars. With Paweł Pawlikowski's breathtaking *Cold War*, picking up nominations for Direction and Cinematography alongside it's best Foreign Language, it stands a strong contender the win. As well as this, Hirokazu Kore-eda's *Shoplifters* has been picking up a lot of awards at different ceremonies, including the Palme d'Or

for its heart wrenching look into a life in poverty. Although the competition is tough going up against Alfonso Cuarón's black and white, critically acclaimed, Netflix masterpiece, *Roma*, it will be interesting to see if Netflix distributed and Netflix originals start to pick up more awards at prestigious ceremonies like this, even after the academy's general distaste to the online streaming platform. It's hard to gauge who will win overall with such a strong trio, winning a multitude of awards across lots of ceremonies. My heart lies with *Shoplifters*, but my money's on *Roma*. -MD

### Foreign Language

**Academy Prediction:** *Roma* or *Shoplifters*.  
**What we want to win:** It would be good to see *Shoplifters* pick up another deserved big win, but *Roma* and *Cold War* are equally deserved.



Huddling for warmth in the harsh Mexican winter //IMDb

on that topic, no women directors were nominated this year. Apparently, you can't use more than one diversity coupon in conjunction with another. -SSM Adam McKay picked up a nomination for direction alongside multiple other nominations for

even after the academy's general distaste to the online streaming platform. It's hard to gauge who will win overall with such a strong trio, winning a multitude of awards across lots of ceremonies. My heart lies with *Shoplifters*, but my money's on *Roma*. -MD



:)// Aoi Pro, Inc

# FILM

film.felix@imperial.ac.uk

## Losers, and yearly scheduled general disappointment

**R**ami Malek took home the BAFTA and the Golden Globe for his performance in *Bohemian Rhapsody*. On top of that, it seems the Oscars really, really, really like *Bohemian Rhapsody* this year, so it's going to be tough to edge out Rami Malek. -SSM  
**When it comes down**

### Cinematography

**Academy Prediction:** *Roma*  
**What we want to win:** *Roma* or *Cold War*.

**C**inematography is a hard category this year, with not one, but two black and white films praised at multiple festivals for their use of colour. It's going to be hard to predict, but very likely one of *Roma* or *Cold War*. -MD

**T**his is a hard judge. On one hand the Academy loves period drama costinguming, and the nominees are ripe, however *Black Panther* bought something that deviates from the western centric norm. -MD

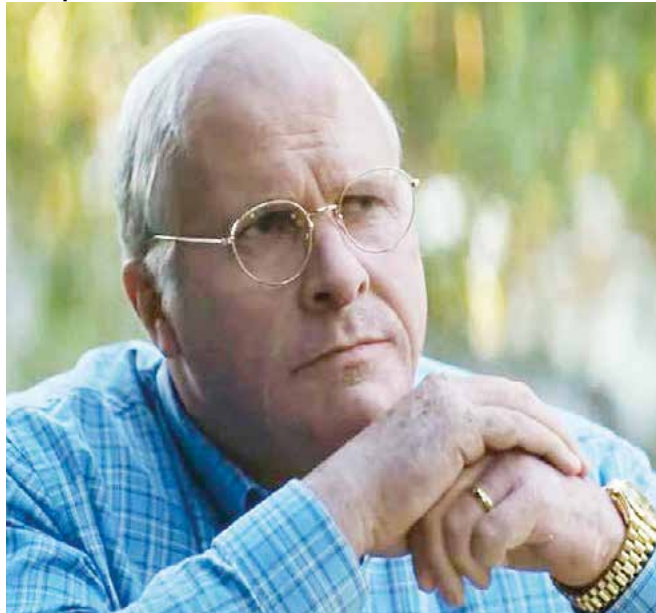
**Academy Prediction:** *The Favourite* or *Black Panther*.  
**What we want to win:** *Black Panther*

### Costume Design

**M**ahershala Ali already has a Best Supporting Actor to his name, from his performance in *Moonlight*, back in 2016. The performances of Ali and Viggo Mortensen elevates *Green Book* into more than the sum of its parts. Solidifying Ali as top candidate in my mind. -SSM  
Sam Rockwell and his

to who I don't want to see win, it is a no brainer with Bradley Cooper. William Dafoe's performance was relatively forgettable; Rami Malek and Christian Bale both did good jobs at impersonation; Viggo Mortensen was fine. It's not a good lineup this year. -MD

**I hope Bale's wife was ok with this// Plan B Entertainment**



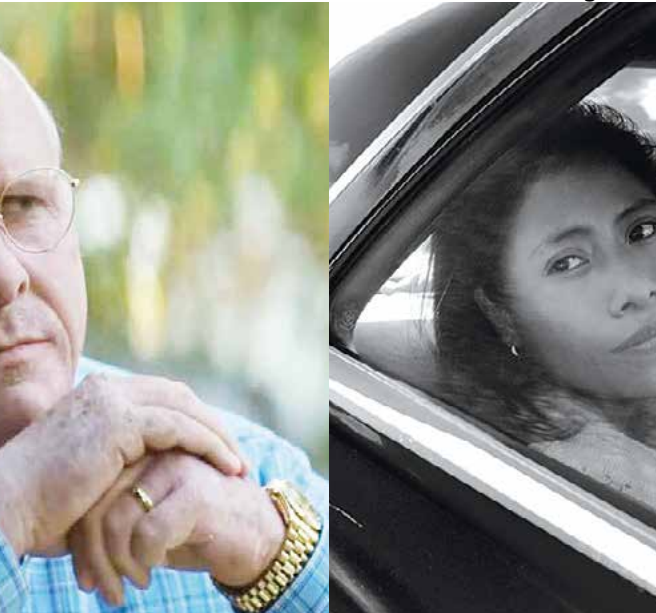
Nothing more romantic than a picnic // Universal Pictures

**Academy Prediction:** *Mahershala Ali*  
**What we want to win:** *Sam Rockwell being able to portray George Bush to that level of accuracy is definitely something that should be awarded, but we'd like to see Mahershala Ali win.*

### Best Actor in a Supporting Role

**Academy Prediction:** *Rami Malek* or *Viggo Mortensen*  
**What we want to win:** *There is nothing that has stuck with me more than old fat Christian Bale, anything but Bradley Cooper.*

**Best Actress in a**



Don't worry I know the Heimlich // Annapurna Pictures

**Academy Prediction:** *Rachel Weisz* or *Emma Stone*  
**What we want to win:** *Regina King* or *Marina de Távira* for both of their stellar performances do deserve to pick up the Oscar, if there were two awards, they deserve both.

### Best Actress in a Supporting Role

**Academy Prediction:** *Olivia Coleman*  
**What we want to win:** *We'd like to see Olivia Coleman continue winning awards, but failing that, Yalitza Aparicio for Roma is great.*

**Yalitza looking like she's in a 90s rap video//IMDb**



Regina King picked up one of the unfortunately few nominations for *If Beale Street Could Talk*, and she definitely deserves it. In an ideal world either she or Marina de Távira would pick up the world, but looking at previous award ceremonies, it looks like *The Favourite* is going to pick up another award here. -MD

**Academy Prediction:** *Rachel Weisz* or *Emma Stone*.  
**What we want to win:** *Regina King* or *Marina de Távira* for both of their stellar performances do deserve to pick up the Oscar, if there were two awards, they deserve both.

**O**livia Coleman is the most likely candidate here, picking up awards all over the shop. Glenn Close has a chance, Aidan gave a glowing review for *The Wife* and especially Glenn Close. -SSM

In my mind, there is a very clear winner for me, and that's Yalitza Aparicio, there is no over-looking her performance in *Roma*, and she deserves to take home the Oscar. Knowing the Academy however I have strong feelings that Olivia Coleman will take the win, deservedly, but still in the shadow of Aparicio's performance. -MD

### Make-up and Hairstyling

**Academy Prediction:** *Vice*  
**What we want to win:** *Vice*.

**D**espite how talented the other makeup and hairstyling is, especially Mary Queen of Scots, this category is a no brainer for me. It just has to be Christian Bale's unbelievable transformation in *Vice*. -MD

**W**ill Kendrick Lamar pick up an Oscar? It's likely. *Isle of Dogs* definitely deserves the best score. -MD

**Academy Prediction:** *Isle of Dogs (Score)* and *All the Stars (Song)*  
**What we want to win:** See above.

### Music (Score and Song)

Regina King picked up one of the unfortunately few nominations for *If Beale Street Could Talk*, and she definitely deserves it. In an ideal world either she or Marina de Távira would pick up the world, but looking at previous award ceremonies, it looks like *The Favourite* is going to pick up another award here. -MD





# LONDON ICE VARSITY 2019



**FRIDAY 1ST MARCH**  
**UCL YETIS VS**  
**IMPERIAL DEVILS**

EARLY BIRD TICKETS: <https://bit.ly/2BK4GUe>  
FACEBOOK: LONDON ICE HOCKEY VARSITY 2019



## ARTS

arts.felix@imperial.ac.uk

## Why Everybody's Talking about Jamie and Aladdin,

Whether you're an ardent theatre lover or a hardened sceptic, there's likely something for everyone to enjoy in our cultural city. In this guide to the West End, Arts Writer Eamon Akil Farhat gives us a flavour of what's on at the moment, and why it might be even better value than we previously thought...

## ARTS

**Eamon Akil Farhat**  
Arts Writer

When it comes to theatre, London is an international capital of excellence. Some would argue it offers the best of the best when it comes to high quality cultural performances. While many have fallen under the spell of the big musicals and gripping plays, always yearning for their next chance to get their West End fix, others don't see the hype, thinking it tacky, overpriced and "not for me". Breaking down these stereotypes and showing that there truly is something for everyone is important to ensure this art form remains accessible to all. What better way to do this than by exploring four very different, hugely successful musicals that you can go and see today on the West End?

**"Too expensive' or 'not for me' are what many say when faced with a trip to the theatre"**

For little more than a cinema ticket, you could

find yourself in the seat of an iconic West End musical. Though movies have their charm, there is something very special about seeing a performance live. Familiar songs are belted out right in front of your eyes – no lip-syncing here! – and the sheer number of people is stupendous, from actors and the live band, to lighting technicians and even the understudies, ensuring that the show goes on every night. To add to the drama of it all, the beautiful old theatres in which the performance take place will make you feel like you're a member of the bourgeoisie, even if you only paid a tenner for your ticket! Here are four very different musicals to give you a flavour for what's on...



**What?** Aladdin  
**Where?** The Prince Edward Theatre

This Disney classic made its West End debut in June 2016 and continues to wow endearingly eager adult Disney aficionados and younger fans alike. Set in Agrabah, a city of wonder, genies and countless stereotypes, the story is at its heart one of social mobility. It proves than anyone can go from rags to rich if, like Aladdin, you find a

magical genie and marry a beautiful princess. The musical. Though movies have their charm, there is something very special about seeing a performance live. Familiar songs are belted out right in front of your eyes – no lip-syncing here! – and the sheer number of people is stupendous, from actors and the live band, to lighting technicians and even the understudies, ensuring that the show goes on every night. To add to the drama of it all, the beautiful old theatres in which the performance take place will make you feel like you're a member of the bourgeoisie, even if you only paid a tenner for your ticket! Here are four very different musicals to give you a flavour for what's on...

The opening of the performance is underwhelming. Despite an innovative set, with swivelling housing and minarets, these first scenes fail to capture the essence of the hustle and bustle from the movie. However, the genie, played by Trevor Dion Nicholas from the original Broadway cast, saves the day with an electric performance of 'Friend Like Me'. Providing high-energy comedic relief, he drops in references to everything from Wakanda, *Beauty and the Beast*, and of course the Christina Aguilera classic, 'Genie in a Bottle'.

