

# Ventures with Chinese defence firms terminated

**Sam Lovatt** Managing Editor

Imperial College will shut two research centres set up in collaboration with Chinese defence firms. The partnerships, which will officially be closed at the end of the year and are still touted on the College's website at the time of writing, are joint ventures between Imperial and Chinese defence and aviation firms linked to the Chinese military.

The Export Control Joint Unit (ECJU), part of the Department for International Trade, rejected two licences requested by the College for the export of sensitive data. No reason has been given by the Department for the rejection of the licences. A total of three export licences have now been denied to the College by the ECJU since 2018.

One research centre, the AVIC Centre for Structural Design and Manufacture, is a collaboration between the College and the Aviation Industry Corporation of China. The Centre "is promoting world leading scientific research into aircraft design and manufacturing technologies" according to the College website. According to The Times, the AVIC lab worked on aerospace design and manufacturing techniques. AVIC has contributed over £6 million towards research into "cutting-edge aerospace materials" at the College, according to The Guardian.

The other centre, the Beijing Institute of Aeronautical Materials (BIAM)-Imperial Centre for Materials Characterisation, Processing and Modelling, carries out fundamental research and 'industrial application' of advanced aeronautical materials, according to the College website. According to The Times, BIAM is a subsidiary of the Aero Engine Corporation of China, which is sanctioned by the US due to its role in supplying jet engines to the Chinese military. It has contributed £4.5 million towards projects on "high-performance batteries, jet engine components and impact-resistant aircraft windshields" at the College, according to The Guardian.

In February, Felix reported on a Times investigation that found that Imperial had accepted £55 million from Chinese funding sources since 2015, £5 million of which had come from companies sanctioned by the US. AVIC is one of the sanctioned companies, due to its role in supplying jets to the Chinese military. The investigation found that Imperial College had accepted more money from China-linked firms than any other UK university. The £55 million was out of a total of

£240 million across the whole of the UK HE sector.

Furthermore, Imperial academics have also collaborated with Chinese military-linked institutions more often than any other UK institution, with 945 papers being co-authored since 2015.

Other partnerships with links to Chinese companies continue. The Shougang-Imperial Lab remains in operation, a joint venture between the College and Shougang Group, a Chinese state-owned steel manufacturer. Co-director of the Lab, Dr Zhusheng Shi, is listed as the contact on the College website for both the labs that have recently had their licences rejected and will soon close.

The centres were, according to The Guardian, founded in 2012, during the "golden age" of UK-Chinese relations under the Cameron government.

Research institutions' "wilful blindness" to the risks associated with collaboration with the Chinese military has drawn criticism more and more over recent years. Martin Thorley, a Chinese international policy specialist, said that collaborations that had

**Continued on page 8**

Credit: Imperial College London

clear potential military

# The cost of living

**Nathalie Podder** Deputy President (Welfare)

With cost of living on the rise, many students across the UK are struggling to make ends meet. This is especially true for Imperial students, given that we live in one of the most expensive cities in the world – this year's Save the Students 2022 Money Survey (published 1<sup>st</sup> September) indicates that the average monthly cost of living for students living in London is at an all-time high of £1089 per month, which is an increase of 21.5% compared to last year. This is almost triple the national rate of inflation, which clocked in at 8.6% in the month of August.

This massive increase in cost of living means that we are all going to have to make choices that we didn't have to make before. This will mean something different for students of different backgrounds. Some students may need to choose between paying for heating or paying for food. Some may need to take up more than 15 hours' worth of part time work per week, essentially ruling out participation in volunteer representative

**Continued on page 3**



Then-chancellor George Osborne and Xi Jinping visit Imperial College in 2015

# EDITORIAL

This edition was produced thanks to the work of

Jamie John	Deputy and Science Editor
Sam Lovatt	Managing Editor
Tara Pal Chaudhuri	Music Editor
Joe Riordan	Music Editor
Jonah Hewitt	Film Editor
Eva Borrás Parades	Film Editor
Harry Schlote	Business Editor
Zanna Buckland	Books Editor

And our numerous contributors

## New Beginnings

Hello! Welcome to *Felix*. I hope you've enjoyed our first issue. This is traditionally a venting space for an Editor-in-Chief running on the tail fumes of sleep-deprivation and too much caffeine. However, I am writing this editorial five hours before the print deadline, instead of the usual one hour, so this year may be our best yet! I am rewriting this editorial one hour before the print deadline.

Our paper is written by students, redrafted and edited by students, laid out by students, sub-edited by students, and finally, distributed by students. Occasionally, Imperial alumni and staff also write in. Our motto "Keep the cat free" was established in 1974, and this has been our promise and guiding principle. *Felix* is both the name of the cat and the paper, and we will always strive to remain free of Union and College influence, with no formal political agenda.

We have 14 sections: News, Comment, Science, Environment, Arts, Puzzles, Catnip (satire), Centrefold, What's On, Music, Film, Books, Investment (soon-to-be Business!) and Sport. With such a wide variety, there is sure to be *something* you're interested in.

Imperial's student population is

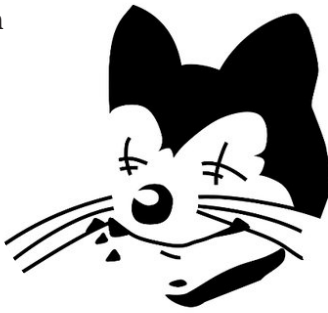
extremely diverse, and as such, holds different opinions. If you disagree with anything we publish, please feel free to write in and make your points.

This first issue is set to reach all first year undergraduate halls, which is why we have sped up our usual schedule to publish on a Wednesday. Usually, a copy of *Felix* can be found at every *Felix* news stand by Friday noon.

If you find we are a bit slow, get in touch to help us distribute!

Like every other issue, this issue of *Felix* could not have been published without the hard work of our writers, illustrators, photographers, publicists, editors, section editors, and subeditors. If you wish to join their ranks on the left of this editorial, get in touch at [felix@imperial.ac.uk](mailto:felix@imperial.ac.uk).

With a new year looming right ahead, I'd like to welcome not only the first years, but the second, third, fourth, fifth and sixth years - because we have all been impacted in some form by the events of previous years, and we are still figuring out what it means to have a normal year at Imperial. *Felix* itself has seen a depleted number of contributors in previous years. We look forward to seeing everyone at the Freshers' Fair on 4<sup>th</sup> October, on Level 1 of the ICU Building, Beit Quad. To new beginnings.



## Statement of Intent

We here at Felix believe that it is always in the interest of the students to know. Transparency in the workings of the College and the work of your student representatives is key. Therefore, I, the Felix Editor, on behalf of the team promise that:

We will, to the best of our ability, tell you the whole truth and nothing but the truth.

We will keep your confidence and will only publish something you say to us if you have explicitly said that we can.

We will work to expose unfairness and discrimination in all forms that it takes at the College.

We will treat fairly any article sent to us, regardless of point of view and do our best to work with you to prepare it for publication in our pages.

**Signed by Ameena Hassan**  
Editor-in-Chief

Felix Office  
Beit Quad, Prince Consort Road  
London, SW7 2BB

Tel: 020 79548072  
Email: [felix@ic.ac.uk](mailto:felix@ic.ac.uk)

[felixonline.co.uk](http://felixonline.co.uk)  
[@feliximperial](mailto:@feliximperial)

Printed by Iliffe Medial  
Winship Road,  
Milton, Cambridge  
CB24 6PP

Registered Newspaper ISSN 1040-0711

Copyright (c) Felix 2020

Back Cover Illustration: Nicolas Toran

# What is a PhD worth?

## ► *How Imperial PhD students are coping during the COL crisis*

**Liv Walthaus, Haaris Asghar, Hendrik Beck**  
Imperial PhD students

The cost of living crisis is affecting us all and is amplified by living in London. With inflation at exceptional levels, rental prices soaring and a base PhD stipend putting students below the poverty line, we ask: Is the recent UKRI stipend increase plus London weighting really enough?

What does it really cost to do a PhD in London and how does it compare to the standard UKRI PhD stipend?

Comprehensive data on this matter currently does not exist or is outdated. It is necessary to collect new

data when pushing for change to improve the living conditions of Imperial's PhD students.

We prepared a survey to gather evidence of how Imperial's PhD students are affording to live in London in 2022. To take part in the survey scan the QR code. The anonymous survey aims to find out how your PhD is being funded and whether the stipend is enough to live in London without needing extra financial support.

By acquiring this preliminary data on the financial situation of our students, we hope to start an official review through Imperial College London on this matter.

What can you do? To begin with, fill out the survey and spread the word to help gather evidence on the need for a more detailed review. If you are interested in the outcome of the survey, join us in late October for a talk and discuss with us how to improve the living conditions of PhD students studying at Imperial. All are welcome and encouraged to attend.



Continued from page 1

## ... The cost of living

roles or participation in clubs and societies. At the direst end, students may be forced to consider dropping out entirely – this is evidenced by the fact that 52% of students in the UK are considering dropping out due to financial reasons, up from 41% last year.

Yes, you read that right. The majority of students in the UK have considered dropping out of university entirely because they can no longer afford it.

### THE UNION'S CONSULTATION

This issue has risen to the top of the list of the Union's priorities. In July 2022, we responded to a consultation from Universities UK on how students are currently facing the cost-of-living crisis. We only had one week to respond, but pulled together various sources of data, including a social media poll with over 700 responses, anonymised data from the Advice Centre, ticket sales for the 2022 Summer Ball, and written responses from elected representatives and liberation officers.

What we found is that, unsurprisingly, 95% of students who responded to the polling are concerned about the cost-of-living crisis. 58% of students are worried about their ability to pay rent, and 20% are worried about their ability to pay their bills. When we looked deeper into these issues in the Advice Centre, we found that students are particularly concerned with their ability to pay rent on time, and many students are experiencing anxiety due to concerns around their ability to afford living in London after graduation. 9% of students are also concerned about their ability to pay tuition fees – these students make up the majority of those approaching the Advice Centre for financial issues, and many of them have asked for support around requesting extensions on payment and applying for loans and grants. Finally, 13% of students are concerned about their ability to pay for food. We have already signposted three students to the food bank voucher scheme in the Advice Centre, which is three students too many.

Based on this research, we have come up with the following series of recommendations to the College:

### RAISING THE IMPERIAL BURSARY

First and foremost, both the total level of bursary funding and the income threshold for being eligible to receive funding both need to be increased. Unlike previous years, it will no longer be sufficient to move around money within that pot to ensure that students are receiving funding that is proportional to their needs – with the recent increases in cost of living, that pot is simply not big enough, and opting to redistribute it will result in some groups receiving less funds when they're already struggling to make ends meet. As the founder of Blackbullion put it, "the bank of mum and dad has run out," which means that all students on bursary will need all the help they can get – hence why the total amount of available funding needs to be increased. Additionally, many students that are not currently on bursary are having to face difficult decisions that they have not had to face before around their ability to afford their degree. Combined with the fact that the maximum threshold for funding has been the same since 2012, this calls for a recalculation of that metric. Finally, the College needs to consider recalculating their bursary amounts on a yearly basis to account for inflation, since currently it is entirely dependent on a student's year of entry. Students are paid a flat rate for 3-6 years of their degree with no adjustments made for inflation, which means that they will end up poorer in their final year compared to their first year. The Deputy President (Welfare) will present these recommendations to the College's Access and Participation Compliance Group on 18<sup>th</sup> October.