The sets, costume and choreography are the forte of this show. During a couple of songs, no less than ten costume changes could be counted! With a backdrop dripping with gold, actors parade in dressed like Vegas showgirls, before reappearing moments later as tap dancers straight out of 42<sup>nd</sup> Street. In the palace, the geometric Islamic art-styled walls add a level of elegance and simplicity to a show that at times seem a little ostentatious. To top it all off, the magic carpet flying through an enchanting starry sky leaves the entire audience in awe.



Born Wicked? // Just Opened London

The only downside of this magical moment is that the carpet rather steals the show, leaving the greatly anticipated 'A Whole New World' something of an afterthought.



**What?** Wicked  
**Where?** Apollo Victoria

If you remember that *The Wizard of Oz* first came to cinemas everywhere in the summer of 1939, you probably never thought a sequel would be possible... until now! *Wicked* focuses on the backstory of the two main witches, Glinda (The Good Witch) and Elphaba, more commonly known as the Wicked Witch of the West. Lots of old characters and top Oz locations are back but the tone of this story

is very different – and yet it instantly feels like a classic. The central question – "Are people born wicked or do they have wickedness thrust upon them?" – is explored with a clear moral argument organically emerging in a way that doesn't feel forced in the slightest.

**"The tone of this story is very different...it instantly feels like a classic"**

If you know anything about Broadway, the West End, musical theatre or if you've ever watched *Glee*, you will have definitely heard the song 'Defying Gravity'. Originally performed by the legendary Idina Menzel,

it is brought to life on the West End stage by Alice Fearn who takes it to new heights. This song comes at such a climatic point, it makes Everest look like a mere hill and, without wanting to give away too much, a certain greenified witch might just defy gravity (just a little!).

Being a faraway land – outside Zone 2 most probably – Oz must live up to its weird and wonderful credentials. During a little weekend trip to the Emerald City, the locals are dressed like they came straight out of the Capitol from *The Hunger Games*, just a little greener. The costumes of the main characters, Glinda and Elphaba in particular, are what you would expect; no bells or whistles, but the simplicity lends itself well to these classic characters which many would have first met in the beloved story *The Wizard of Oz*.

## ARTS

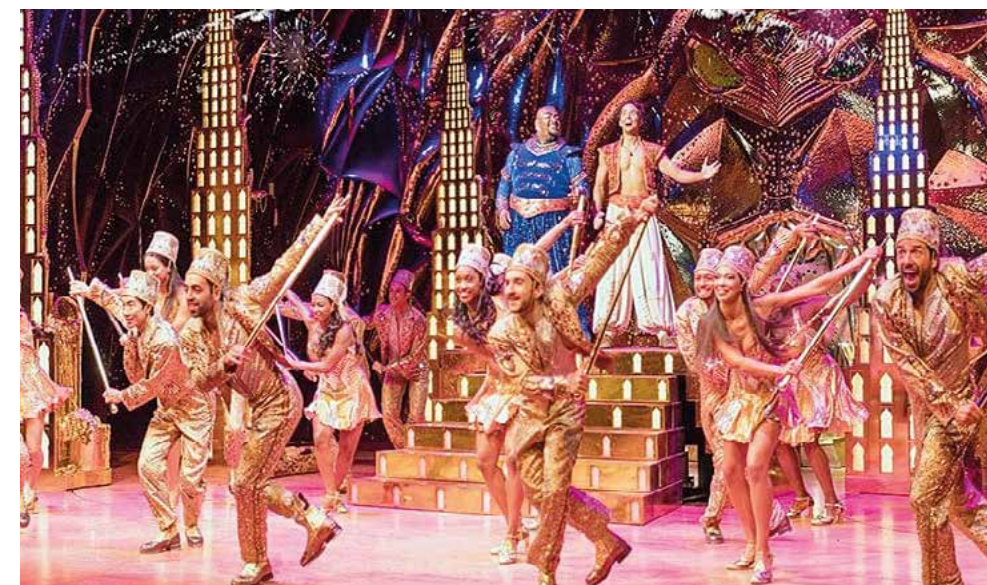
arts.felix@imperial.ac.uk

## and other West End shows

### Cast Member to Watch...

...Lucie Shorthouse in *Everybody's Talking About Jamie*

This British born actress plays the part of Pritti, Jamie's best friend. Her standout solo during 'It Means Beautiful' shows the potential that she has. Her voice is spectacular – of course, in a West End musical you expect amazing voices, but hers is truly a cut above the rest. As part of a big new cast at the end of January, she left the production and it is not yet certain what her next project will be, but after an amazing run in this production and winning a 'WhatsOnStage Award' for Best Supporting Actress in a Musical, she is definitely one to watch!



Magic awaits you at this glittery production of *Aladdin* // Prince Edward Theatre



**What?** Les Misérables  
**Where?** Apollo Victoria

If you've ever had a bad day and wondered how things can ever get worse, now you have the answer: *Les Misérables*. Inspired by the 2012 movie which was itself inspired by this musical, this production of *Les Mis* portrays the grit, gore and miserableness of life in 19th century France. If you have read the original books by Victor Hugo from the 19<sup>th</sup> Century, you probably don't have a much of a clue what is going on in this notoriously confusing plot. The story follows Jean Valjean, a convict on the run who wants a clean slate. After the death of one of his factory workers, Fantine, he agrees to take her daughter Cosette under his care. To really

make sure the story of the orphaned girl whose mother died due to an unfortunate foray into prostitution is miserable enough, it is all set during the June rebellion. This battle sees many characters meet their fate on a poetically staged battle on the barricades where scores of bodies are left to rest.

**"Epic singing and minimal but effective set design"**

If it wasn't already clear, this is no fairy tale and thus the production focuses on epic singing and minimal but effective set design. The whole set revolves around a spinning stage, like a giant record player. The intelligent partial lighting of the stage mean that

tables, chairs and other props can simply appear and disappear as the stage spins. There are no big costume changes or huge sets, mostly due to the fact that 19<sup>th</sup> century France was quite uniform in its gloominess. This means that transitions between scenes can take place very quickly and allow for a continuous and dynamic story. Like the turbulent life of the characters, the audience is never given a chance to rest.

**"A musical to see time and time again"**

With no fanfare to hide behind, performers are left alone on stage, and their raw talent is put to the test. No musical has such a wealth of songs which conjure up such emotion; every note hits home. A few notable songs are 'On

My Own' and 'I Dreamed a Dream', some of the most well recognized songs in all of musical theatre. Being the world's longest running musical and now in its 34<sup>th</sup> year, some of the actors today were not even born when the original cast took stage – quite the legacy to uphold. This can be daunting, but all the actors bring something different to their respective roles making it a musical to see time and time again.



**What?** *Everybody's Talking About Jamie*  
**Where?** Apollo Theatre

If you are tired of unelected Broadway bureaucrats influencing the artistry of the West End and want to take back control, *Everybody's Talking About Jamie*, a British-born musical proudly set in Sheffield, is the show for you! Based on the 2011 BBC Three documentary *Jamie: Drag Queen at 16*, it follows a young 16-year-old boy who wanted to go to his prom in drag.

**"It is a story of acceptance, making the themes universal"**

The musical explores the reactions of those around him including his mother, father and other classmates as he embarks on a journey of drag discovery. It is in many ways a queer story, but it is also a story of acceptance, making the themes universal. As Sheffield seems to have more in common with 19<sup>th</sup> century France

than Agrabah or Oz, there is not much room for magical set designs.

**"A show for someone who's looking for something fresh"**

Instead, it is the story and characters which captivate the audience and provide the strong Northern spirit.

Although some aspects of the musical seem a little ordinary, the choreography is very fun and adds to a feel-good factor. Other shows and storytellers should take notes from *Everybody's Talking About Jamie* with regards to diversity. While in other shows, diversity is having a token minority character, in this musical, there are two Muslim girls who are very different, breaking down any preconceptions the audience

**"Characters which captivate the audience"**

might have associated with them. This musical is definitely the kind of show for someone who isn't interested in the familiar stories of *Les Mis* or *Aladdin*, but wants something fresh!

The performances last for about 2h30 with a 15 minute interval for you to buy overpriced snacks, or...

...Bring in your own snacks and drinks! (Just make sure it isn't too obtrusive!)

### Top Tips: Cheap Tickets

Whenever doing any kind of booking, look up promo codes – there may be a few extra quid to be saved!

Lots of shows have daily lotteries – enter for free (every day if you wish) and only pay if you win! *Hamilton* tickets for £10 anyone? Find these on individual box office websites.

*TodayTix* is an amazing app for getting the best deals. It offers lotteries for front row seats at bargain prices as well as many, many other deals. If you don't mind being last minute, keep them on notifications and you'll be the first to know when the prices are slashed!

Look out for big West End sales and make sure to compare the sale price with the original price (straight from the box office) to make sure you are getting good value for money.

Finally, use seatplan.com to make sure that the seats you have are worth it; discounted seats can often be ones with restricted viewing. If you don't mind though, you can save a lot of money!

### Top Tips: At the Show

Most evening performances start at 19:30 but it is good to arrive at least 15-20 minutes beforehand as there can be queues.

The performances last for about 2h30 with a 15 minute interval for you to buy overpriced snacks, or...

...Bring in your own snacks and drinks! (Just make sure it isn't too obtrusive!)



## ARTS

arts.felix@imperial.ac.uk

## The Justice Syndicate

An innovative, incisive, and much-needed scrutiny of our attitudes in the #MeToo era.

## ARTS



**Where?** Battersea Arts Centre  
**When?** 11th – 23rd Feb  
**How Much?** £12.50; £10 students

**Claire Chan**  
Arts Editor

In *The Justice Syndicate*, an interactive 12-person game created by theatre company fanSHEN, we're on a jury deciding the fate of a top paediatric neurosurgeon who's been accused of sexual assault by the mother of one of his patients. It's almost like *12 Angry Men* when we walk in: twelve desks arranged in a rectangle, and at each seat an iPad, notebook and glass of water. Evidence for the case – statements, forensic reports, video

testimonies from both sides, and expert opinions – is revealed to us piece by piece on the iPads as we go along. Guilty or innocent? We get to decide.

The evidence is designed to be equivocal. There is a clear power imbalance here: Huxtable, a renowned neurosurgeon, is clearly socioeconomically better off than Hodges, a struggling single mother of two. Though we might wish for more conclusive evidence, it just doesn't exist – much as in real life, where hard evidence in rape and sexual assault cases is often lacking. This makes it incredibly difficult to decide. It's a his-word-against-hers situation, but who is being truthful and who is lying?

The tech syncing, thanks to computational artist Joe McAlister, is

great, with a slick interface and voting results displayed to everyone instantaneously. Our iPads are synced and different witness statements are read out by different jurors – we all get a chance to speak, emboldening everyone for the discussions later on. Although I must say I was glad it wasn't my iPad that lit up when it was time to read out the transcript of Huxtable's BDSM sexting...!

Midway through, we are even offered the option to bar one juror from the final vote. My group, which was fairly civil, chose not to, but the threat of elimination served to deter any single individual from being overly disruptive. The game creators Dan Barnard and Rachel Briscoe have clearly put a lot of thought

into encouraging productive discussion amongst participants, and it works. Despite having never met each other before, we're soon getting into excited arguments about whether or not Huxtable should be convicted.

There are 3 opportunities for us to vote on which way we are leaning, and one last discussion of all the evidence before the final decision of the jury is handed down. Once the verdict is out, Barnard and Briscoe finally appear to facilitate the post-game debrief. After all the tension of the last hour or so, it's time to clear the air and for everyone to hash out any unfinished arguments. It's another excellent discussion – I get into a small debate with my neighbour about how insufficient evidence to convict isn't the same as

not believing the victim. Barnard and Briscoe also take the time to point out how social dynamics, such as groupthink and group polarisation, can (and did) affect group decision-making as well. It's quite illuminating to think about our own decision-making process in retrospect and see how these forces actually had an influence in real life.

Before leaving, we're given a 'newspaper' with commentary from the game creators, using statistics from their first 15 sessions, to take home and peruse at leisure. It's a fascinating read, showing the radically different conclusions that different groups came to. Despite the intentionally equivocal evidence, individuals were able to form very strongly held opinions on the guilt or innocence

of Huxtable. I noticed this myself in our group session; several people were deeply convinced that Huxtable was guilty. When challenged as to why, they simply said they felt it "in their hearts". Was this borne of a desire to protect the underdog? A kind of reverse-victim blaming? An effect of the #MeToo era that we now live in? I found it strange and disturbing how fallible the jury system was, and how much sway emotion held over people's supposedly rational decisions.

Innovative and exciting, *The Justice Syndicate* is not only a fascinating demonstration of group dynamics, but also a timely examination of attitudes towards sexual assault in the present social climate.

## Crime and Punishment: Czech Edition

Royal Opera House production of Leos Janacek's opera *Katya Kabanova* is definitely worth your attention.

## ARTS



**Where?** Royal Opera House  
**When?** Until 26th Feb  
**How Much?** Prices vary

**Maria Portela**  
Arts Writer

**K**atya Kabanova could be one of those plots we have heard a million times: a woman avoids immorality, succumbs anyway and punishes herself for her actions. Unhappy marriage, controlling mother-in-law, lover with family issues, friend who nudges her into temptation. What is unusual about this particular story is the intense focus on Katya's psychological drama which, in stark

contrast with the other characters' lightheartedness, only increases the feeling of her tragedy. She is a complex character, a gentle soul in a difficult situation and filled with contrasting, violent emotions. Singer Amanda Majeski steps into her shoes with breath-taking intensity, making the audience (literally) shake with her during her mental breakdown. Director Richard Jones helps her create this effect by cleverly employing his cast of choir members and actors, who fill the stage for ordinary life scenes, empty it to emphasize Katya's solitude and finally fill it with judging, disapproving eyes. Group scenes do play a very important role in the performance, dynamically changing the sets, introducing comical elements and effectively

intensifying the drama by adding an extra dimension to the stage.

Although Majeski's extraordinary performance in the title role was clearly the highlight of the opera, others are also worth a mention. Emily Edmons as Varvara and Susan Bickley as Katya's tyrannical mother in law were both brilliant in their roles, one gaily praising love and the other pedagogically instructing a husband how to deal with his wife. A low mark goes to Pavel Cernoch, whose beautiful singing was poorly matched by his acting, resulting in a barely convincing male lead. Finally, Dominic Sedgwick proved he is worth keeping an eye out for. A participant in ROH's Young Artists Programme, his short but passionately energetic

interventions made me eager to listen to more of him in the future.

Like any good disciple of the Romantic tradition, Janacek places a large weight on symbols. Natural elements, such as a bird, the river Volga that crosses the town where the action takes place, and the thunderstorm that accompanies the fateful upshot of the plot, all have metaphorical significance. The music which represents these elements is also symbolic, providing our ears with motifs that our subconscious then starts associating with specific events. Often you don't really need to look at the stage to know what is going on, even without knowing Czech! Particular to Janacek's style is his treatment of dialogue. His melodies result from a thorough study of



Amanda Majeski as the titular Katya // Alastair Muir

speaking patterns, so that rhythms and tones feel natural and conversational, informed by the mood and emotional state of the characters. The orchestration is very effective, actively shaping the action at every moment. One of my favourite sets was the end of the opera, where a delicate, yet

disturbing off-stage choir leads to a tragic orchestral conclusion.

After all, this is no regular plot. Janacek's dramatic and musical mastery together with clever staging and great performances make *Katya Kabanova* a tension-packed story of love, crime and punishment.



## ARTS

arts.felix@imperial.ac.uk

## Rattled: A spotlight on postnatal mental health

Rachel Harper shines in a brilliant solo show as a woman confronting her fractured childhood, shining a much-needed light on female mental health.

## ARTS



**Where?** Old Red Lion-  
**When?** Until 2nd March-  
**How Much?** £12.50

**Shivani Gangadia**  
*Arts Writer*

**R**attled is Missmanaged Theatre's debut production, both written and performed by the multitalented Rachel Harper. She bravely uses her platform to raise awareness of mental health problems in new mothers, half of whom are said to experience it in their lives. This play is an eye-opening statement on a problem that is underreported and underdiagnosed, likely due

to stigma and traditional ideas of motherhood.

The play centres around one such character, Em, whom we meet on a train platform, along with what she thinks is a stranger's baby. This baby becomes her audience, with whom she begins to share her life's story, her confessions, her secrets – and we, as the *real* audience, are privy to all this. She takes us on a journey through her turbulent, traumatic childhood and disappointing marriage, littering the dialogue with moments of sombreness and bursts of dark humour. This is what I especially loved – despite the seriousness of the content, it is deeply witty; even with dark subject matter there are light moments. Sometimes it is genuinely comic; other times, Em is using humour to gloss over

damaging life experiences with a blasé tone and sarcastic quip, nervously laughing the way people do when they talk about something uncomfortable.

It is techniques like this that allow this play to function so successfully as a one-woman play; although there are no other characters to interact with, there is never any dullness or struggle to keep the audience engaged. Even in the necessary moments of silence, there is a gravity and intention behind the choice, where the audience can absorb the words and the emotions.

This is all thanks to Harper, because since she both writes and performs the piece, she is able to present it authentically, exactly as intended. The way she naturally communicates is so raw and vulnerable; there is



Rachel Harper is brilliant as 'Em' // Ali Wright

a fascinating 'stream of consciousness' feel to the whole thing. Whilst it was humour that engaged the audience and kept us listening, I'm sure we all left having been touched by themes that we could relate to – loneliness, struggle, fear, desperation, resilience, courage,

and overcoming hurdles – even if the exact situation itself wasn't shared by all. At the end of the play, Harper says a few words about how the story is inspired by a real woman she met who shared her experiences with postnatal mental health. To me, this highlighted the very

real nature of the play, and that the content was not just entertainment, but a wonderful starter for meaningful conversations about mental health. Highly recommended!

## Don Quixote – A Sizzling Spanish Comedy

Sun, laughter and impressive technical performances: Carlos Acosta's dazzling choreography is brought to life by the Royal Ballet.

## ARTS



**Where?** Royal Opera House  
**When?** Until 4th April  
**How Much?** Prices vary

**Rebecca Byford**  
*Arts Writer*

**D**on Quixote is a sumptuous delve into Spain through Miguel de Cervante's classic story. It follows the eccentric Don who, through reading too many old tales, believes he is a knight and goes out seeking adventure with his faithful squire Sancho. Their misadventures

involve helping young lovers Kitri and Basilio evade Lorenzo (her father) and Gamache (the proposed suitor). It's hardly smooth sailing for the pair, but all ends well in an impressive final wedding scene.

Carlos Acosta's daring new choreography for the Royal Ballet was introduced in 2013 alongside the fantastic score by Ludwig Minkus. The sumptuous music transports you to the Mediterranean and was wonderfully conducted on the night by Martin Yates. Acosta wished to show off the full cast in this large-scale ballet, so alongside the traditional solos and pas de deux, there are many marvellous group sections for the corps de ballet.

Throughout the night

it was a delight to watch Kitri (Marianela Nuñez) and Basilio (Vadim Muntagirov). Both gave truly outstanding performances with great characterisation and impressive technique. Nuñez perfectly achieved the remarkable 32 fouettés in Act III, travelling en pointe, escalating grand jetés and effortlessly held the many balances. All this whilst lighting up the audience with her radiant smile. Muntagirov caused the audience to gasp with his remarkable split leaps, displayed impressive pirouettes and jumps, and conveyed elegance in every moment.

The level of trust and togetherness shown by the pair was revealed in the final pas de deux, with the incredibly difficult 'fish dives' seemingly effortless.

Alongside them were a number of standout performances. Kitri's cheery friends, played by Yuhui Choe and Beatriz Stix-Brunell, pulled off the difficult pas de deux. Laura Morera portrayed a delightfully flirtatious Mercedes alongside Ryoichi Hirano's arrogant Espada. During the dream sequence of Act II, Fumi Kaneko made the complex routine as Queen of the Dryads seem effortless with delightful extensions, and Anna Rose O'Sullivan provided a wonderfully exuberant Amour.

Another highlight was brought by the corps de ballet in the gypsy scene at the start of Act II – the more contemporary repertoire delightfully brought it to life.

This performance

requires just as much talented acting as it does dancing. In this vein Don Quixote (Christopher Saunders), Sancho Panza (David Yudes), Lorenzo (Gary Avis) and Gamache (Bennet Gartside) are brilliantly performed, bringing real moments of comedy to the stage. Yudes in particular had wonderful comedic timing.

At times Acosta's ambitious choreography can leave the stage feeling crowded, with almost too many things to see at once. This combined with Tim Hatley's moving set, although beautifully setting the scene, can at times be distracting. However, despite these things, it is a brilliant move in modern ballet, reenergising the perceived stiffness of classical

ballets.

This vibrant and highly comedic production, combined with the amazing talent of Nuñez and Muntagirov is definitely one not to miss.



Marianela Nuñez as Kitri  
// Johan Persson



## ARTS

arts.felix@imperial.ac.uk



She looks innocent, but don't be fooled // Paul Coltas

## The brilliant mess of the Birmingham pantomime

*Arts Writer Sam Welton reflects on the, shall we say, Peter Pan-inspired, not-entirely-child-friendly Birmingham panto. Buckle up for a wild and hilarious rollercoaster ride!*

## ARTS

Sam Welton

Arts Writer

Pantomimes follow a simple formula - jokes, colourful costumes and a pervasive camp atmosphere combining to form family entertainment. As had been family tradition for over ten years, this Christmas I experienced the Birmingham pantomime. Now, experienced really is the word - as in that time it has devolved into simultaneously a perfect distillation but also parody of the genre, and at this point exists entirely to entertain the adults. Don't get me wrong, the funny man doing the big fart and the colourful dresses keep children entertained, but the endless sex jokes and dated references reveal its true colours. But it is definitely still pantomime. It has laughs for days, the most flamboyant costumes you will ever see, and by god it's camper than a weekend in the

Peak District with Freddie Mercury. Frankly I feel it needs documenting.

This year's show resembled Peter Pan. I say

### "Camper than a weekend in the Peak District with Freddie Mercury"

resembled as, while many characters were present, there was also a sizeable amount of random deviation. The "buttons"- alike (played by a man named Matt slack who literally carries the entire show) was Mr. Smee, rewritten as the nanny of the kids and a spy for them once in Neverland. There is also a fairy godmother character, who you may be surprised to find is not actually a fairy but a magical mermaid with short term memory loss who flies around in a giant clam shell. Buckle up, we

are just getting started.

While the kids fly to Neverland with fairy dust, Mr. Smee travels by means of flying vesper which is hydraulically lifted above the audience in a very convincing effect. Upon arrival the plot proceeds to play in both high speed and slow motion. The show tries to hit all the important moments of the source material, but given half the scenes are just vehicles to tell jokes, 30% are immaculately choreographed dance numbers and 10% are sudden intense acrobatics sessions that teach you the meaning of tension, there isn't much time left for plot. Vital moments just suddenly happen, the first time the word "mum" is used is when Peter asks Wendy to be his. Tink drinking the poison completely alone is such an immense plot hole that Smee calls her a stupid cow. There is a five-minute scene in the second-half where Hook and Smee flirt, ending with a metaphorical

orgasm when Smee's guitar explodes. A joke is made about Smee having an inflatable girlfriends before he returns to save the day using an extended matrix parody wherein physical theatre is used to show slow motion. Still with me?

Of course, there are constant fourth wall breaks throughout. Along with the classic "oh no you didn't" and such there are meta jokes about who the actors are, about the reality of putting on a show etc. Donny Osmand plays Hook and Smee spends the entire show asking where Jimmie is; Wendy at the end makes a long and painful Brexit joke to the audience and, during the final loving moment between Pan and Wendy, Smee pipes up and reminds everyone that the actor playing Pan is 35. This immediately caused the entire cast to corpse in a moment that will stick with me forever.