### MAKING FUNDING MORE ACCESSIBLE

It is important to acknowledge that not all students facing financial hardship at Imperial are currently eligible for the Imperial bursary, as this is exclusive to undergraduate Home students that have a household income under £60,000. This excludes international students and postgraduate students, both of which make up roughly half of Imperial's student population. It is also worth noting that the College has already



On 8<sup>th</sup> September, the Deputy President (Welfare) was invited to speak on a panel at the Annual Universities UK conference. She advised a room full of vice chancellors on how to support their students during the cost of living crisis.

put in a lot of work to support students during these unprecedented times, including increasing the hardship funds allowance from £4000 to £5000, increasing the cap on rent and energy within that allowance, and increasing the President's PhD scholarship by an additional 10% in line with the UKRI's recent increase.

In order to come up with bespoke recommendations to support these groups, we are currently working with a group of PhD students that have rolled out a survey on stipends. We are also working on creating a similar survey that will be rolled out to all Imperial students – the aim of this survey will be to measure the gap between available funds and financial need, identify the groups of students that are most vulnerable, and create measures of direct support for those groups. Be on the lookout for that survey in a future issue of *Felix*.

# ALERT: Imperial

- ▶ *ALERT statue to be installed on Imperial College Road despite Union opposition*
- ▶ *First announced on 2<sup>nd</sup> August 2021 with no student consultation*
- ▶ *Opening ceremony expected on 3<sup>rd</sup> October 2022*

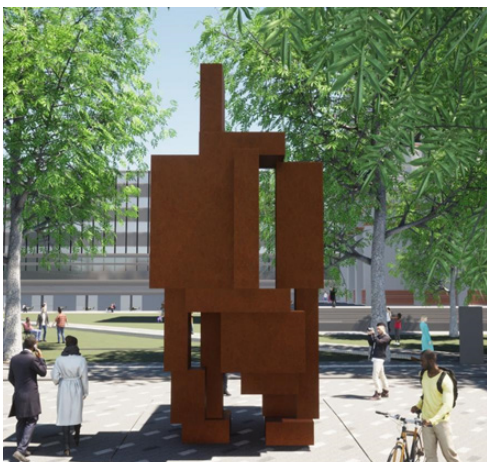
**Jamie John** Deputy Editor-in-Chief

On Friday 26<sup>th</sup> November 2021, Felix first reported on the now-infamous ALERT statue, running the headline “Dongoor Plaza – Imperial College lawn re-opens as statue plans seen”. Since then, the statue has become the source of much controversy as a consequence of the 2m appendage protruding out of its lower torso, which many have interpreted as its penis.

The artist, acclaimed British sculptor Sir Antony Gormley, has denied this. In an interview with The Times on 7<sup>th</sup> August this year, he praised students for questioning “the decisions and context in which they are working”. However, he argued that “their objection is founded on a misinterpretation”, calling it the “sign of an overactive imagination”. Sir Gormley claims that the figure is “squatting on its haunches and surveying the world around it”.

## Calm before the storm

The first mention of ALERT appeared on 2<sup>nd</sup> August 2021 on the College website as part of an article on the long-term redevelopment of the South Kensington campus. The article is accompanied by a 3D render of the statue taken from behind. Conspicuously missing from this image are what in Gormley’s interpretation might be considered the “knees”, a point which



Taken from behind: The ALERT statue as featured on the College website. The “knees” are not visible as a consequence of the viewing angle.

## QUICK FACTS

**Where:** Imperial College Road  
**Designed by:** Sir Antony Gormley  
**Donated by:** Brahmaj Vasudevan  
**Dimensions:** 6.1m tall, 2.7m wide, 3.9m long  
**Shaft dimensions:** 2.2m long, 1.1m girth  
**Material:** Solid weathering steel plates  
**Weight:** 67 tonnes

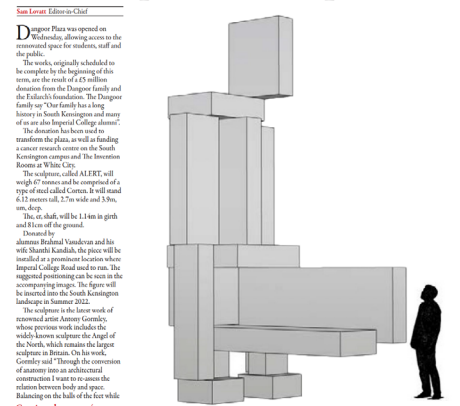
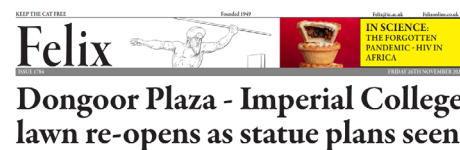
# 2.2 -metre shaft

Imperial College Union Council would later draw attention to.

On 10<sup>th</sup> August 2021, the College submitted a planning application for the statue, under the title ‘Installation of a new public art feature and public realm improvements’. *Felix* understands that senior College staff saw and approved the plans. Amongst the 27 documents included was the innocuously titled “Design and Access Statement”, containing the now-infamous renders of the ALERT statue. One astute observer submitted an objection to the application on 23<sup>rd</sup> August, noting that “the design of the sculpture seems to me to resemble a man with an erect phallus”. Aside from this, however, there appears to have been little knowledge of the statue outside of College circles.

Three months later, on 26<sup>th</sup> November, *Felix* found the renders whilst looking

through the College’s planning applications. A picture of the statue was splashed across the front page of the paper, bringing ALERT in all its glory to the general public.



*Felix* Issue 1784, 26<sup>th</sup> November 2021

## Union has its say

Controversy soon followed, and on 11<sup>th</sup> January 2022, the Union Council passed a proposal to lobby against the installation of the statue, with 29 out of 32 council members voting in favour. It argued that students should have been consulted on the installation. The Union paper, seen by *Felix*, raised concerns about the potentially “phallic interpretation” of ALERT’s form. The statue was described as “exclusionary” given the College’s “issues with gender ratio and inclusion”. A figure was produced to

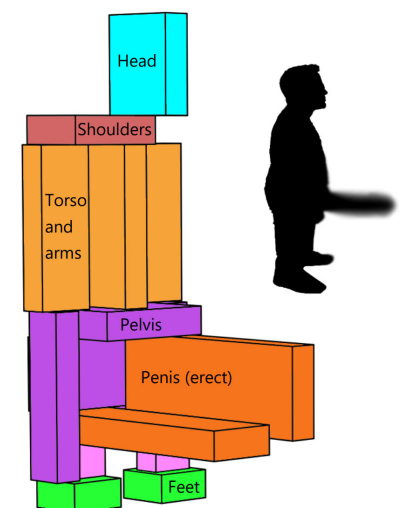


Figure produced by Union to illustrate “phallic” interpretation of statue

accompany the motion, explicitly indicating the alternative interpretation. The proposal further alleged that “College publicity regarding the statue chose an angle that avoided making the statue appear phallic”.

# NOT TO SCA

**02/08/21**

Statue appears on College website as part of redevelopment article

**10/08/21**

College submits planning application to Westminster Council

**26/11/21**

*Felix* first brings attention to ALERT with front page report

**11/01/22**

Union passes proposal to lobby against ALERT installation

**03/08/22**

First external news publications pick up story

# 's newest member

Gormley image credit:  
"Youth Center",  
Wikimedia Commons,  
CC BY-SA 3.0

(continued from previous page)

**“Phallic”, “hilarious”,  
“tragicomic”: how the press  
reacted**

A slew of art outlets first picked up the story in early August, with national and international news publications following soon after. News coverage focused on student opposition to the installation and cited the Union proposal. In the UK, ALERT was featured by the *BBC*, *The Guardian*, *The Daily Mail* and more. Across the pond, *The New York Post* led with the headline, “Woke college students are ‘hurt’ by supposedly ‘phallic’ abstract sculpture”. The story reached as far as Nairobi, where it was covered by *People Daily*. In Columbia, the nation’s oldest paper *El Espectador* kept things simple, opting for the headline, “Es un pene de tres metros” – or, “It is a three metre penis”, for those whose Spanish is a little rusty. “Students at Imperial College London don’t want a statue erected on their campus that they say looks like a man with an erect penis”, the article continues.

Online editions of articles racked up hundreds of comments from members of the public. In particular, *Daily Mail* readers were quick to wade into the debate with their own musings. “The students must be as thick as whale omelettes and studying mickey mouse degrees,” said one *Mail Online* reader. Another agreed with the Union Council’s interpretation, but compared the installation to classical Roman art, remarking, “Ridiculous. The Romans built things with massive c...ks [sic] too”. Some readers were less sympathetic to

the statue: “If this is art then I am an [sic] hippopotamus.”

**What now?**

At the time of writing, ALERT is being constructed on Imperial College Road, opposite Queen’s Tower. The statue is due to be formally unveiled by the College on 3<sup>rd</sup> October.

Professor Hugh Brady, the recently instated President of Imperial, said, “We are grateful [for] the opportunity to be the setting for a striking new artwork by one of the UK’s foremost living artists.”

**Photos  
overleaf!**

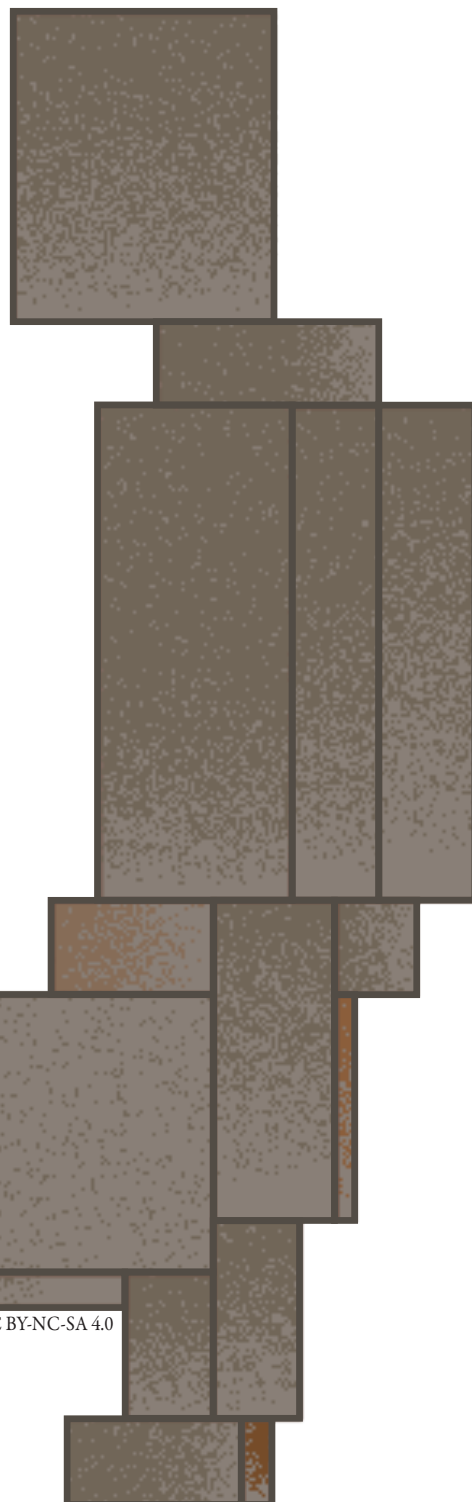


Illustration credit: Jamie John, reuse permitted under CC BY-NC-SA 4.0

**Sir Antony  
Gormley OBE  
RA:  
The man  
behind the  
member**



Sir Antony Gormley is a British artist and sculptor, best known for creating the Angel of the North. In 1994, he was awarded the annual Turner Prize, amongst the most prestigious art awards in Britain. Sir Gormley is known for featuring the human form in his work and has used casts of his own body in previous works. Regarding ALERT, he said, “The attitude of this sculpture is alive, alert and awake... The work will beckon towards passers-by on Exhibition Road, providing a point of interest and intrigue, and encouraging a closer look.” This is not the first time Sir Gormley’s work has been the subject of controversy; in early 2021, a set of his sculptures installed on a beach in Suffolk were compared to “sex toys” and “a giant dog poo”.

**Brahmal  
Vasudevan:  
The donor**



Brahmal Vasudevan is an alumnus of the College and CEO/founder of Creador Capital, a private equity firm which has a total of \$2bn worth of Assets Under Management. He and his wife, Shanthi Kandiah, donated the ALERT statue to the College. Vasudevan completed his A-Levels at Colston’s School, an independent boarding school in Bristol, before obtaining a First Class in Aeronautics from Imperial in 1990. He applied to McKinsey & Company to pursue his longstanding interest in business, but dropped out of the application process after difficulties obtaining a work permit. He instead joined a management training programme for British American Tobacco (BAT) in Malaysia, eventually rising to become an International Brand Manager in their London office. BAT is the largest tobacco company in the world and was accused of ignoring the link between smoking and cancer in the 1950s. In 2021, it denied allegations that it facilitated conditions including “the widespread use of unlawful child labour [and] unlawful forced labour”. After a five-year stint at the company and a short spell at Boston Consulting Group, Vasudevan obtained an MBA from Harvard Business School. In 2011, he founded Creador Capital. Speaking to the College, he said, “I am proud to bring this iconic, world-class piece of art by Antony Gormley to the heart of campus”. Aside from the ALERT statue donation, Vasudevan recently donated £25m to the College to establish the Brahmal Vasudevan Institute for Sustainable Aviation.

ALERT

**03/10/22**

**ALERT to be  
unveiled in opening  
ceremony**

NEWS



The ALERT statue is being installed on Imperial Road and is due to be inaugurated on 3<sup>rd</sup> October 2022. See the article on the previous page for further details

# ALERT in pictures

# *Write for Felix!*

**Felix is a longstanding institution which has produced some of the finest student journalism in the country, won awards and broken stories that end up in national news.**

**Felix provides an outlet for all students and staff to review, read about and report on whatever they want. Anything you feel passionate about can be transcribed, honed to perfection with the help of our Section Editors and published both in print and on the website.**

**Writing on what you're passionate about is the best way to deepen your interest and expand your horizons (also, if we're honest about incentives, a lot of the sections get you free tickets and it looks good on the CV)**

**If you're interested in writing for us, get in touch with any of the section editors at their submissions inbox (e.g: if you want to write for Arts, email [arts.felix@imperial.ac.uk](mailto:arts.felix@imperial.ac.uk)), or the Editor in Chief at [felix@imperial.ac.uk](mailto:felix@imperial.ac.uk)**

**We need writers, editors, sub-editors, illustrators, photographers and more!**

## **Keep The Cat Free**

Since 1974, "Keep the cat free" has been Felix's motto and a central tenet of its operation. The phrase applies in three aspects: editorial independence, free to read and free to write.

Editorial independence does not mean unfettered free speech. Just because we can say something doesn't mean we should. Felix will always be an inclusive environment for as many people as possible. This being said, Felix does not conflate offence with harm, and any content that is not illegal or deeply immoral can be published at the Editor's discretion, with the following statements in mind.

The paper will never hold a formal political agenda, nor will it be reliant on advertising for funding, despite the occasional inclusion of ads.

These ads will never dictate what is run in the paper.

Felix retains the right to criticise anyone and is accountable to the law in terms of defamation. As part of the Union, Felix is part of a charity that exists to represent and support students. The paper will always seek to strike a balance between public interest and student welfare.

Since 1971 the paper has been free to pick up and read and will remain this way indefinitely.

The paper will always be a place that students, staff and alumni can write freely. This statement applies exclusively to the aforementioned groups, and guest posts, paid or otherwise, are never accepted. In the same spirit, Felix will never financially reward any contributions from the above groups.

## NEWS

Continued from page 1

applications demonstrated “outright recklessness by the British institutions involved”.

Rhetoric from Western agencies such as MI5 and the FBI has also increased in its animosity to the CCP over recent years. On 6<sup>th</sup> July this year the heads of both of these organisations gave a joint address highlighting the intent of the

CCP to steal trade secrets from the upper echelons of Western research, highlighting an example of a Chinese intelligence officer being convicted of espionage in late 2021.

Liz Truss, the new UK Prime Minister, has signalled an increased hostility towards the CCP, stating that the country will be classified as an “acute threat”, the same grading as Russia, during the Conservative leadership race.

This follows tough rhetoric on the CCP during her time as Foreign Secretary under Boris Johnson. Multiple think tanks understand that the possibility of such partnerships will only decrease as time goes on. A number of think tanks and policy experts believe that collaboration with China should continue on research that has no potential military application.

No UK research institution publicly states that it contributes to work to aid the Chinese military; all joint ventures are reportedly for “civilian use”, and Imperial College carries out no classified research. Supposed civilian application of certain technologies draws much criticism from some, as often the results of the research in question are “dual use”, meaning that whilst they may have civilian applications, they can equally be used for military purposes, and once the information is shared there is no way of stopping the Chinese Communist Party (CCP) from applying it however they see fit.

Furthermore, the Chinese ‘Military-civil fusion’ initiative operated by the

CCP dissolves the barrier between civilian and commercial research and the Chinese military. This means that research and data held by Chinese companies can be accessed by the CCP and the PLA whenever it is deemed necessary. As such, dealings with China-based companies are only slightly removed from dealings with the CCP itself. The US State Department describes the policy as “as an ‘aggressive’ strategy that involves ‘diverting the world’s cutting-edge technologies – including through theft – in order to achieve military dominance”.

An Imperial spokesperson said: “Imperial’s research is open and routinely published in leading international journals and we conduct no classified research. All partnerships and collaborations undergo thorough scrutiny and are regularly reviewed, working closely and regularly with the appropriate government departments, and in line with our commitments to UK national security.”



Provost Ian Walmsley (left) and Chinese Science and Technology Minister Wang Zhigang

## Alice Gast remains Emeritus Professor

Sam Lovatt Managing Editor

Alice Gast has been granted the title of Emeritus Professor of Chemical Engineering at Imperial College London.

Gast’s page on the College website details that “she is now Professor Emeritus of Chemical Engineering at Imperial and advises venture capitalists and venture philanthropists.”

Gast came to the end of her eight year tenure as President of Imperial College on July 31, 2022, following the publication of a report, written by a QC judge, on the conduct of senior College

staff members around the beginning of the COVID pandemic. The report found Gast participated in behaviour that was found to be belittling and undermining, and ex-CFO Muir Sanderson guilty of bullying their subordinates.

During her tenure as President of the College, Gast also received criticism for her role on the board of Chevron, an American energy company that has been accused of illegally discharging billions of gallons of contaminated water into the Amazon rainforest, endangering the lives of Ecuadorian residents. Gast, who sits on the ‘Public Policy and Sustainability’ board within Chevron,

was appointed to the role in 2012 and remains there today.

The title of ‘Emeritus Professor’ is given to retired professors, who no longer carry out paid work for the institution in question and carry the title in an honorary capacity.



*Felix is going to be conducting a variety of surveys throughout this term through our Instagram page, to inform our statistics as we report on how the rising cost of living is affecting you.*

*To make sure the numbers and views are expressive of the entire student body, please take part.*

*Instagram: @feliximperial*



# COMMENT

> IC SOUP RUN  
WHAT THEY DO, AND WHY THEY DO IT

## How should a statue look?

► *Gormley faces further criticism as University of Cambridge statue of Alan Turing is revealed, aptly named... DAZE IV? Felix Illustrator Nicolas has his say.*

**Nicolas Geisler-Toran**  
Imperial Alum and Felix Illustrator

When I first saw the designs for ALERT, I genuinely didn't believe it was real. The idea that real life members of the bureaucracy could genuinely want or even approve such a comically phallic statue seemed too funny to be true. That amusement has now been replaced by anger, after seeing Antony Gormley's proposed statue in tribute to Alan Turing, in Cambridge. It turned out the statues' concepts come from a line of sculptures called *Cast Slabworks*, all following the motif of "Humans but made of cuboids". My anger spews forth from two factors: artistic and moral.

I myself am an artist by trade, and this line of sculptures is basically just a technical exercise, in the same vein of making a drawing without lifting your pen off the paper. *Figure Drawing Methods for Artists*, by Boerboom and Proetel, is an excellent book full of suggestions for these kinds of studies. The Tangram

Photo credits: Wikimedia Commons, CC 2.0



Queen Vic's statue: an example for Gormley

puzzle game utilises a style very similar to Gormley's to produce all manner of images. This is not to disparage the sculptures; they make for quite an effective physical exhibition when viewed one after the other in ensemble. But each individually has little value as a standalone piece, much as a single musical note is quite boring when removed from its parent melody. And yet, one of these is what's being given to the commemoration of Alan Turing. Compare Imperial's most important statue: that of Queen Victoria in the entrance space. There is no pretentious attempt to make an abstract statement of any kind, the statue is an expertly made rendition of the monarch most associated with the university and the neighbouring museums. Imagine how much more engaging for the average person it is to see a realistic statue of an icon, look at the statue from different angles almost imagining that you are looking upon the real person, feel the

Photo credits: University of Cambridge



reality that this person existed and influenced the course of history... and now consider what will actually be available to Cambridge students: looking at some cuboids that you are told represent the figure. From an artistic perspective, it really is quite lazy. From an audience perspective, it is needlessly 'artsy'. Just make

a statue that looks like the guy.

Moving beyond art, however, the greatest point of anger for me now directed towards Antony Gormley is how much of an actual insult to Alan Turing it is to offer what he has offered in the way of a commemorative statue. Ignoring my bias against abstract art, it cannot even be argued that the statue was in any way inspired by Alan Turing; there are scores more statues indistinguishable from it from the rest of *Cast Slabworks*; ALERT could easily have been offered

Photo credits: Imperial College London



in its place. Some argue that its problem is that it clashes with the aesthetic of the Cambridge grounds, when in reality the problem is that it is the equivalent of being asked to paint Charles Babbage and just picking out an already drawn sheet of something unrelated from your sketchbook. What is being erected in truth is an Antony Gormley statue, in place of an Alan Turing one. This wouldn't be a problem if the statue were part of an Antony Gormley exhibition, as it would necessarily be an experience dedicated to Antony Gormley. But a statue in a public space, in principle dedicated wholly to the figure? The only truly respectful style is realistic, like the aforementioned Queen Victoria, made by a trade sculptor not overly-concerned with making a



**PICKING OUT AN ALREADY DRAWN SHEET OF SOMETHING UNRELATED FROM YOUR SKETCHBOOK**

name as a statement artist.

For the sake of momentary clarity, I have directed my anger towards Antony Gormley. I should make it clear that perhaps the real rage should be felt towards whoever commissioned him for the Alan Turing statue. Obviously Antony Gormley would both use an unnecessarily abstract style from his own portfolio and impose his personality on a statue dedicated to a historical icon. He's Antony Gormley. If you wanted a more conventional and respectful tribute, you would simply commission a skilled but conventional sculptor. So why didn't they? Is Alan Turing's name so worthless that it must be propped up by a famous sculptor? Is Antony Gormley so much more desperate for employment than trade sculptors? Truly, some people cannot be trusted to spend money wisely. However, we cannot grant Gormley any leniency for not identifying the massive erection in ALERT, that's all on him.

Over the next few weeks, Felix will be running a competition to issue ALERT its very-own nickname. Please refer to the next issue to enter potential names and for further details on this process.