And with that, the show is basically over - there is only one more

tradition to fulfil. At the end, Smee brings four kids from the audience up on stage to talk to them about the show, make some wholesome jokes to the audience, give them presents and make them feel special. It's a sweet way to end the show. I, having been so many times, know how easily this can go awry. This year for instance one of the kids wouldn't stop dancing, at any point. Another was so bewildered he could barely speak, but it all played out nice in the end. I would be remiss not to mention last year though, wherein one of the children was a seamless plant. We know this, because after seemingly acting like a show-off to the audience, the straight-faced Buttons character said, "no one likes a know-it-all", picked up the kid and dropped him into the band's pit. The entire audience lost it. The power of subversion of expectations.

No doubt, what I witnessed that Christmas Eve

was completely senseless, barely even trying to tell a story. But here is the thing, while it may be nonsense, deep down, you can't tell me you don't want to experience it. Over the years the show has reached the point of maximum mess. The whole thing feels like what you and your mates might pull together if you were told you had to put on a show and had an hour to prepare, but with the budget of a Broadway production. Frankly, there is nothing I've ever experienced quite like it and that is why, at 21, I have every intention of going again next year - and you should too.

Finally, I wish to extend my best wishes to Donny Osmand who suffered a stroke mid show only three days after I was there. Having powered through to the end of the performance he was rushed to hospital. He seems to be doing better now but was unable to perform subsequent shows. I hope he makes a full and speedy recovery.



# ARTS

arts.felix@imperial.ac.uk

## Review: *Tobacco Road* at the Vaults

### ARTS



**Where?** The Vaults  
**When?** 13th - 17th Feb  
**How Much?** £15

**Simran Kukran**  
*Music Editor*

**T***obacco Road* begins with a standoff, a gang cornered in a shootout, directly facing the audience. The gang of 1920s ne'er do wells address the audience. "We should tell them how we got here" gesturing at us. "We'll have to start all the way at the beginning". The cast run through the years 1918-1920, explaining

why life as gangsters is so attractive and exciting in postwar London. The Great War had left a legacy of disarray and corruption, fuelled by alcohol and cocaine. The cast use very few props, just a few crates and bandages to tell the story. Impressive theatrics, including choreographed dance routines, are integrated in a way that isn't cheesy or cliché. This is by far the highlight of the show.

While the London accents are far from convincing at times, the characters are well developed. The plot follows Elsie (Jennie Eggleton) and Frida (Atlanta Hayward) in their struggle to make money upon having lost their factory jobs to returning soldiers. They join forces with loveable buffoon Alfie (Dan Whitlam), sympathetic brute Tom (Angus Cas-

tle-Doughty) and Felix (George John), the ring leader and brains behind the operation. To begin with, the gang are at the bottom of the pile; petty thieves struggling to make ends meet.

As they work their way up the ranks, accumulating wealth and reputation, cracks begin to show and their ambition leads to

**"Biting off a bit more than you can chew was leaked somewhat into the production"**

their inevitable demise. It seems the approach



If you squint it's like *Peaky Blinders* // Tim Hall

of biting off a bit more than you can chew has leaked somewhat into the production. While the individual performances are compelling, there is too much packed in to pace well in an hour. This means the production relies on a periodic narration, a

repetitive breaking of the fourth wall to advance the plot. The result is somewhat disjointed and feels rushed and unresolved. Some interesting plot points - the struggles of a queer boxer and a gangster with a develop-

ing drug problem - are left unexplored. Despite these shortcomings, the show is worth going to see, if just to see a boxing ring transform into a telephone wire.

## The designer baby debate

The Power To Control Your Own Evolution, with Robert Winston, Tom Whipple, Gunes Taylor and Inga Prokopenko.

Book your space via the Imperial College website.

Sir Alexander Fleming Building, G16  
 Tuesday, February 26, 2019  
 5pm - 7pm  
 Food and drink included



Robert Winston



Gunes Taylor



Tom Whipple



Inga Prokopenko

**THE TIMES**  
**THE SUNDAY TIMES**  
*Know your times*



# MUSIC

music.felix@imperial.ac.uk

## The man with the Midas touch, ante-ambient

*How Brian Eno's solo debut Here Come the Warm Jets cemented his legacy as one of music's most unconventional yet influential figures.*

### MUSIC

**Adrian LaMoury**

Music Editor

As part of creating the Windows 95 start-up sound, Brian Eno is perhaps best known for pioneering the genre of 'ambient music', where extended instrumental compositions slowly loop and bubble, creating soundscapes that are intricate yet discreet. His work in this area went on to directly inspire artists such as Aphex Twin, William Basinski, and Tim Hecker. Long before this, however, Eno was doing something really quite different.

His musical career began in 1970, though not as a musician, when he joined groundbreaking art rock band Roxy Music as a 'technical advisor'. He'd known founder member Andy Mackay from their days in art school where the two had bonded over their shared love of electronic music, and so when Mackay joined forces with singer Bryan Ferry, he convinced Eno to come aboard. It was an odd appointment, as Eno played no instruments and had absolutely no musical experience. What he did bring to the table, however, was a reel-to-reel tape recorder and a eye for experimentation.

Before long, Eno became an integral part of the band. Their debut album *Roxy Music* (1972) was a genre-blending landmark of creativity, fusing glam, prog, and pop to form a symphonic whirlwind of an LP. A constant advocate for the avant-garde, Eno's influence was strong; he

contributed synthesisers and tape effects that gave their music an otherworldly quality. On stage he was a wizard. Cutting and manipulating tapes to distort their sound in real time. This, along with his flamboyant feather boas, garnered him much attention, despite never taking centre stage. His presence was only amplified on their second album *For Your Pleasure* (see *Felix* issue 1686), particularly on the eerie and dystopian closing track.

**"It was here that he first challenged the norm and probed what it really meant to make music"**

Frontman Bryan Ferry (along with just about everyone who knew them) drew much inspiration from 60s proto-punk band the Velvet Underground. The story of their early days is one of a great power struggle and fierce rivalry between two extraordinary musicians. Vocalist and primary songwriter Lou Reed was, for the most part, a straight forward New York rock and roll type with insatiable charisma. By contrast, fellow bandmate John Cale was a reclusive viola-playing Welshman. The two grappled to take the band in different directions. Reed, frustrated by their lack of commercial success, wanted to pull them towards the mainstream, while Cale sought to further nourish

their experimental artistry. Following their second album, *White Light/White Heat*, the tensions became too great, and Cale was acrimoniously given the boot.

It is fitting, or perhaps ironic, therefore, that Roxy Music nigh on exactly replicated the path carved by their idols. After just two albums, dashing crooner Ferry began to tire of Eno the bohemian stealing the limelight, and wanted to take the band in more conventional directions. Resistant to this change, Eno departed citing creative differences, leaving Ferry the dominant force. While both Roxy and the Velvet continued to produce very fine music without their respective renegades, it is certainly arguable that something of their original creative flair was lost. Coincidentally, though not unsurprisingly, Eno and Cale would later go on to become firm friends and collaborators, even recording an album together, 1990's *Wrong Way Up*.

Free of restrictions, Eno allowed his creative tendencies to run wild. His debut solo album *Here Come the Warm Jets* was released in January 1974, though it was anything but solo in nature. A thread that was to run through the rest of his career, Eno enlisted a whole host of collaborators, including all members of Roxy Music (bar Ferry), and King Crimson guitarist Robert Fripp, with whom he had recently recorded the experimental noisecape (*No Pussyfooting*). Recording techniques were as unconventional as you would imagine, with Eno



Brian? What does 'e know?! // Island

often directing musicians to swap instruments, or giving instructions solely through the medium of dance. For those who know Brian Eno only for his ambient work, the initial shockwave hits immediately in the form of a throbbing distorted guitar. Shortly afterwards, we find out that Eno can sing. And boy, can he sing! The first side is frenetic and high-octane. With conventional song structures out the window, hooks and choruses are in short supply, while feedback-driven instrumentals (notably Fripp's sublime guitar work on 'Baby's On Fire') are aplenty. Cryptic lyrics act more as impressionistic word decorations than narrative devices, with Eno's voice veering between distant

drones and staccato snarls. As the noise of sinister nursery rhyme 'Driving Me Backwards' draws to a close, we hit a change of gear. The piano-led ballad 'On Some Faraway Beach' is by far the most tender moment on the LP, its simplistic yet evocative lyrics ("Unlikely I'll be remembered / as the tide brushes sand in my eyes / I'll drift away") ushering in an unexpected moment of clarity and vulnerability. Following this precedent, the second side is musically lighter, favouring synths over guitars. It's here that we can see the seeds of his minimalist approach begin to germinate, though it wouldn't sport its first flower until *Discreet Music*, just short of two years later.

*Here Come the Warm*

*Jets* is a peculiar yet extraordinary stepping stone in Eno's career. It was here that he first challenged the norm and probed what it really meant to make music, the resulting album being more akin to a Dadaist vignette than a pop-rock record. After a string of ever more experimental solo albums, he soon found himself engaging in landmark collaborations with David Bowie and Talking Heads, and behind the boards producing for the likes of Devo, U2, and Coldplay (we all make mistakes). His gargantuan influence on the musical landscape really cannot be understated, and he's still churning a regular output to this day. Seemingly without even trying, everything he touches turns to gold.



# FOOD

food.felix@imperial.ac.uk

## Did we just hear someone say brunch?

*Have you ever found yourself with some free time before a 12pm class, where it's too early to eat lunch but too late for breakfast? Brunch (not only for weekends) is the answer, and we've rounded up all our favourite spots around campus...*

### FOOD

**Julia Dabrowska**

Food Editor

What comes to mind when you see the word 'brunch'? Probably a bunch of millennials eating crunchy avocado toast, Insta-worthy smoothie açai bowls or stacks of warm waffles (drizzled with maple syrup and topped with fresh summer berries of course), and all of this costing you lots and lots of £££.

Although that may be a part of it, brunch can also be a nice treat for you and your friends to enjoy on any day of the week, (right before that booring lecture) and super close to campus as well! We therefore present you 3 places to have brunch near campus, all no more than an 8 minute walk away from campus!

#### Muriel's Kitchen

Located just outside South Ken station, this place is always hustling and bustling (what better marker of a food venue's popularity, right?), and

after peeking in and seeing the delicious plate of croissants that was being consumed at the cute marble-style tables, I knew I had to go in and try it. Judging by the youthful presence, I was sure that the food served here was not your simple brunch. I was right – Muriel's Kitchen provides everything you could want for brunch with a modern twist. Particular things that caught my eye included The Ultimate Eggs Royale, Banana & Ricotta Pancakes, and the omnipresent Buddha Bowl which I ended up ordering and very much enjoying (is it me, or are they absolutely everywhere?!).

And don't worry about drinks – from their classic ice cream milkshakes

**"I was sure that the food served here was not your average simple brunch. I was right..."**

and fresh juices to more unique beverages such as the turmeric latte, you'll surely find something to complement your meal. The counter also has an array of warm, freshly baked homemade cakes, including banana bread, Nutella cake or their special carrot cake. Prices range from £2.30 for a pastry with spreads to £12.50 for a Full English – by brunch standards, pretty good. (Oh, and if you're interested in all that basic bitch stuff, they do a lovely afternoon tea too!)

#### Brown & Rosie

Walking past Brown & Rosie on my many, many trips to campus (skipping lectures is of course not recommended by Felix Food editors... unless they're 9ams), I was always fascinated by the classy but cute décor, not to mention the mouth-watering food from their Instagram ads (that I've been getting ever since I once liked a post marked #brunch (GDPR anyone?). On a lovely day last week, I finally got the chance to see if the food lived up to the aesthetics.