## COMMENT

# Volunteering with IC Soup Run

► *Imperial College Soup Run interviews volunteers to find out why they give their time*

## IC Soup Run Committee

At Imperial Soup Run, we distribute food to rough sleepers, people who have lost their job or victims of broken homes on a weekly basis. However, we believe that something more than just material should be done. Therefore, we invited active members of the society to talk about their experiences with Soup Run, their insights and vision in an open and honest attitude.

### *What motivates you to join Soup Run?*

**LAURA (ACTIVE VOLUNTEER):** I encounter homeless quite often on the street, so it's a big issue and it's hard to ignore it. At the same time there are controversial remarks about them, like, "They end up like this because they don't work hard". I doubt it, and I hope to know them better and learn what their lives are like, such as how difficult it is for them to get a job, what they need and we can do for them. I think one has to actually interact with them to learn the answers, and SoupRun is a good place to start.

**A (ACTIVE VOLUNTEER WHO CHOSE TO BE ANONYMOUS):** There are so many reasons why someone may end up homeless including lack of affordable housing, poverty and unemployment. I think it's only fair that we each do our bit to help those who ended up in this situation.

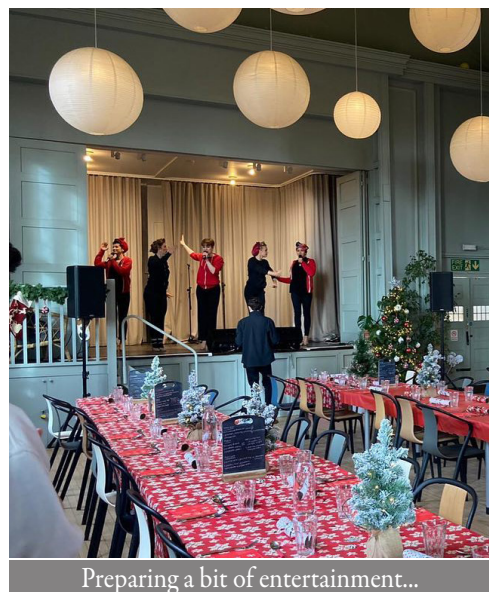
### *What's your biggest gain from volunteering in Soup Run?*

**A:** Volunteering with SoupRun has been an eye-opening experience. Witnessing homeless people queuing for food Sunday after Sunday has helped me to snap out of my own (comparatively very small) bubble of problems.

**RITVIK (COORDINATOR FOR SOUPRUN 21/22):** The big highlight

for me was having an end of week routine where I felt like I was on the ground making a palpable difference and got to learn about the problems that the homeless faced in London. You meet the most extraordinary people, I once met an 18-year-old chess whizzkid who had been kicked out of his house for social reasons but his resilience and drive really stuck with me.

Photo credits: IC Soup Run



Preparing a bit of entertainment...

### *Has volunteering ever changed your opinion on this issue?*

**LAURA:** Homeless people need understanding, but not pity. In fact, most of them are less desperate for food than I imagined. Sometimes it's not like they scramble for all the free food provided, they select what they really need, and perhaps what they enjoy to eat. One of the organisers reminds us that it is respect that they need the most. I came to realise that the right thing to do is not just to help them survive, but also to let them

know that they are part of the society and that they are not forsaken.

**A:** The homeless need to feel like their circumstances are being understood in their entirety.

*Are there any improvements charities can make to tackle this issue better?*

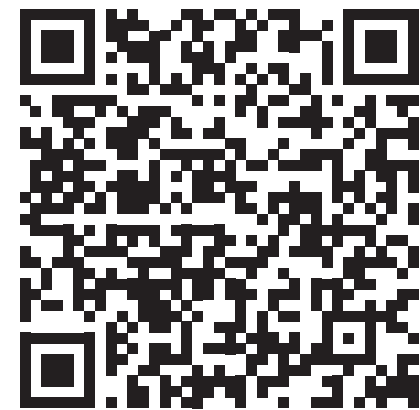
“  
**A BIG ISSUE AND IT'S HARD TO IGNORE IT... LEARN WHAT THEIR LIVES ARE LIKE**

**SARAH (COORDINATOR FOR SOUPRUN 22/23):** A social worker once mentioned that most homeless people have believed that modern society is hostile to them after struggling in lower class for years. Therefore, they have rejected going back to it even if they have a chance. I think this mentality is one of the underlying reasons for their unemployment, which needs to be tackled with patience.

**A:** I think it's important to constantly evaluate whether we're truly impacting people's lives with the voluntary work we do. Providing food is a very sensible short term solution but will not solve the homelessness issue in the long run. I think charities should focus on trying

to prevent homelessness in the first place and if that's not possible, they should focus on trying to provide people with the mentorship and support they need to get back on their feet. Of course, this is much easier said than done as it involves much higher costs and the need for skilled people.

Therefore, we are inviting you to join us! In the coming academic year, we will hold petitions for policy change, share tips and facts, provide information for volunteering as a skilled mentor as well as serving food, hygienic products, sanitary products (and maybe beauty products to make someone's day!). Stay tuned by following Instagram @icsouprun!



## Join IC Soup Run

Photo credits: IC Soup Run



IC Soup Run spreading holiday cheer

# SCIENCE

## *Science Spotlight: Physics Education Research with Dr Michael Fox*

**Taylor Pomfret** Science Writer

Over the summer, I had the opportunity to take part in a UROP with the Imperial Physics Education Group. Physics Education Research (PER) is an important subfield of science education. Its focus is on understanding the teaching and learning of Physics from a scientific and observational perspective. PER is crucial in various areas of the department, playing an important role in outreach, promoting a sense of belonging within the department, and informing the design of experimental physics lab courses.

I sat down with my UROP supervisor, Dr Michael Fox, to discuss his work on PER. Dr Fox is a Senior Teaching Fellow at Imperial with a research focus on physics education. He is also part of the Strengthening Learning Communities Project at Imperial, which aims to better understand the student experience, not only within the Department of Physics, but across the Faculty of Natural Sciences.

To begin with, Dr Fox and I spoke about the numerous aims of PER, alongside his initial motivations to pursue PER:

“PER has a number of aims depending on who you ask. For some, the focus is on building evidence on what constitutes best practice in teaching and learning, while for others the focus is more towards understanding how people learn the skills, concepts, and ways of thinking associated with physics. I would personally say that I sit in the latter group, though have strong connections to the practical implementation of that knowledge in the classroom.

“What made me interested in PER was the ability to take the time to really think about these problems of teaching and learning. When I was a school teacher, I often found it really interesting to see how students would use concepts they understood in new and unexpected ways, but I did not have the time to really ponder the connections that led to those

ways of thinking. This was especially true in the complex environment of the physics practical. Making measurements and understanding what they mean is a fundamental part of physics – and science – but is often taught very superficially. I really wanted to

“

**“WHAT MADE ME INTERESTED IN P.E.R. WAS THE ABILITY TO TAKE THE TIME TO REALLY THINK ABOUT THESE PROBLEMS OF TEACHING AND LEARNING.”**

understand what it is people learn when doing a practical and how close that is to the intention of the teacher. This led me to do postdoctoral research in the group of Heather Lewandowski at the University of Colorado Boulder, whose group focuses on researching undergraduate teaching labs.”

We then discussed the impact of PER on physics curricula and lab courses at Imperial, and the role of PER groups during the turbulence of the pandemic: “The curriculum in physics is quite static and actually some of the work that I have been involved with at Imperial has been looking at how the “curriculum” is perceived in the Department of Physics. I think in the physics community we are really just starting to ask the question: what is the curriculum in physics? And indeed, there are 4 UROP students who have been working in the department this summer on a project funded by

the Institute of Physics to diversify the curriculum, which is being supervised by Jess Wade, Isabel Rabey, Amy Smith, and Mark Richards, following best practises from PER.”

“For lab courses, there is a growing body of research on multiple different aspects of learning in labs – from epistemologies around experimental physics, through to equitable group work dynamics, as well as frameworks on modelling, critical thinking in labs. More concretely, established PER groups also helped with resources when labs went remote due to the pandemic in Spring 2020, such as one project that I was involved in which produced a rapid report on what lab instructors had tried to help inform the community when planning for the Autumn semester in 2020.”

Dr Fox went on to explain the future potential of PER, with a particular emphasis on the research conducted at Imperial: “At Imperial, I am working as part of the Strengthening Learning Communities project based in the Department of Physics. This project has two main strands, one looking at attainment data for the past 10 years in all physics modules to identify demographic gaps which need to be addressed. Jessie Durk, a postdoctoral research associate, and I are currently in the process of analysing this data. The second strand, which Amy Smith is doing her PhD on, explores students’ sense of belonging in the department, the



Dr Michael Fox, Senior Teaching Fellow at the Physics Education Group, Imperial College London

College, and to the discipline of physics. The reason for investigating this second strand is to try to understand the reasons behind any attainment gaps, so that we can make more informed decisions to address those gaps.”

I’d like to thank Dr Michael Fox for the time he dedicated to this piece and to my UROP project. It has been an excellent opportunity to learn more about Physics Education Research and particularly how it can transform the design of labs in physics courses. To learn more about the Imperial Physics Education Research Group, visit its dedicated Imperial webpage.

### Science Editors Needed!

*Felix* is looking to recruit new Science Editors to write, edit and lay out the Science section every week.

Prior experience writing science articles is required (experience outside of *Felix* is acceptable), alongside a strong grasp of written English.

If interested, please email [science.felix@imperial.ac.uk](mailto:science.felix@imperial.ac.uk) for further details.

# ENVIRONMENT

## IC Environmental Society's Secret Garden Part 2

**Simran Patel** Environmental Soc Treasurer

Upon entering Imperial's Secret Garden from the back entrance, visitors are greeted with a faint smell of honey. For hiding amidst the peas and potatoes is a hive of honeybees that Imperial College Environmental Society are delighted to call their own. After a failed attempt to take care of three hives at once, this hive has received the society's undivided attention over the last academic year. And their attention has paid off.

In early June, students found that a new queen was being reared in their hive. When a hive naturally has a new queen, the old queen and part of the hive leave in a process called swarming. Environmental Society simulated this process and created an artificial swarm. One student held up the frames from the main hive, and another brushed some of the bees and their old queen into a smaller nucleus hive. It took bravery to forcefully evict dozens of bees from their homes, as they buzzed loudly and flew around dangerously close to jumping into the students' suits. But the students remained calm, and the nucleus hive was created without anyone getting hurt. In

Image Credit: Simran Patel



The main hive (right) and nucleus hive (left) in the Secret Garden.

fact, the head apiarist takes pride in the fact that no one has been stung over the last academic year. He calls this hive most docile he has ever dealt with, so even students who have never been around bees before can become comfortable around it. Wearing the correct equipment and dressing appropriately for sessions has made students even more comfortable.

Beekeeping sessions take place every Saturday. Over summer this mainly involved checking on the nucleus hive, because the main hive was left alone to allow the new queen space and time to grow. To check on the nucleus hive, each of the five frames are carefully raised, both sides inspected, and lowered again. This can be a squeamish process for newbies. Frames are overcrowded with wiggling bees, some of which crawl over the top to the other side of the frame. Heavy with nectar and honeycomb, some frames need skill to hold up. But inspection is a simple process after this.

“

### BEEKEEPING SESSIONS TAKE PLACE EVERY SATURDAY.

The frames are checked for the presence of the old queen, who was marked with a white spot on the head when the hive first arrived at the garden. Another thing being looked out for is whether nectar reserves are healthy; bees in the Secret Garden collect nectar from Prince's Gardens and the fringe of Hyde Park. Occasionally students have spotted worker bees bringing back colourful nectar on their hind legs, a surprisingly adorable sight. Many cells are filled with chubby larvae, who are raised by their sisters to eventually join them.