Salmon and avocado brunch at Le Pain Quotidien // Julia Dabrowska

Again, the variety was not disappointing – apart from classics such as French toast or smoked salmon, you can also find the sugary Coco Pop waffles (personally tried and tested – although extremely sweet, also extremely yummy!) or the healthier courgette & corn fritters, if you so desire (new year new me going strong?). The taste was also lived up to the aesthetic – rich, well-made and well, good. Albeit priciest on our list, you can find yourself a meal for £5.50 to £12.90, and the portions are very filling. The only things worth complaining about are the size of the venue, as it can get busy at times, and the semi-slow service – but the food is good enough to compensate, so definitely worth a visit.

#### Le Pain Quotidien

Finally, after having tried some less 'typical' brunch places, it was time to test a more popular venue. Le Pain Quotidien,

as the name suggests, (for those of you who don't speak French, t'as pas honte) is largely known for its selection of fresh bread, pastries, sandwiches and all that kind of yummy carbs, in its chain-café-style locations, the nearest of which is located just a minute away from South Ken station (and actually opposite Brown & Rosie). Having heard a friend raving about it after she had eaten brunch there just recently, I thought it was worth a try. The outcome? Incredible.

Besides their usual eat-in omelette, eggs any style, smoothie bowl,

**"Best of all, all the breakfast foods fall in the price range of £4.20 - £8.00 - win-win!"**

or parfait options, you can also order takeaway bagels, salmon and cream cheese tartine or even avocado toast for when you're rushed for time. Yes, you read that right – delightful avocado toast which you can take away, all carefully packaged in a box so you can eat it in the back of the lecture theatre (if you manage to make it last those 7 minutes of walking). Best of all, the breakfast foods fall in the price range of £4.20 to £8.00 – win win!

The lowdown? Although the food is the simplest in LPQ, it definitely takes the gold in terms of affordability and ease. If you're looking for something a bit more original and Instagrammable (and you have a bit more time), go for Muriel's Kitchen or Brown & Rosie – they're worth it.

Now let me enjoy my Eggs Benedict in peace...



Buddha Bowls at Muriel's Kitchen // Julia Dabrowska



# SUSTAINABILITY

artur.donaldson15@imperial.ac.uk

## IMPERIAL FOOD CO-OP

Providing organic, healthy and plastic-free food to Imperial students and staff at affordable prices.



**THURSDAY**  
12:00 - 15:00  
SAF Foyer

IN STOCK THIS WEEK:  
LOOSE DRIED APRICOTS, WHITE AND BROWN BASMATI RICE,  
MERIDIAN PEANUT BUTTER, AND MUCH MORE!  
**JUST BRING A JAR.**

## Not yet (bothered to be) recycled

40% of plastic used in the UK is used only once. It's time to rethink our use of this resource

### SUSTAINABILITY

Artur Donaldson  
Sustainability Editor

From crisps to coke, and pears to pizzas, almost everything we buy today is wrapped, boxed or bottled in plastic. Disposable packaging is, by definition, used just once yet, according to the government recycling agency WRAP, they make up 40% of all plastic used in the UK. A key part to changing this is a change in culture, particularly around food packaging. We need to cut back on our individual consumption of plastics.

Plastics used for pack-

aging primarily are made from virgin material. This is particularly true of plastic films which are largely made from polypropylene (plastic no 5) and polythene. Despite

**"40% of plastic used in the UK is used for packaging"**

their extensive usage, only 19% of local authorities in the UK collect them, though many supermarkets do collect plastic bags. If you're wondering which plastic is which, polypropylene gives crisp



Are we just going with the flow? // Plastic Ocean, Huffington Post

packets their characteristic crackle. If it crackles, it can't be recycled.

Plastic packaging has brought many benefits. It is used by retailers for good reason to prolong the lifetime of foods and to protect products. They are light, cheap, food-safe materials, and arguably help prevent food waste and fuel in transportation. However, they are being used excessively for the purposes of increasing appeal to consumers.

This excess is causing serious harm to economic and environmental sustainability. Plastic is not a renewable resource – globally its production consumes 8% of oil extracted - 4% for the raw material, and 4% in

# SUSTAINABILITY

artur.donaldson15@imperial.ac.uk

**GENERAL CHAT (TODAY)**  
SAF FOYER FRIDAY  
22ND FEB 12-2PM

**WOMEN'S EVENING**  
SAF FOYER TUESDAY  
26TH FEB 6-8PM

**ZERO WASTE IMPERIAL**

**LET'S TALK ABOUT MENSTRUAL CUPS**

Ask any questions about switching to a menstrual cup in a safe, non-judgemental environment

Or just come along for free tea and biscuits!

**TAMPONS VS MENSTRUAL CUPS**

**ZERO WASTE IMPERIAL**

TAMPONS	VS	MENSTRUAL CUPS
£1500 FOR 12000 TAMPONS	1 LIFETIME COSTS	£60 FOR 4 MENSTRUAL CUPS
1000S OF CASES	TOXIC SHOCK SYNDROME	0 CASES
1 = 4 SAME AMOUNT OF PLASTIC	WASTE	SILICONE CUP REUSABLE FOR 10 YEARS
CHANGE EVERY 3-6 HOURS	CONVENIENCE	CHANGE EVERY 6-12 HOURS & EASY TO CLEAN

generating energy for production and processing.

In the UK, 10.9 million tonnes of plastic are used for packaging each year. That's over half a kilogram per person each day. Some of this is hidden behind the scenes in transportation between production facilities or in the kitchens at restaurants. Yet regardless of where it is used, the key point is that, as a society, we consume too much of it. We choose, by buying cheap products with disposable packaging, to send around a half of plastic to landfill. It will stand as a testament of our wastefulness for generations to come. The largest structures which our species have built are not walls nor pyramids,

but landfills (Fresh Kills Landfill in New York).

One might struggle to design a more optimal

**"52% of plastic sent for recycling in the UK meets its fate in an incinerator"**

system for increasing the greenhouse gas content of our atmosphere, the plastic content of our seas and reducing the biodiversity of our ecosystems than our take, make and dispose plastics economy. But surely it does not

matter how much plastic we use if it is recycled?

Sadly, recycling is not a satisfactory solution. Firstly, at present, much of packaging used is virgin and has to be because of the poor quality of recycled material. Secondly, the Second Law of Thermodynamics tells us we will never be able to recover all of the plastic. Recycling bins are not magical alchemical cauldrons.

52% of plastic sent for recycling in the UK meets its fate in an incinerator. Recycling is far better than landfill, however it does give a false sense of security. It does not close the loop in our economy and causes other issues such as air pollution. Besides, much of the

plastic which is recycled is exported to less wealthy countries where waste processing regulation is less stringent.

Within our personal lives, there are changes we can make to reduce our dependence on packaging. For one, avoid food packaged in materials not recycled in our area. Secondly, make use of our own containers. If we bring reusable containers to shops we could significantly cut back on waste production. The blossoming of coffee mugs from the rucksacks of students at the college since the introduction of the 25p levy on coffee cups are testament to this. Take this one step further and bring tupperware to serve food in. Catering

**"Let's use this a incredible material a bit more resourcefully"**

outlets including the Tuesday farmers' market have already agreed to serve food in containers brought by customers. Some supermarkets and smaller enterprises, such as Whole Foods, Eat 17 in Hammersmith and the Imperial Co-op (see above) have refill stations for nuts, pulses, beans and cereals which bypass use of plastic for pantry essentials.

Government could do

more to prevent plastic from going to landfill. Eight EU countries, including Germany, Switzerland and the Netherlands, have banned disposing of plastic in landfill, ensuring all waste is recycled or used for energy generation.

We do not have a choice about whether we stop using oil-based plastic as, eventually, we will run out of affordable crude oil. Let's use this incredible material a bit more resourcefully.



# INVESTMENT

icu.investmentsociety@imperial.ac.uk



## Sovereign debt: a tale of two dilemma's

### INVESTMENT

**Tom Alston**

*Investment Editor  
ICIS Editor in Chief*

At the beginning of the month, Beth Hammack, a senior Goldman Sachs banker and chair of the government advisory group known as the Treasury Bond Advisory Committee sent a letter to Steven Mnuchin, Treasury Secretary, warning that according to TBAC calculations, America will need to sell \$12 trillion of bonds before the end of the decade. The question loomed that who in the global financial industry will buy this vast amount of treasuries? This is especially worrying after China's holdings of US treasuries (previously probably the most reliable source for demand for American debt as it amassed vast foreign exchange reserves amid its export boom) shrank from \$1.25tn to \$1.12tn over three years. Chinese diplomats deny that this is part of a political game amid trade tensions between the two superpowers. Fang Xinghai, vice-chairman of the China Regulatory Commission stressed that Beijing does not intend to "significantly reduce its investment into the US government bond market". Instead many investors see the declining Chinese demand for US debt as a result of its slowing imports and changing demographics. Furthermore, China is not alone. Ms. Hammack warned in her letter about "a stagnation in international reserves" and that in the future there must be "an increased need for this [US] debt to be financed domestically". Fortunately, American

domestic savers have been filling the gap. American households held nearly \$2.3tn in Treasuries in November last year, increasing from \$1.9tn from January. Despite this, with the governments increased spending plans the need for US debt is rising. Some hedge-funds now conclude that in five years' time the Treasury will need to sell bonds equivalent to 25% of GDP, up from 15% now. That level of debt has only occurred twice in the past 120 years. Once during the second world war and again during the 2008 financial crisis. The clear solution would be for the Trump administration to change its fiscal aims and reduce its reliance of debt, but with no mention of the problem during his State of the Union speech, that is very unlikely. Further souring the situation is the \$9 trillion corporate debt bomb, "bubbling" in the US economy. Many Investors worry about this as the current cash-to-debt ratio for corporate borrowers fell to 12% (lowest ever), which means there is a shortage of cash to cover this debt. There is no slowing this advance as the Fed U-turns on

interest rate hikes, causing cash to funnel into bonds, whose fixed interest payments become more valuable if the base rates fall. However, this was expected as Investors feared that increasing interest rates would push the US economy into recession, bringing to an end a credit cycle which had seen companies stockpile low rate debt. Despite this, Hans Mikkelsen, a strategist at Bank of America Merrill Lynch, warned that a further increase in supply could test investor

demand as seen with sovereign bonds. Meanwhile, across the pond Germany's insistence on running a balanced budget and a current account surplus has led to no expansion in debt issuance. Consequently, there is an undersupply of Bunds, creating a shortage of safe assets in the eurozone. This leads to exacerbation of the price effect of European Bank bond-buying, increasing the spread between German yields and those of riskier

assets for example Italian sovereign bonds. The yield of the 10-year Bund has slipped this year to 0.1%, increasing the spread against equivalent Italian bonds to 2.9%. EU budget rules do aim to ward off excessive surpluses, as the euro was created "as a means of strengthening the political bonds between [European Nations]" as stated by the European Commission. By deliberately under borrowing you leave the continent's banks and pension funds suffocating

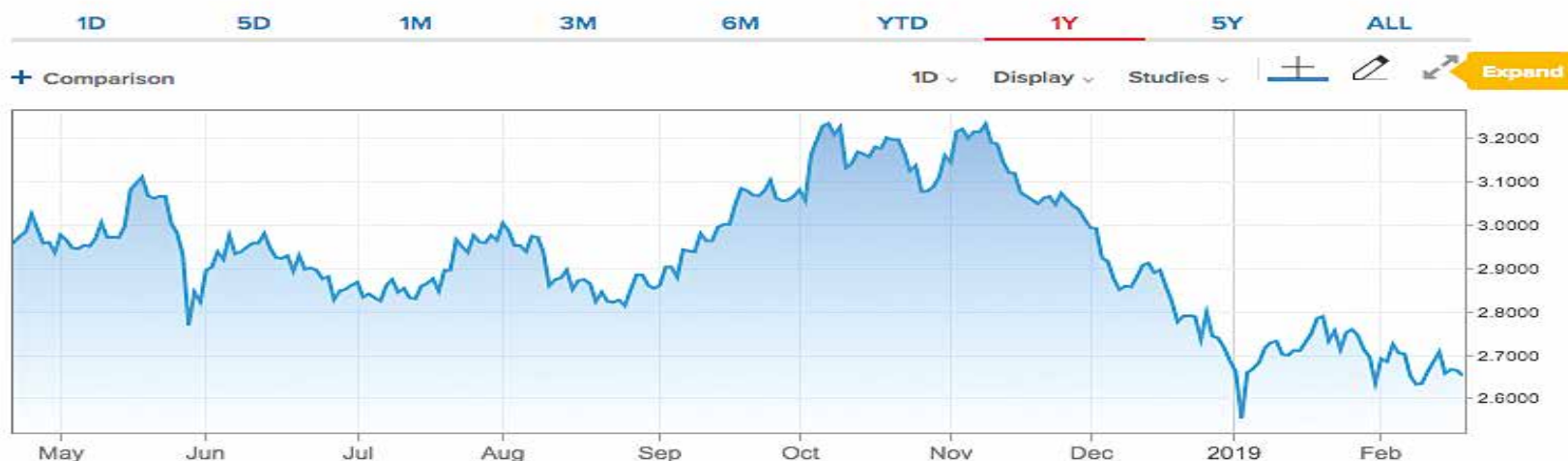
under a shortage of safe assets. Is Germany therefore fulfilling that pledge? Interestingly the shortage of bunds has many investors worried about bubbles in sectors such as real estate. Investors need to put their money in something and when there aren't enough Bunds going around they are forced into substitute assets which become overloaded and hence suffer price bubbles.