But ensuring these larvae have a future



Image Credit: Thomas Angus/Imperial College London

IC Environmental Society's Secret Garden

in the Secret Garden requires dedication from student apiarists through the

mental Society beekeeper!

Image Credit: Heiloi Yip



autumn. Preparation for the winter is crucial, especially because winter killed Environmental Society's last three hives. For example, male bees (drones) need to be removed from the hive because they serve no purpose over winter and drain resources. Above all, Environmental Society is looking for an heir to the current Head Apiarist. With so much work needing to be done, there is no better time than now to become an Environ-

Scan the QR code for Part 1!



Do you like what you see in the Environment section? Want to get exclusive access before we print? Join Felix today!

Email Environment.felix@ic.ac.uk, and join us on Imperial Union A-Z!

## ENVIRONMENT

# IC Environmental Society's Secret Garden Part 3

**Simran Patel** Environmental Soc Treasurer

Imperial College Secret Garden is a place full of greenery and charm. But afternoons at the garden would not be as fun without the company of other Environmental Society members.

Students join Environmental Society for a variety of reasons. Some students want a career in sustainability and enjoy the EcoCareers talks taking place roughly once per term. Some students have grown up around nature and attend gardening sessions to meet other plant lovers. In contrast, some students have grown up in concrete jungles and visit the Secret Garden to escape from bustling Central London. Most student apiarists had zero beekeeping experience before joining Environmental Society - they wanted to try something new and challenging. This year, the committee seeks students with innovative campaign ideas on how to make the College more sustainable.

But what connects all Environmental Society members is a love for nature. When a toad or snail is discovered in the Secret Garden grass, there is likely someone there who knows an obscure fact about the animal. Plants are talked about a lot while gardening, be it those in the garden or houseplants. Similarly, beekeeping sessions are filled with fas-

inating bee facts. Students love discussing the roles, skills, and social structure of bees while inspecting the hives. The head beekeeper has an answer to all bee-related questions, which is especially remarkable because he is self-taught. Learning about apiculture was his lockdown project while more experienced student beekeepers were stuck in their home countries.

It is therefore no surprise that most Environmental Society members study Biological Sciences. The Secret Garden is the perfect place for biology students to get advice on next year's modules, careers, internships and more. But students also love meeting people from other courses while gardening, like any other society. As well as departmentally diverse, the Secret Garden is a culturally diverse place - often students have to look up what a plant's English name is

Image Credit: Thomas Angus/Imperial College London



IC Environmental Society's Secret Garden

because they only know it in their mother tongue. While doing mundane tasks like raking leaves or painting the fence, it is nice for students to be able to chat about where they're from or interests other than the environment. Art galleries, Spanish literature, the neurological effect of drugs... the Secret Garden fence has heard it all. But every so often, when an ant is accidentally smothered with paint or a bee does something interesting during inspection, the conversation sways back to nature. So after two hours of hard work, gardeners and beekeepers leave the Secret Garden with a reinvigorated appreciation for the plants and animals we share a planet with.

If these feature articles have interested readers in becoming a gardener or beekeeper, the joining process is easy. First, students pay a negligible Environmental Society membership fee and join the WhatsApp group. There is no further registration required for gardening; students just need to show up at the Secret Garden on a Wednesday at 2pm and they will usually be let in. Beekeepers need to sign up for each session on a form sent via WhatsApp, with most sessions taking place on Saturdays 1pm-

3pm. Members can attend as many or as few sessions as they want, but Environmental Society hopes to welcome more regular members to the garden this academic year!

Scan the QR code to join IC Environmental Soc



IC Environmental Society's Secret Garden

PUZZLES

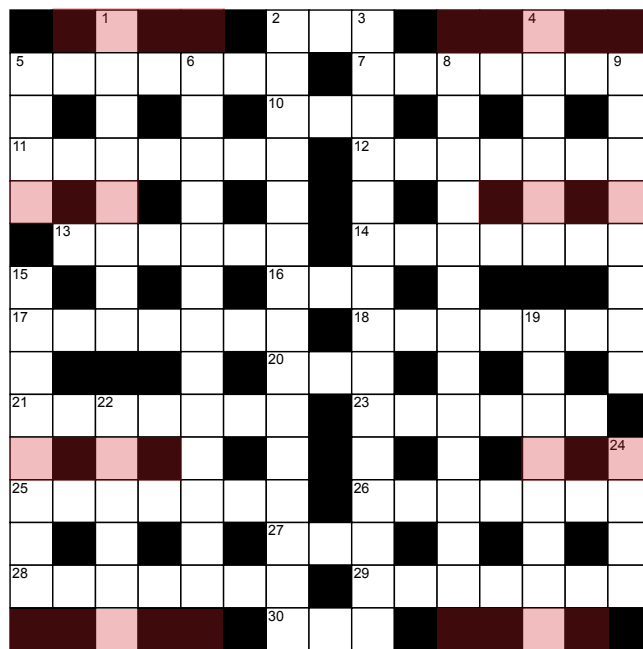
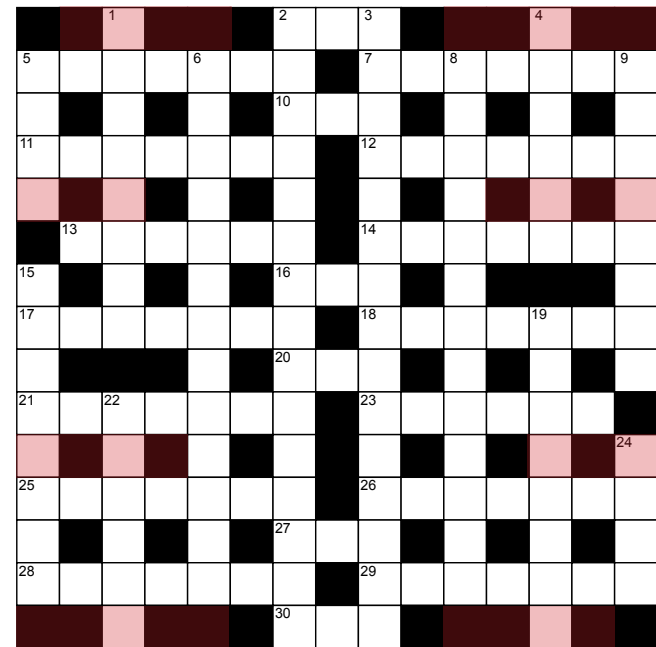
**CRYPTIC Crossword Clues**

**Across**

- 2) She's quite a vain travesty. [3]
- 5) First crawled out of the unending quagmire. [7]
- 7) Removes fastenings under no circumstances - it could cause a slip! [7]
- 10) Scan for a type of insurance. [3]
- 11) Urge to mix up slime. [7]
- 12) In the game, try to get rid of this turn back to draconian curtailment. [3 4]
- 13) The best city to find a frying pan and cooking oil? [6]
- 14) It's got runny snot in its opening! [7]
- 16) It could be tan, or red, or black! [3]
- 17) Writer's tool that allows her to do her job properly. [7]
- 18) Low returns (in fact about zero) for the man who makes jumpers. [7]
- 20) Card displaying the read line. [3]
- 21) Lazy botcher of his own digital capitalist "grindset"? [4 3]
- 23) Complete bust when the inexperienced player puts down 500 instead of 5. [2 4]
- 25) I hear the bride will continue to wear it just before her face. [7]
- 26) "It's time to go back home", I wished. [7]
- 27) Found in twenty-one of Tolkien's creatures. [3]
- 28) Knees-up, or knees-in? [7]
- 29) Rings that belonged to the girl. [7]
- 30) Almost come back to that movement. [3]

**Down**

- 1) Take a broader view when you resign. [4 4]
- 2) \*II\* Where the reader likely goes? [8 7]
- 3) \*III\* Tutu woman wove with double-X in that time period. [6 6-3]
- 4) She has her skirt on backwards whilst skydiving. [3-3]
- 5) Mr. Redding is not issued the centre part. [4]
- 6) \*I\* Do this at a meeting for directors, but say this to the newbies. [7 6]
- 8) \*IV\* One of which the reader hopefully is! [9 4]
- 9) Involving frying linseed, I do this as an extra job. [8]
- 15) Is my switch to Spanish around the barn park causing blunders in dictation? [8]
- 19) We accredited them, before those many blood-suckers scattered in opposing directions! [8]
- 22) The new King will be found on our change and bank notes. [6]
- 24) Modest poems? [4]



**Reverse Cryptic**

Cryptic clue: It's not my way to travel by this!

Answer: HIGHWAY

Reason: \_\_\_\_\_

Cryptic clue: A brave type?

Answer: BOLD

Reason: \_\_\_\_\_

Cryptic clue: Come down hard - like this London district, I heard?

Answer: BRIXTON

Reason: \_\_\_\_\_

**Points**

Cryptic Crossword 5 pts

Regular Crossword 3 pts

Reverse Cryptic 3 pts

Please send your solutions to Puzzles. sudoku@imperial.ac.uk by 5th October Wednesday noon.

**REGULAR Crossword Clues**

**Across**

- 2) Arachnid trap. [3]
- 5) Alternative to fold, as in loo roll. [7]
- 7) What a 2-Ac might do. [7]
- 10) Robert E. or Peggy, e.g. [3]
- 11) That which comes before a trial. [7]
- 12) \_\_\_\_\_ one's horn. [7]
- 13) One of the People's Fronts in the Life of Brian. [6]
- 14) Green stone. [7]
- 16) Informal superior's address. [3]
- 17) Blockbuster creation ground. [4 3]
- 18) How you might describe one 7-Ac'd. [7]
- 20) Utterly embarrass, in internet slang. [3]

21) The time five hours behind. [7]

- 23) "\_\_\_\_\_ away", RuPaul Charles catchphrase. [6]
- 25) Desert cactus species. [7]
- 26) Lennon song infamously covered by Millie Bobby Brown on YouTube. [7]
- 27) Expired. [3]
- 28) Commoner. [7]

29) Word preceding paste or expansion. [7]

30) Disapproving text speak. [3]

**Down**

- 1) On time. [8]
- 2) Pedal mud shields. [10 5]
- 3) Very famous symphony. [10 5]
- 4) Italian sandwich. [6]
- 5) Bivalve of giant or razor variety, e.g. [4]
- 6) Iberian custardy pastries. [7 2 4]
- 8) Measure of capsaicinoid concentration. [8 5]
- 9) Brainiacs. [8]
- 15) Gives as a sacrifice. [6 2]
- 19) Alluring personality trait. [8]
- 22) Indicate, show. [6]
- 24) Currency in Brazil. [4]

Best redrawing of Felix to be featured on Instagram:

## CATNIP

\*\* real!

Felix would like to congratulate alum Mr Bradley Scott Kneisel and Mr Timur on their recent engagement on Sunday September 25, 2022



## STAY ALERT!

Do you think you can do better than Sir Anthony Gormley?

Send us suggestions of how to modify the statue for a chance to be featured in Catnip over the coming term!

## A NEW NAME

As students, it is our responsibility to give our newest member a nickname worthy of its magnitude. Felix will be opening up nominations from next week, and voting will commence on October 14th. Keep an eye out for further details!