### U.S. 10 Year Treasury (US10Y:U.S.)

Real Time Quote | Exchange

Yield | 11:28:17 AM EST

**2.652 %** **+0.007**



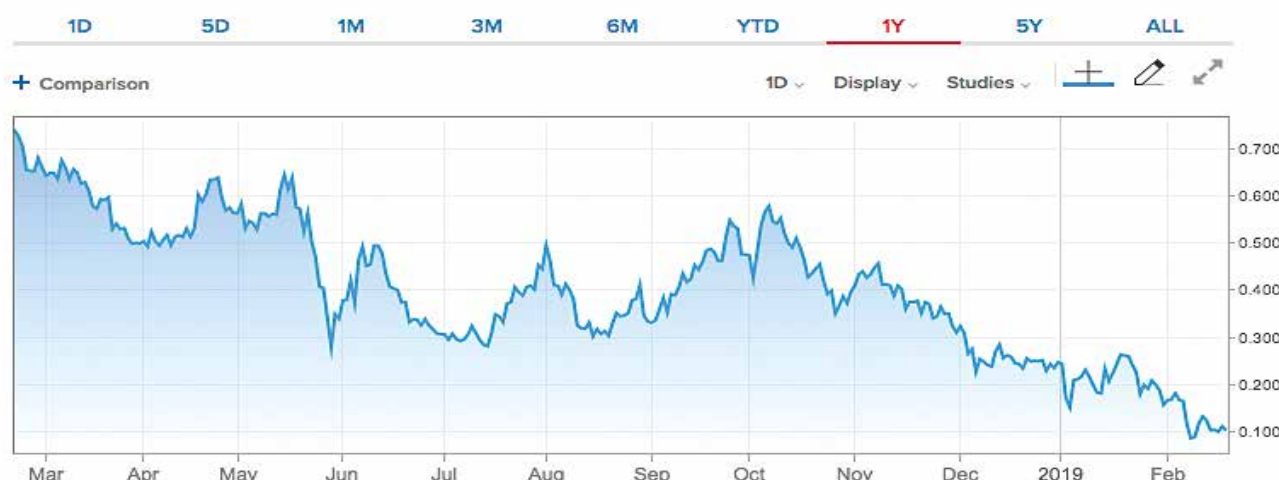
US 10 Year Treasury Yield// **CNBC**

### Bund 10-YR (DE10Y-DE:Germany)

Real Time Quote | Exchange

Yield | 5:33:16 PM CET

**0.102 %** **+0.001**



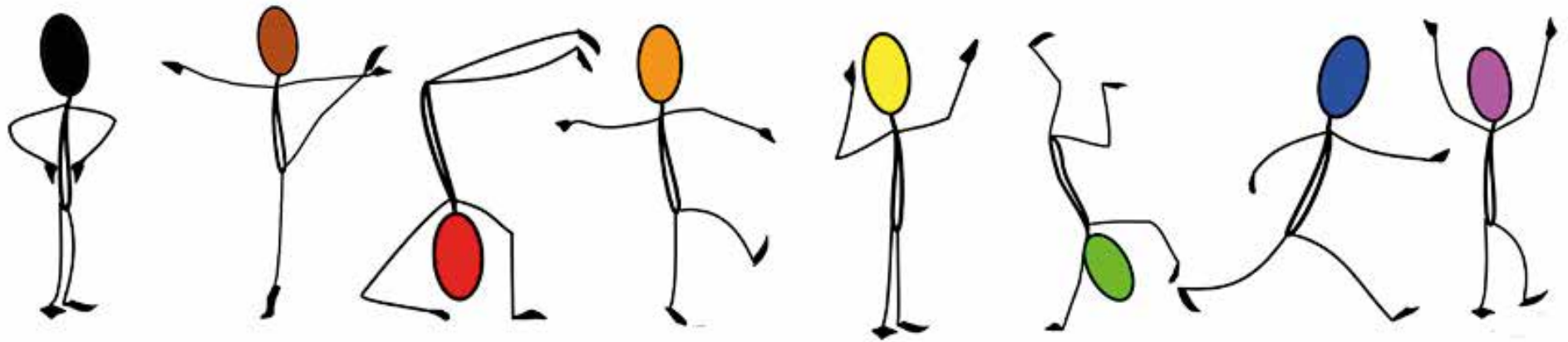
10 Year Bund Yield// **CNBC**



# LIBERATION

felix@imperial.ac.uk

pride  
not  
prejudice



22-24 february 2019 london

The UK's largest LGBT+ careers fair and conference // Student Pride

## National Student Pride 2019: More Pride, Less Prejudice

### LIBERATION

**Andy Djaba**  
*Editor-in-Chief*

As LGBT History Month draws to a close, National Student Pride (NSP), the UK's largest LGBT+ careers fair, holds its annual conference at the University of Westminster.

NSP brings a vibrant mix of graduate careers fairs, conferences, debates, cinema screenings, parties, exhibitions, and workshops to London. This weekend sees the return of the three-day 'extravaganza', which hosts over 1700 students from 170 global univer-

sities. The event is also available online via live stream. NSP consistently motivates young queer people to engage with challenges facing our community, furthermore providing attendants with the unmissable opportunity to access the UK's biggest LGBTQ+ careers fair.

Signature moments from NSP's rich history include Courtney Act (Big Brother and Ru Paul's Drag Race) host 'queer dates', Olly Alexander tackling sex education and declaring that, "we still grow up in a society where we're told that we're 'othered' as LGBT people", and Will Young colourfully calling out key government ministers on mental health.

The Saturday main-stage at NSP 2019, in collaboration with Attitude Magazine, will be combating the issue of prejudice within the LGBTQI+ community and getting to grips with what it means to be an activist with the '50 Years of Stonewall' panel. Continuing to engage with important issues, the Gay Star stage will be discussing the "+" in LGBTQ+, and explore Student Sexwork to understand how we can provide better support to our peers. And what better way to end the weekend as Student Pride take over the world-renowned G-A-Y Heaven Saturday Night, following up all the fun with a queer bus tour of London with some of the city's hottest drag

talent.

Keep a lookout for announcements on who will be gracing National Student Pride as panellists to, as always, provide information and inspiration as to how we can move forward as a community. Without a doubt, NSP 2019 is going to animate some pretty crucial conversation.

National Student Pride is being platinum-sponsored in 2017 by EY for the seventh consecutive year. Maggie Stilwell, Managing Partner for Talent at EY, UK & Ireland, comments: "EY are proud to be the Platinum sponsor for National Student Pride 2017, a partnership we have built and maintained for the last seven years.

Our commitment to diversity and inclusion is unerring and the event allows us to connect with young LGBT talent in an environment of respect and opportunity. It's important for us to show the next generation that they will be able to be themselves in the workplace. Last year thousands of the students from across the UK attended the event and we are excited to meet even more in February at the Careers Fair. We look forward to the whole weekend festival of events, including the ever popular series of discussions."

Law firm Clifford Chance and 02 are gold sponsors. The Adidas Group, Aviva, Enterprise Rent-a-car, GE Capital,

IBM, Lloyds Banking Group and Thomson Reuters are silver sponsors.

The event began at Oxford Brookes University in 2005 as a response to the Christian Union's 'Homosexuality and the Bible' talk. Student Pride continues this mantra in its 12th year, choosing to hold its 2017 event on campus because the fight students face remains just as prevalent, if not more complex, than when we first began.

Tickets are available now: [www.studentpride.co.uk/tickets](http://www.studentpride.co.uk/tickets). £5 early-bird price covers entry to all NSP club events





#icuelections

## Thinking of standing?

[imperialcollegeunion.org/elections](http://imperialcollegeunion.org/elections)

### Shape your Union

Not sure why you should stand in the Leadership Elections? You will have the ability to drive change and steer the direction of your club, society, the Union or wider College. Standing in the elections will also allow you to meet other students and build relationships across the Imperial community. In addition to all this, you will also boost your employability and stand out to potential employers.

Whether you want to make a difference as President of a Constituent Union or as a Departmental Faculty Rep, there are over 700 roles available in which you can make a difference. Read more about all the roles and nominate yourself at [imperialcollegeunion.org/elections](http://imperialcollegeunion.org/elections). Or maybe you know someone who would make a great candidate? Give them a 'nudge' at [imperialcollegeunion.org/nudge](http://imperialcollegeunion.org/nudge). Nominations close on **Friday 1 March**.

Imperial College London



### Reflect on your experiences Gain the Imperial Award

#### Benefits of registering and participating in the Award

- You can access a personal, private online portfolio allowing you to track your activities and experiences.
- You'll get a line on your transcript for each Stream you complete and an extra line if you achieve the full Imperial Award.
- Participating will improve your writing skills, helping with job and grant applications.
- You will develop attributes highly valued by employers.
- There is nothing to lose, only successful students have the outcome recorded.
- The Imperial Award is developmental, the skills you learn and attributes you develop will remain with you forever.
- There are plenty of support resources available, including workshops, videos and your personal tutor.

Find out more and register online  
[imperial.ac.uk/imperial-award](http://imperial.ac.uk/imperial-award)

## ICXP

IMPERIAL CLUBS EXPERIENCE PROJECT



### Sign up for ICXP

Has your Club, Society, or Project signed up for ICXP yet? Gain special rewards such as priority placement at Freshers' Fair, promotion on Union social media channels, exclusive workshops and much more.

ICXP - Imperial Club Experience Project - is a way for Clubs, Societies & Projects to be recognised and rewarded for their successes. CSPs will receive points for the completion of a series of goals, unlocking rewards along the way. It's a great way for clubs to develop for the benefit of their members.

Deadline is 20 March. Sign up at [imperialcollegeunion.org/icxp](http://imperialcollegeunion.org/icxp).

Make great memories



Wednesday 27 February  
Reynolds | 19:00 - 01:00

**22** February, Friday

Cocktail & Jazz  
Metric | 19:00 - 23:00

PGI Friday  
h-bar | 19:00 - 23:00

Battle of the Bands: Heat 4  
Reynolds | 19:00 - 23:00

**26** February, Tuesday

Super Quiz  
FiveSixEight | 20:00 - 22:00

Cocktail & Jazz  
Metric | 19:00 - 23:00

**27** February, Wednesday

CSP Wednesday  
Beit Bars | 19:00 - 01:00

Club Reynolds  
Beit Bars | 19:00 - 01:00

**28** February, Thursday

Pub Quiz  
h-bar | 19:30 - 22:00

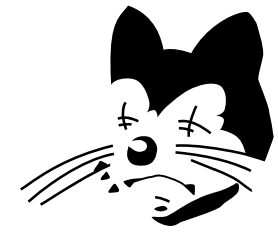
**1** March, Friday

Beit Me I'm Famous  
Beit Bars | 20:00 - 02:00

PGI Friday  
h-bar | 19:00 - 23:00

[f beitbars](#) [f hbarpub](#) [f reynoldsbarcx](#)





# Hangman



I'd be pissed if I didn't get mine too // Imperial College Union

## Academics riot after Union misplaces SACAs mugs

### HANGMAN

Negafelix  
Editor-in-Chief

Staff across multiple campuses have rioted in their tens after the Union announced it had lost a shipment of SACA mugs to be delivered to nominees.

**"How the fuck do you lose a box of mugs [...] the Union's filled with 'em, and I'm not talking about the cups!"**

The shipment of branded mugs, intended for all SACA nominees, was said to be mistaken by an unassuming staff member as a delivery for the Rugby club, causing

for the blunder was sent round to all nominees on Wednesday. Within minutes, angry crowds gathered in the Senior

Common Room, flipping tables and breaking trays in protest. Similar scenes were reported in Hammersmith and Charing Cross campuses, though Silwood was notably quiet, as the WiFi was down.

Ronny Greaves, Reader in Advanced Molecular Madness in the Department of Chemical Engineering, was irate at the Union's blunder. "How the fuck do you lose a box of mugs?!", he ranted, "the Union's filled with them, and I'm not talking about the cups! Do you know how many hints I had to drop to my students - every lecture for the past 6 years - I even poked them on Facebook! And the one

year I get nominated, they mess up!"

Claire Aberkorn, Graduate Teaching Assistant in the Department of Chemistry, was inconsolable at the news. "This was the one thing I was looking forward to," she wailed. "I'm underpaid, overworked, and now I don't

**"Now I don't even get my mug - I'm not paying 20p extra for a stupid paper cup!"**

even get my mug - I'm not paying 20p extra for a stupid paper cup!"

When confronted with the news, Amadeo Buy, Deputy President (Emancipation), immediately became defensive. "Look, I already went round campus in that weird green gimp suit," he complained, "what more do you want from me, for fuck's sake!"

This year's SACAs have been plagued with disappointment - the Union was criticised for an overly aggressive approach in promoting the awards, with allegations of students being flogged to fill out nomination forms in the Library group study area.

This was followed by a

**"I already went round campus in that weird green gimp suit, what more do you want from me?!"**

disappointing number of nominations being made, with only 500 being put in, half of which were put in from an IP address registered to UCL, in what is believed to be an attempt to undermine ICU's democracy.

# HANGMAN

negafelix@imperial.ac.uk

## ICIS President stripped of Union membership in embarrassing blunder

### HANGMAN

Negafelix  
Editor-in-Chief

The President of Imperial College Investment Society (ICIS) has been banned from the Union over an apparent mix-up.

Johann Arrundfeld was informed that his membership of Imperial College Union was rescinded when he attempted to enter the Union Bar for

a pint after lectures this Tuesday.

It is believed that the confusion arose over his similarities in his society's name to an established terror group, though Negafelix has been unable to confirm which one.

"I knew this would happen," he told NegaFelix, "when we started up we thought the name ICIS sounded kind of cool and sexy, you know? Now people keep sending me hate mail on my LinkedIn profile, saying 'hope you die of ringworm, you fucking scum.' I'm never advertising as 'open to recruiters' again - all I

wanted was a damn spring week!"

The decision has been contested by the rest of the ICIS committee, who question the intelligence of the Union. "There's no way they can be that dumb," said Nicky Shoo, club Secretary, "there's a letter difference - how has no one in that building figured that out?"

Yob Dumfries, Union President, refused to change his decision to exile Johann. "The Union stands for democracy and justice, and those people are a scourge on our values! Plus we're running out of money and we need to



Is being banned from the Union the worst thing in the world? // Imperial College

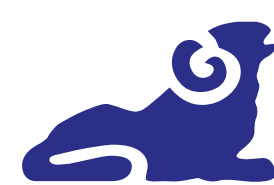
confiscate their accounts to keep h-bar running."

Supporters of the decision have pushed for the Union to crack down

harder on ICIS. "Just get rid of them all together," said Catelyn Taranteno, President of FinanceSoc.

"There's only room for

one money-grabbing CSP on campus and we're not going anywhere anytime soon."



ARIES

This week you hear that Union Breakfast's been cancelled.

Oh well, you've still got h-bar!



LIBRA

This week you leave an anti-Semetic cult.

You join the Independent Group.



TAURUS

This week you raise the minimum spend threshold at the Union.

It's almost like you want to kill off all the bars on campus.



SCORPIO

This week your school friend gets engaged. Meanwhile you buy half-price Valentine's chocolates from Tesco to eat alone in bed.

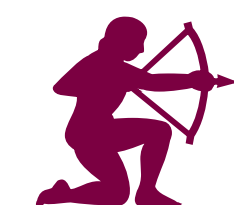
Change your destiny.



GEMINI

This week you're the Black and Minority Ethnic (BME) Officer.

It's not easy representing all the 'funny-tinged' people on campus.



SAGITTARIUS

This week you're the Horoscopes Editor.

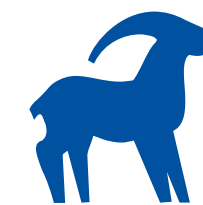
Never has plagiarism looked so attractive.



CANCER

This week you leave an Islamophobic cult.

You join the Independent Group.



CAPRICORN

This week you're Deputy President (Clubs & Societies).

Does anyone even remember what you look like anymore?



LEO

This week you pay the Union bouncers to beat you up.

It was either that or hand in your Fluid Dynamics coursework.



AQUARIUS

This week you get food poisoning from h-bar.

Thank God it's the last time.



VIRGO

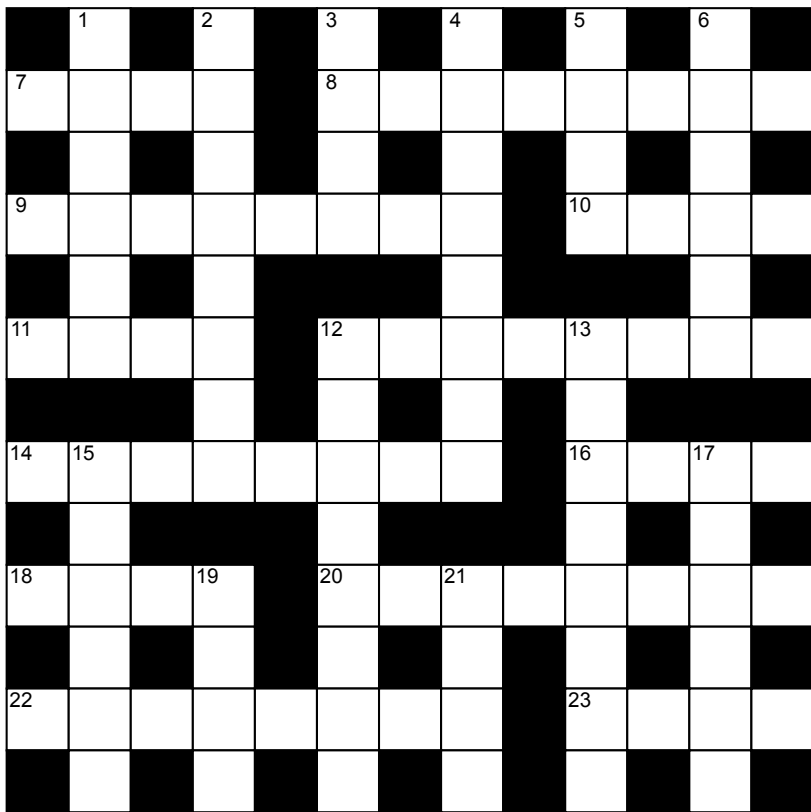
This week you're Deputy President (Finance & Services).

Maybe if they'd just listened you we wouldn't be in this damn situation.



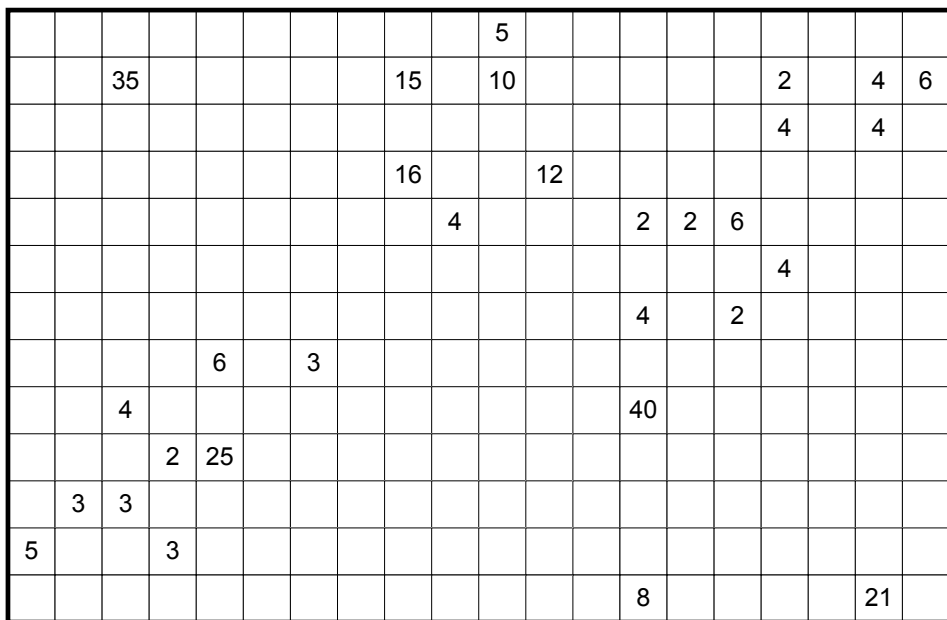
# PUZZLES

fsudoku@imperial.ac.uk



### SHIKAKU

Divide the square into rectangles, such that each rectangle contains exactly one number. The numbers given represent the area of the containing rectangle.



### SPOT THE DIFFERENCE

There are six differences between the two images.



### CROSSWORD

#### Across

- 7. Large brass instrument (4)
- 8. Green cross store (8)
- 9. Exhibits simple harmonic motion (8)
- 10. Kia sponsored one in Kennington (4)
- 11. A fashionable West End district (4)
- 12. Hopefully it won't chip (8)
- 14. Users of the London Underground (8)
- 16. Plenty of 'em in the sea (4)
- 18. Musical Instrument Digital Interface (4)
- 20. Italian cheese (8)
- 22. Lorde drives one in her dreams (8)
- 23. The tick brand (4)

#### Down

- 1. Requires a bow tie (6)
- 2. Homeowner (8)
- 3. October birthstone (4)
- 4. Clothes (8)
- 5. Bullets and grenades (4)
- 6. French Finger-shaped pastry (6)
- 12. Board game where you pretend to be rich (8)
- 13. Imperial's favourite drug (8)
- 15. One of the five kingdoms (6)
- 17. They roam Metric (6)
- 19. Budget hotel chain (4)
- 21. Cheap carb food (4)

### FUCWIT

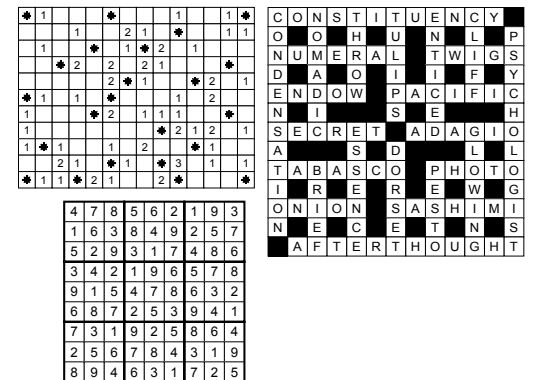
1	Maxiane	93
1	Trollheim	93
1	Wooloomooloo	93
4	DQ	92
5	Yeet Infection	87
6	Big H's Boys	84
7	KBLB	82
8	Fleesh and the tooters	80
9	O1G	74
9	Shark	74
11	Rock, Flag & Eagle	69
12	S. B. S.	60
13	Quizlamic extremists	59

Send your solutions to [fsudoku@imperial.ac.uk](mailto:fsudoku@imperial.ac.uk) before Wednesday midday to take part in the leaderboard!