**Sam Lovatt**  
Catnip Reporter

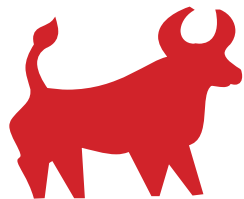
An art critic I might have been,  
were I born a higher class,  
But hide nor hair of bourgeoisie,  
Are needed to critique this farce  
Rain beats down on Imperial Road,  
Leaves fall from the trees,  
Never before has a student seen,  
Such pathetic phallus-y  
Burnished bronze and built of blocks,  
The Queen's Lawn in its sight,  
I'm know to sing my strumpet song,  
Though now, I fear, I am too tight  
Gender, exclusion, EDI,  
The burly hulk of man,  
Defence of art has gone with the wind,  
And frankly, my dear, I don't give a damn

## Horoscopes



## ARIES

This week, you join a queue to join a queue to join a queue



## TAURUS

This weekend you get on a train for the sole purpose of taking a bath in Bath



## GEMINI

This week you go to a STEM uni and still believe the Felix horoscopes are real.



## CANCER

This weekend you go to Amsterdam to see the lights.



## LEO

This week I have just joined the queue



## VIRGO

This week, minor data breach mix-up leads union staff to send registration details to the well-established Rock Climbing Society, instead of the newly formed limerick club Cock Rhyming Society



## LIBRA

This week, you can no longer afford the bleaching chemicals used in toilet paper. You remember *Felix* is free.



## SCORPIO

This week you decide to go on a not-meal diet. Op per kilo, what a steal!



## SAGITTARIUS

This week you return to your addiction to fossil fuels "as a fallback"



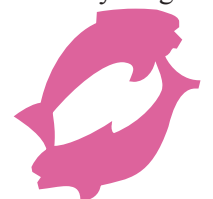
## CAPRICORN

This week you try and figure out if you could sublet half your room for a bit of moolah



## AQUARIUS

This week, you're a fresher moving into halls and pledging to never ever work for an evil corporate scheme. You attend an InvSoc event on Friday



## PISCES

This week your plans to lay-chest-'air go very wrong

# Your Officer Trustees:

## Who are the people representing you?

► *Felix takes a look at the students now representing you as Officer Trustees of the student union, and their aims*

### Hayley Wong

#### Union President

After winning an election which saw an unprecedented eight candidates vying for the role, Hayley Wong is now your Union President for the 2022/2023 academic year. Wong comes to the role a seasoned veteran of ICU, having already served for two years as President of the City and Guilds Constituent Union (CGCU), which represents engineers and computer scientists at the College. She has also been on Union Council for three years and served as Faculty Rep for Engineering.



#### Campaign Goals

Wong ran a campaign based around removing “bureaucracy”, and is aiming to review the Constituent Union (CU) structure. She is reviewing complaints and disciplinary procedures, and wants to implement a code of conduct for CSP culture and improve Union admin and finance procedures for students.

### WHAT DO THEY ACTUALLY DO?

Expect more on this from *Felix* in an upcoming issue, where we plan to explain what the Union as a whole does, but for now, here it is in the Union’s own words:

“The Union is led by the Officer Trustees who are elected every year in our Leadership Elections in a cross-campus ballot. They take a year out of their studies and work full-time, making your Union and Imperial even better. Our elections achieve one of the highest turn outs of any Students’ Union election in the UK and you can get involved with the Leadership Elections every March.”

“Your Officer Trustees are here to improve the student voice for all students at Imperial. They represent you to College on issues such as your course, department and faculty as well as any other problems you may have during your time at Imperial. They are here to make your time at Imperial even better and to ensure you have the best possible experience both during your studies and personal life. They work hard for all students to create a positive and welcoming student community, you can read more about what they are doing on their blogs, or contact them.”

### Niamh McAuley

#### Deputy President (Finance and Services)

Niamh McAuley is your Deputy President for Finances and Services. She brings with her three years of experience at Beit Bars (FiveSixEight, Metric and the Union Bar) and has served as Chair of the Arts & Entertainments Management Group, which represents Arts and Ents clubs.



#### Campaign Goals

McAuley ran on a platform of diversifying Union events and reducing response times from the Union to clubs and societies. Specific goals on her manifesto include increasing events for underrepresented groups and the implementation of a post-grad welcome week. She also aimed to work with College campus services to expand the range of food available. McAuley has already delivered on some of her pledges; Postgrad Night starts on 30<sup>th</sup> September, promising “the cheapest drinks in South Ken”, followed by Postgrad Pies, Postgrad Prosecco and Postgrad Pilates. Fulfilling another election promise, McAuley’s tenure will also see the return of h-bar quiz nights - every Tuesday, starting on 4<sup>th</sup> October.

### Dylan Hughes

#### Deputy President (Clubs and Societies)

Dylan Hughes is the new Deputy President for Clubs and Societies. His most notable role prior to Deputy President is as Club Captain of Imperial Men’s Football Society, though his manifesto says he has been active in other societies besides this.



#### Campaign Goals

Hughes’ campaign centred on his passion for programming, nurtured by a year in industry developing software for Siemens, which he aimed to use to improve Union systems. Particularly noteworthy is his goal to “automate the management of union tasks” to allow the Union to handle requests from CSPs more quickly. His manifesto also states aims to improve the transparency of financial decisions and to develop a system to allow CSPs to use the union to find sponsors. Aside from this, his manifesto expresses an aim to “help introduce a clear path to net zero for the union” and “support clubs in reducing their carbon footprint”.



## Jason Zheng

### Deputy President (Education)

Jason Zheng is the new Deputy President for Education. Zheng served for two years as an academic representative - once as a year rep for his cohort in EIE and then as EIE Departmental Rep. Zheng highlights his experience in these roles advocating for students in discussions with department, faculty and College-level staff.



#### Campaign Goals

“Often when coursework and exam marks are released, it can feel like they were made with a random number generator”, says Zheng’s manifesto. He says he will work to ensure that students know how their marks were allocated and where they can improve. He also aims to reform mitigating circumstances policies across all departments to ensure parity of student experience.

## THE JOB DESCRIPTION

Bye-Law F of Imperial College Union’s constitution sets out the roles of the Officer Trustees. Clause F8 gives a broad job description and is presented below:

8. All Officer Trustees shall;
- 8.1. Act as a Trustee ex-officio,
  - 8.2. Fulfil all Presidential and constitutional responsibilities,
  - 8.3. Execute and develop policy and further the aims and objectives of the Union,
  - 8.4. Ensure that all members of the Union are equally represented,
  - 8.5. Chair relevant Union Committees,
  - 8.6. Liaise with Union and College staff as appropriate,
  - 8.7. Represent the Union on external committees as appropriate,
  - 8.8. Report to Union committees as appropriate,
  - 8.9. Establish extra duties with the President where appropriate,
  - 8.10. Coordinate the work of the non-Trustee officers of the Union,
  - 8.11. Deliver the Union’s strategic aims and uphold the Union’s values,
  - 8.12. Ensure that the Union provides relevant and sustainable events and services that meet the demands of its members,
  - 8.13. Campaign where appropriate on issues relevant to the membership.

## Chris Oldfield

### ICSMSU President\*

Medics do love their acronyms don’t they? With the longest acronym out of all the Union representatives comes Chris Oldfield, ICSMSU (try saying that out loud) President. This is Oldfield’s second such role - he served last year as Medgroup Chair of United Hospitals, a student body representing London’s five medical schools.

He comes to the ICSMSU (Imperial College School of Medicine Students’ Union) role with a formidable array of experience besides this, having held nine different committee positions across CSPs and spent two years on ICSMSU.

#### Campaign Goals

Oldfield wants to improve Equality, Diversity and Inclusion (EDI) at the medical school. His manifesto pledges to actively initiate the suggested outcomes of the BMA’s racial harassment charter. He also wants to support widening participation in ICSM and focus on prevention and a clear disciplinary procedure for misconduct. He notes the “stark disparity” between Reynolds Bar (frequented by primarily by medics) and other facilities in South Kensington. Oldfield aims to improve ICU support for Reynolds in the coming year.

\* Technically speaking, Chris is not an Officer Trustee



## Nathalie Podder

### Deputy President (Welfare)

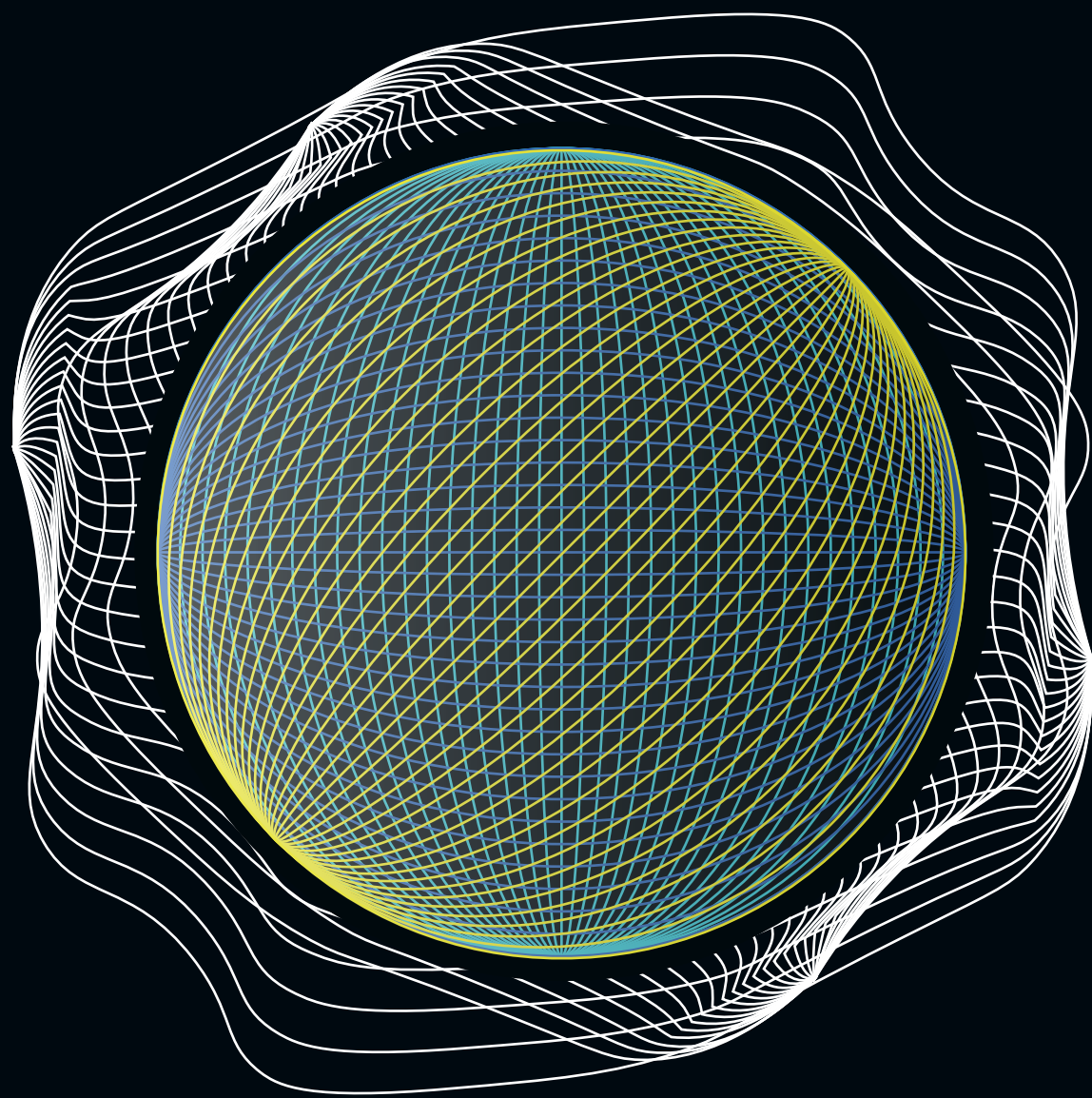
Nathalie Podder continues on for a second year as Deputy President for Welfare, having already served in the 2021/22 academic year. Her manifesto highlights her impressive track record in the role, where she worked with liberation networks to roll out free period products across College, “quadrupled” the size of the Union’s Advice Centre (from one person to four, but noteworthy all the same) and led an ongoing campaign to address concerns around spiking. On her page on the Union website, she writes of the mental and physical challenges she faced as a student, which inspired her to advocate for those going through challenges.



#### Campaign Goals

Podder’s manifesto addresses the handling of violence and harassment. She aims to improve reporting procedures for the two within the Union and the wider College. Aside from this, she also wants to reform the College’s provision of mental health services and implement the Union’s EDI Strategy and Action Plan, which is currently under development. She has already been working to deliver a paper on the effect of the cost of living crisis on students, alongside specific recommendations to the College. She aims to mitigate the impact of cost of living increases on vulnerable groups and is consulting on how to best support them (see our front page article).

# DECIBEL



imperial  
college  
union

FiveSixEight.



THE UNION BAR est. 1957

Join us as we take over Beit Bars. Expect some of London's top DJs, exclusive drinks deals and student performances.

**Wednesday 12 October**

**Monday 31 October**

**Wednesday 9 November**

**Wednesday 23 November**

**Wednesday 14 December**

**Get your tickets at**

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

# BOOKS

Edited by: ZANNA BUCKLAND

## Book Review

# Transformer: The Deep Chemistry of Life and Death

An exploration into the origins of living cells with respect to cancer, aging, and consciousness

Kieron Cartwright Books Writer

**T**ransformer begins with 'It is the movement that creates the form' and with that, Nick Lane sums up his entire thesis. To best understand the origin of life, as well as where life falters, we must not underestimate the central importance of metabolism – and especially the Krebs cycle.

Lane journeys through the discovery of the Krebs cycle and enlivens the narrative with stories of scientists who've cast long shadows across their respective fields. He gradually develops the picture with descriptions of discoveries and findings that ultimately led to the complete cycle. The author indulges in affectionate metaphors and chemical representations of molecules that aim to ease the lay-reader into textbook biochemistry. While this slightly dulls the presented ideas for more technical readers, it is a minor flaw.

As far as over-simplifications go, according to Lane, none are as harmful to the subject as the dogma surrounding respiration and photosynthesis. Plants make glucose, which animals then oxidise to create

adenosine triphosphate (ATP), an energy carrier. It's a problem that goes unnoticed unless pointed out, but it is certainly there. There is more to the Krebs cycle than simply energy production – it constantly changes and directs metabolic flux within cells. It fits in with the information-obsessed era of biology we're currently in that tends to overshadow the dynamic side of biochemistry.

With this knowledge now in place, Lane delves into the greatest mystery of all – the origin of life. Without giving too much away, Lane's interpretation involves hydrothermal vents, catalytic minerals, and a complete reversal of the modern-day Krebs cycle. It is a fascinating look into how living cells may have originated from simple chemical beginnings. The later chapters on cancer, ageing, and consciousness are equally intriguing – but I leave it to the reader's discretion to dig deeper into these concepts.

Lane's style is easy to read, and unintimidating – at times too much so. Whilst I'd like to say the book is accessible to anyone, I would advise that someone with a biology-related background would find it more easily digestible. Regardless, Transformer is an

excellent book and a worthwhile read, particularly for those interested in biology and biochemistry.



“  
INDULGES IN  
AFFECTIONATE  
METAPHORS ...

## Editor's Picks

# 50 Must-Reads for the Year Ahead

Zanna Buckland Books Editor

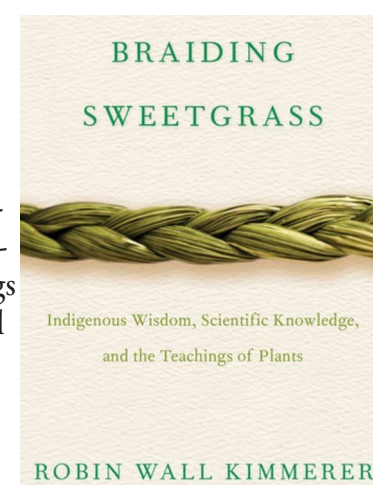
**H**ello. I am Zanna Buckland, and I am continuing on as your Books Editor this year. To mark the start of the academic year, I have compiled a selection of non-fiction and fiction reads to read over the coming year. If you read one of these (or any others!) and want to submit a review, get in touch with me through the Books.felix@ic.ac.uk email.

### Non-Fiction

1. As Long As Grass Grows: The Indigenous Fight for Environmental Justice, from Colonisation to Standing Rock – Dina Gilio Whitaker
2. Why Has Nobody Told Me This Before? – Dr Julie Smith

3. Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants – Robin Wall Kimmerer

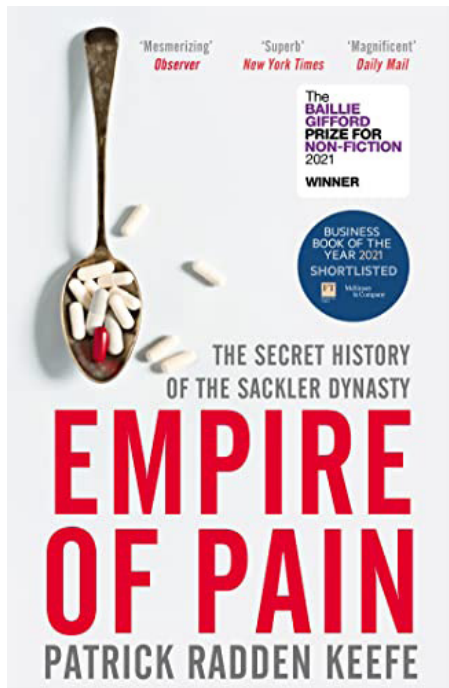
4. Constructing a Nervous System: A



Memoir – Margo Jefferson

5. Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming – Paul Hawken

6. Empire of Pain: The Secret History of the Sackler Dynasty – Patrick Radden Keefe



7. How Civil Wars Start: And How to Stop Them – Barbara F. Walter

8. How Iceland Changed the World: The Big History of a Small Island – Egill Bjarnason

9. How to Prevent the Next Pandemic // How to Avoid a Climate Disaster: The Solutions We Have and the Breakthroughs We Need – Bill Gates

10. Indelible City: Dispossession and Defiance in Hong Kong – Louisa Lim

11. In the Margins: On the Pleasures of Reading and Writing – Elena Ferrante

12. The Invisible Kingdom: Reimagining Chronic Illness – Meghan O'Rourke

13. The Joy of Science – Jim Al-Khalili

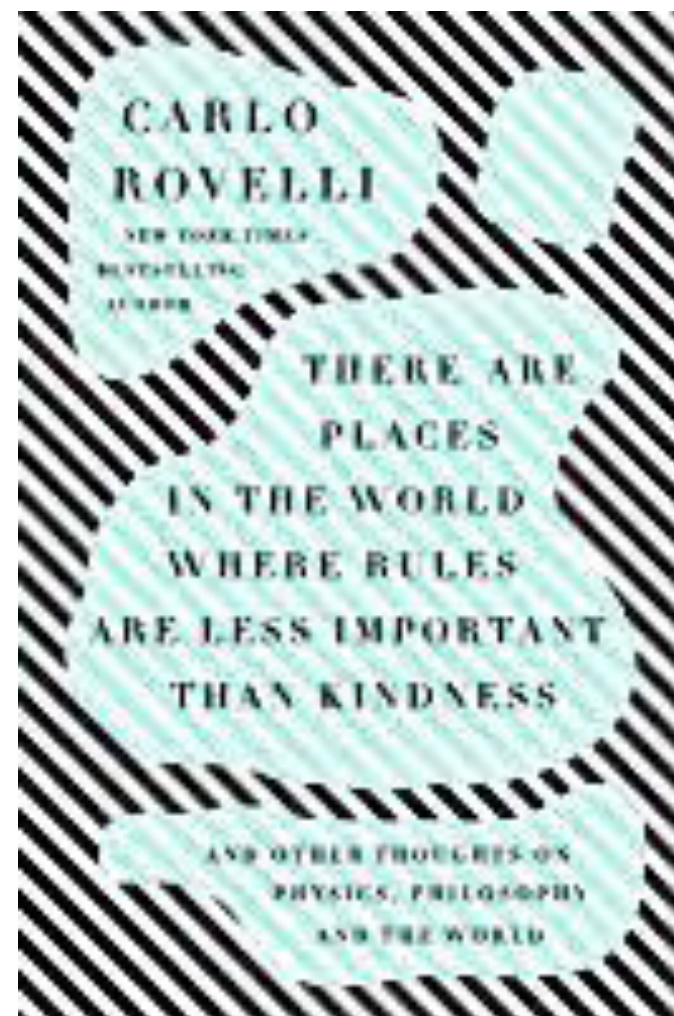
14. The Last Days of Roger Federer: And Other Endings – Geoff Dyer

15. The Life-Changing Science of Detecting Bullshit – John V Petrocelli

16. Scoundrel: How a Convicted Murderer Persuaded the Women Who Loved Him, the Conservative Establishment, and the Courts to Set Him Free – Sarah Weinman

17. Sentient: How Animals Illuminate the Wonder of Our Human Senses – Jackie Higgins

18. The Sixth Extinction: An Unnatural History // Under A White Sky: The Nature of the Future – Elizabeth Kolbert



## Felix Books Wants You!

Calling all Imperial College readers - we would love to see some of your thoughts on all things books and literature!

Felix accepts all kinds of pieces, including, but not limited to, non-fiction and fiction book and magazine reviews, literature articles, and author profiles. We also regularly receive copies of new titles to be reviewed by our writers if you're not sure what to read next.

Please feel free to email [books.felix@imperial.ac.uk](mailto:books.felix@imperial.ac.uk) if you have any prospective pieces or are simply interested in contributing this year. We look forward to working with you!