### Points available

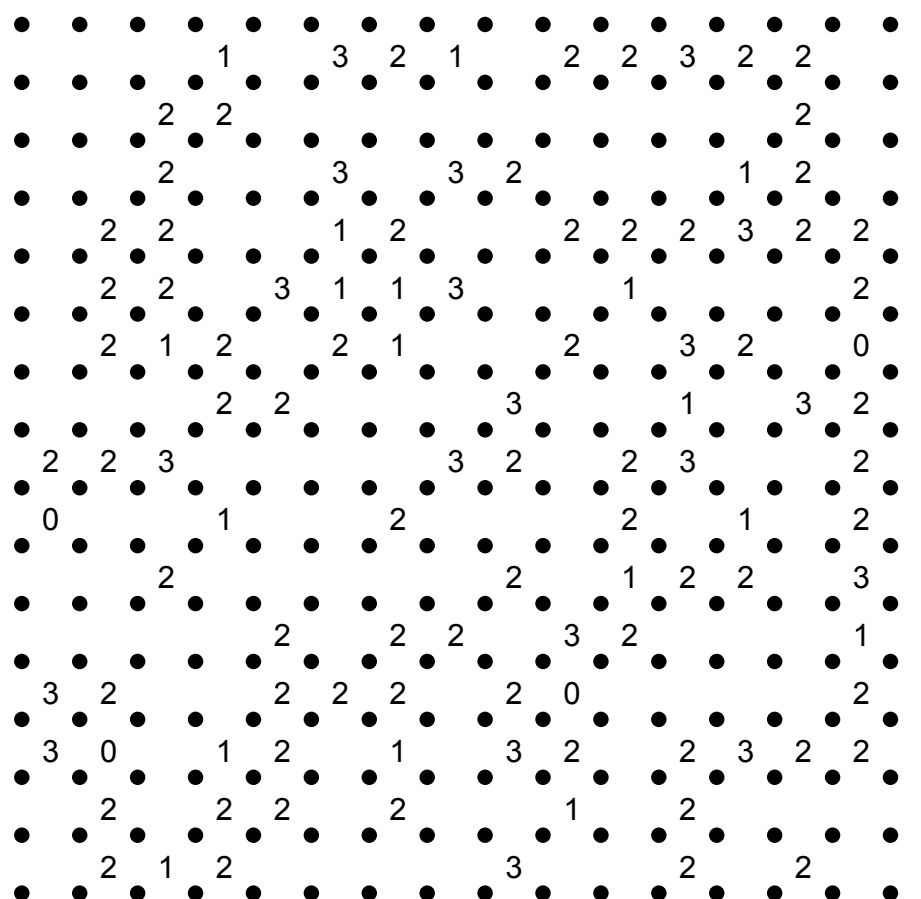
Crossword	6
Spot the difference	3
Slitherlink	3
Shikaku	2
<b>Total</b>	<b>14</b>

### Last week's solutions



### SLITHERLINK

Connect horizontally and vertically adjacent dots so that the lines form a simple loop with no loose ends. The number inside a square represents how many of its four sides are segments in the loop.





## SPORTS

sport.felix@imperial.ac.uk

## Imperial Squash: mad dog and Imperial men

## SPORTS

**Seigo Masuda***1<sup>st</sup> Team Captain***David Newman***Father of the Club*

Continuing on from the success of the Roehampton Uni Cup, Imperial College Squash Men's 1st Team travelled up to Birmingham last weekend (9th & 10th of February) to compete in the BUCS Premier Division play-off where the top eight universities around the country gather to decide their placings for the upcoming BUCS knock-out stages.

Imperial Men's 1st were once again playing for a spot between 5th = and 8th hoping to repeat last year's success in finishing 5th by winning all of their matches.

The first match was

against Newcastle on Saturday morning who finished 6th last year by just narrowly losing to Imperial in a closely contested match. The Imperial team knew that this was an important match to win to carry momentum into the weekend and nerves were running high.

So it was a soothing surprise and a huge moral boost when the team turned up to the venue to find that the "Tree Chopper" a.k.a. Patrick Brandl was there waiting for us. He had made the effort to catch a 6 a.m. train to come all the way from London to cheer his team-mates on.

What difference does that extra support make? Well Imperial beat Newcastle 4-1 this time around with Seigo "Top knot'ch" avenging his last year's defeat by saving 5 match balls against him to win 3-2.

The second match was rather straightforward for



GBUCS team from left to right: James McCouat, Marco Alves, Seigo Masuda, Puven Subramaniam, Dave Newman, and Patrick Brandl. // IC Squash

the team against Loughborough. Everyone won their matches, meaning that the team won by 5-0. And it was looking like 5th place would once again be within reach with just Nottingham Trent, only recently promoted to the big leagues, to beat on Sunday morning. But Nottingham Trent had shown already that they were at home in the top division by inflicting defeats on both Loughborough and Newcastle on the Saturday. Imperial would therefore need to steel themselves for a close fight for that coveted 5th spot at the top of their group.

With the "Tree Chopper" on his way back to his cabin in the woods, the team made their way to the venue the following morning with some trepidation. Would Dave "N'iceman" Newman's aging body hold up to another tough match?

Would Puven "Psych" Sivasangari finish digesting the all-you-can-eat carb-loading sushi session

**"The Imperial team knew that this was an important match to win to carry momentum into the weekend and nerves were running high"**

from the previous night? The answer to these questions and the outcome of the match were all coming down to the wire. Up steps James "The Hound" McCouat, somehow full

of energy despite only a couple hours sleep, to commence the final battle, and what a battle it was...

Squash is a brutal sport. Like any other racket sport, skill and tactics are important but the physical demands that squash places on the body are widely considered to be the toughest of any sport. Players will hit their maximum heart rate repeatedly in even just a single rally.

A rally can last in the region of fifty shots, and it is common for players to average between 5km and 10km in lunges alone over the course of a match.

In the case of the hound's opponent, he hit his maximum heart rate too many times, vomiting from sheer exhaustion on court in the middle of an epic rally. In squash terms, this is a TKO – match forfeited.

James was not alone in proving his physical

superiority, with veteran Dave "Iceman" Newman rolling back the years to floor his opponent (literally – he passed out after the match only to resurface two hours later). Marco

**"Players will hit their maximum heart rate repeatedly in even just a single rally"**

"Amy" Alves then closed out the match in style and 5th place in the country once again belonged to Imperial Men's 1st.

Now Bristol and Oxford await us in the knock-out stages, but you'd be a brave punter to bet against the mighty mad dog and his Imperial men.



Hallowed ground where games took place. // IC Squash



# SPORTS

sport.felix@imperial.ac.uk

## IC American Football: Immortals Charge to a 40-0 win

**SPORTS**

**Daniel Grumburg**  
Publicity Officer

40	0
Imperial Immortals	Canterbury Chargers

With the end of the season in sight, we are in the middle of a two-part relegation battle. The battle is against the Canterbury Christ Church Chargers a team who, like us, have sustained a losing record throughout the season. Due to the league timetabling, our matches against them are the final two consecutive matches of the season. This meant that the loser of this series will get relegated

to Division 2. Both teams were eager to get on with it, and the energy was the highest it has been all season.

The first game was at Fortress Harlington. The Chargers took the opening kick-off. The offence did not start off well on the first drive as we seemed destined for a three-and-out. However, one of the Canterbury players failed to cleanly field the ensuing punt, and we were able to capitalize on this mistake and recover the ball, which kept the opening drive alive. We marched on with powerful running by Jonas "Dreadnought" Eschenfelder all the way to their 10-yard line. Unfortunately, they managed to intercept a wobbly pass at their own two-yard line, leaving the Chargers with difficult field-position. Our vaunted defence came out of the gate hot



Woke squad is tired but happy. // Imperial Immortals

almost getting a safety and forcing Canterbury to punt from inside their own yard line. The lack of space and the heavy pressure resulted in a blocked punt we recovered at their 15-yard line. From there a couple of passes and a QB sneak play resulted in us opening the score 8-0. We never slowed down from that point until the half,

only allowing a single first down from the Chargers and scoring three more touchdowns thanks, to great passing by Ben "Big Red" O'Brien that made up for his earlier interception. This led to the score being 26-0 at the half.

Canterbury were somewhat able to neutralize the offence, but they could not find an answer

to get past our defensive front eight, especially our nose tackle Michael "Drama Sec" Anyanechi. We kept stifling their QB by penetrating their offensive line that looked more like a sieve than a wall by the second half, which all culminated by Dom "RoadRage Gang" DeSilva recovering a fumble in the end zone

for a touchdown. Also, special shout out to Nick "Daddy" Hoare for handling his first game at center with plenty of poise.

The final score was 40-0 in our favour, but this is only half the battle. Part 2 coming next week. #BecomeImmortal

## Taekwondo's Winter Championships spirit unbeatable

**SPORTS**

**Sojin Park**  
ICUTKD Publicity Officer

Twenty members of Imperial College Taekwondo (ICUTKD) travelled to Nottingham for the Winter Championships held by the British Student Taekwondo Federation (BSTF). Returning home are 21 medals: ten bronze, seven silver and four gold across all disciplines. There has been an overall improvement in individuals' performances since the previous competition in November. As ever, guiding and supporting the students were our instructors, Master Reza Saberi and Christopher Dancel.

The championship took

place at Nottingham Trent University and opened up entries to both poomsae and sparring in World Taekwondo (WT) and International Taekwondo Federation (ITF). Taekwondo is a Korean martial art and WT-style have been part of the Olympics since 2002.

Although ICUTKD mainly focus on WT, a handful of members continues to practise ITF. Savya Aggarwal (gold and silver), Angela Sun (silver and bronze) and Wenbo Chen (bronze) are our main representatives in the competition. The club encourages both disciplines to work together. Johnny Kim (bronze) won his first medal in ITF sparring; he is our alumni who started his taekwondo journey with ICUTKD, training in WT for four years.

The club saw another treasured alumni and club coach as an A-class fighter as Liyan Chow (bronze), demonstrated years of practice in the ring. Other A-class fighters using the electronic gears were Sojin Park (bronze) and Jamie McNeil (silver). Special mention to beginner Thomas Kloska (bronze) and first-time competitors Gino La (bronze) and Myriam (silver and gold), who fought persistently for countless numbers of rounds.

Aside from sparring, there is poomsae which involves strength and conditioning training. There were outstanding performances from our beginners Lucy Lei (gold), Camille Cheng (silver), Thomas Kloska (silver), Tara Sassel and Zeme Andrews-Haycocks. Our returning members

continued to stand their ground as Cynthia Ho (bronze), Sophia Ppali (silver) and Andrew Bates (gold) showed off hours of practice prior to the competition.

With the scale of competition bigger than ever,

the championship series is prime opportunity to learn from opponents and bond with other club members. Also, it conduces the focus of training.

Ultimately, we take away much more than just medals. The overall

rankings will be released in the final competition of the Championship series in March. Until then, ICUTKD will continue to train hard and keep the spirits indomitable.



ICUTKD at BSTF Winter Championships, Nottingham Trent. // IC Taekwondo