19. Stolen Focus: Why You Can't Pay Attention – and How to Think Deeply Again – Johann Hari

20. The Story Of More: How We Got to Climate Change and Where to Go from Here – Hope Jahren

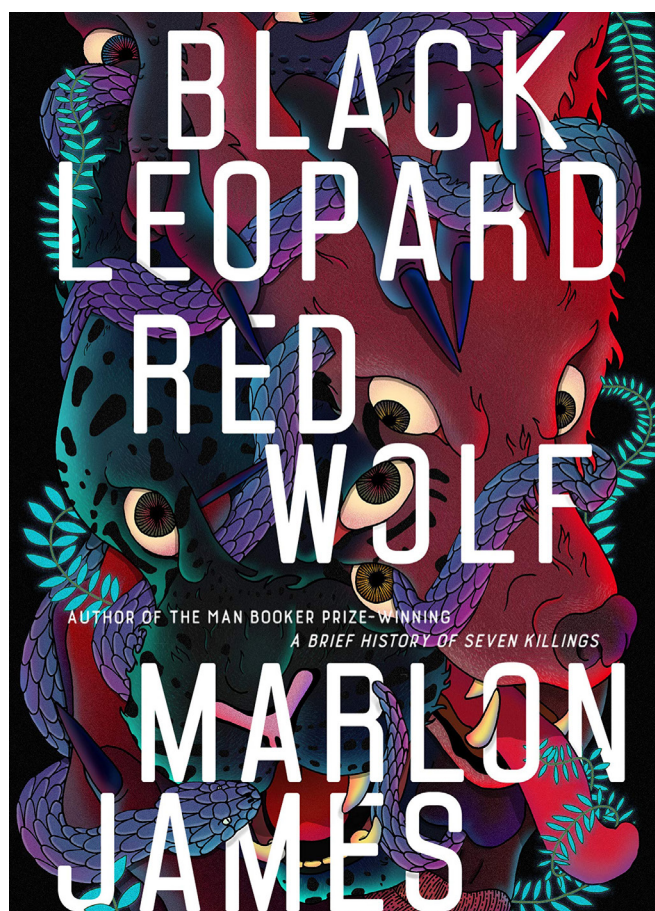
21. Their Eyes Were Watching God: A Novel // You Don't Know Us Negroes – and Other Essays – Zora Neale Hurston

22. There Are Places in the World Where Rules Are Less Important Than Kindness: And Other Thoughts on Physics, Philosophy, and the World - Carlo Rovelli

23. This Changes Everything: Capitalism vs. the Climate // On Fire: The (Burning) Case for a Green New Deal – Naomi Klein

24. Trans: When Ideology Meets Reality – Helen Joyce

25. What My Bones Know: A Memoir of Healing from Complex Trauma – Stephanie Foo



*Fiction*

1. All My Rage – Sabaa Tahir

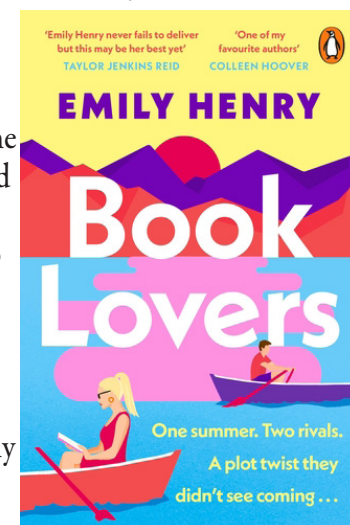
2. Beautiful World, Where Are You? – Sally Rooney

3. Black Cake – Charmaine Wilkerson

4. Black Leopard, Red Wolf // Moon Witch, Spider King (Dark Star Trilogy) – Marlon James

In this fantasy trilogy set in Africa, two kingdoms – the North and the South – compete for land and resources. Witches, spirits, and vampires also roam the story, helping and hindering characters from the two sides.

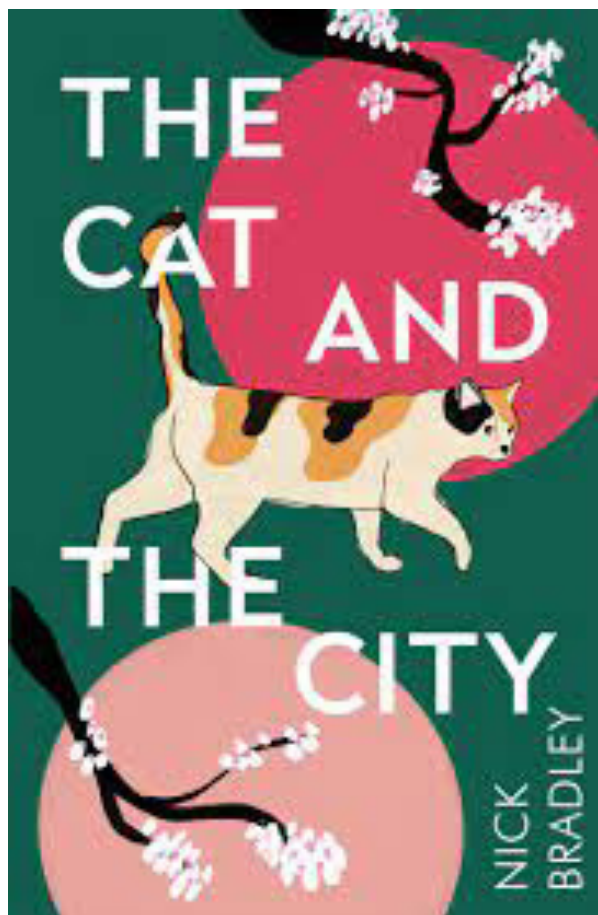
5. Book Lovers – Emily Henry



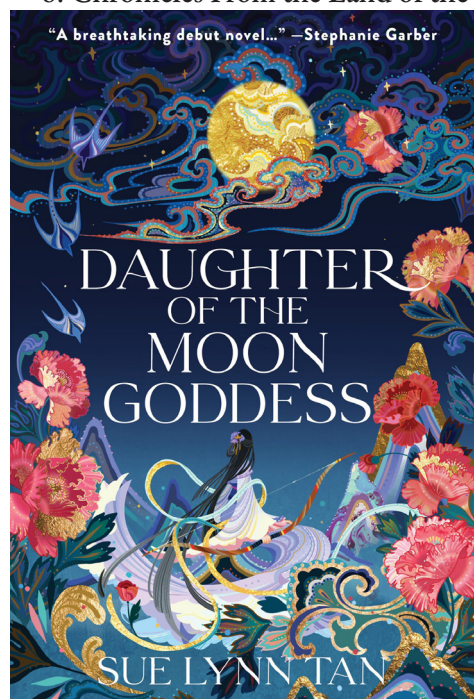
## BOOKS

6. *A Visit from the Goon Squad // The Candy House* – Jennifer Egan

A sci-fi, slightly dystopian novel, that plays with the idea of a device that is able to recall and record real memories and share them with others, as with content on social media. A story about how we deal with privacy and authenticity.

7. *The Cat and the City* – Nick Bradley

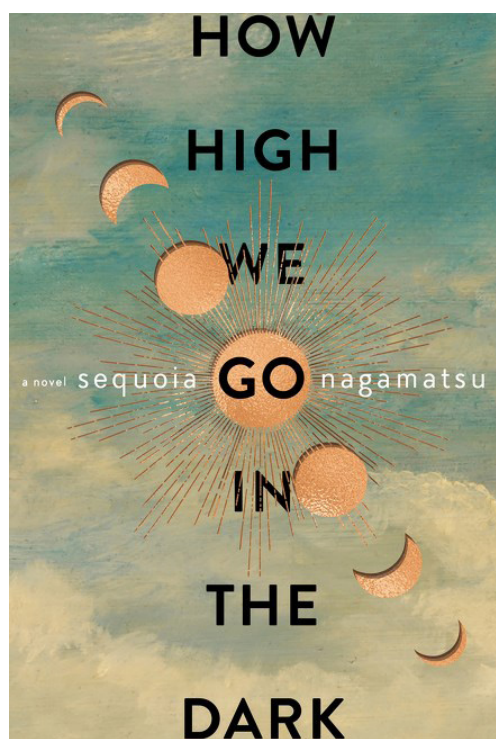
This follows a cat as it travels around Tokyo, visiting and interacting with various citizens on its way. The lives of these citizens are intertwined, but also stand alone. A novel about the ups and downs of everyday life and human connections.

8. *Chronicles From the Land of the Happiest People on Earth* – Wole Soyinka

A political/crime title, this story set in a literary version of Nigeria discusses corruption through the tale of an entrepreneur who deals in body parts for use in ritualistic sacrifice.

9. *The Country of Others (Translated)* – Leila Slimani10. *Cult Classic* – Sloane Crosley11. *Daughter of the Moon Goddess* – Sue Lynn Tan

Based on the Chinese legend of Chang'e, this fantasy novel tells the story of a woman who goes on a quest to free her mother from exile. In the vein of Percy Jackson, the novel draws on Chinese legend to create a tale full of magic and morals.

12. *Girl A* – Abigail Dean13. *Happy Ending* – Thien-Kim Lam14. (*The Underground Railroad // The Nickel Boys*) // *Harlem Shuffle* – Colson Whitehead15. *How High We Go in the Dark: A Novel* – Sequoia Nagamatsu

An episodic sci-fi novel that delves into the consequences of human-caused climate catastrophes. The premise is of a virus being released by the melting of permafrost, and the story spans from Earth to the moon, and back. The tales are eerily familiar, clearly inspired by recent events.

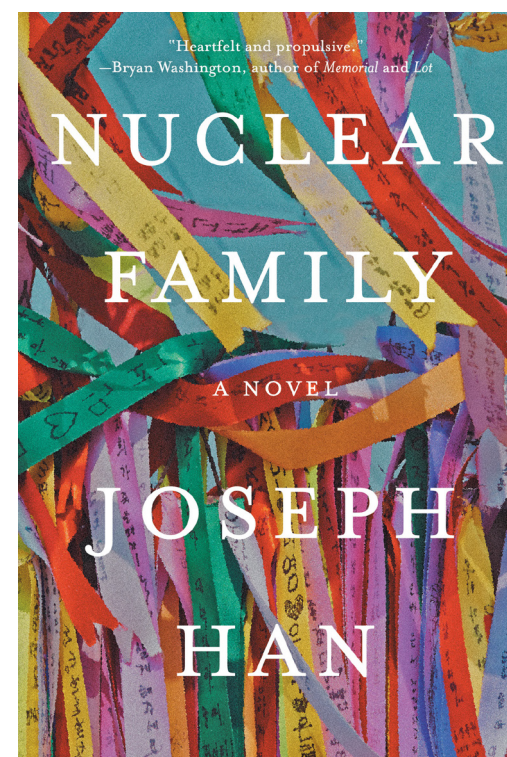
16. *The Hummingbird (Translated)* – Sandro Veronesi17. *I Will Die in a Foreign Land* – Kalani Pickhart18. *Klara and the Sun* – Kazuo Ishiguro

Klara is an android 'friend' with artificial intelligence, who spends her days watching customers and potential friends roam the streets and the store she

resides in. A sci-fi and fantasy book that follows closely in the footsteps of Ishiguro's other novels, exploring the intricacies of human and technological connections.

19. *Lessons in Chemistry* – Bonnie Garmus

The story of a chemist in the 1960s who is also a single mother. While not given her due recognition in the field of chemistry, she finds this respect and admiration through her methods of applying chemistry to cooking on TV. Both a commentary on historical attitudes towards women's rights and an unusual take on a romance novel; an amusing read.

20. *Nuclear Family* – Joseph Han21. *Olga Dies Dreaming* – Xochitl Gonzalez

A politically-charged romance novel covering topics such as family connections, LGBTQ+ issues, and idealism. The titular character is orchestrating weddings for the rich and wealthy of New York when her mother returns to visit her and her brother, wreaking havoc in their personal lives.

22. *Raising Lazarus* – Beth Macy23. *Sea of Tranquility* – Emily St. John Mandel

Seemingly inspired by the Covid-19 pandemic, this sci-fi title examines the causes and consequences of a pandemic on Earth, from various locations both on-world and off. The story bounces between characters who are inevitably interlinked, and explores the concept of time travel and changing the course of history.

24. *The Thursday Murder Club // The Man Who Died Twice* – Richard Osman25. *To Paradise // A Little Life* – Hanya Yanagihara

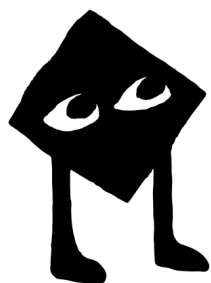
# MUSIC

Edited by: TARA PAL CHAUDHURI  
JOE RIORDAN

## DON'T MISS THE GIGS!

### DOWNLOAD DICE

FEEL LIKE GOING TO A GIG AND DON'T KNOW WHAT'S ON? DOWNLOAD DICE AND USE IT TO FIND OUT. IF YOU FEEL LIKE A COMEDY NIGHT, A CLUB OR A GIG, DICE HAS YOU COVERED. OUR BIG TIP FOR ANY MUSIC-LOVING FRESHERS IS TO DOWNLOAD OUR FAVOURITE CONCERT SCHEDULING APP!



\*\* unsponsored!

## Album of the Week

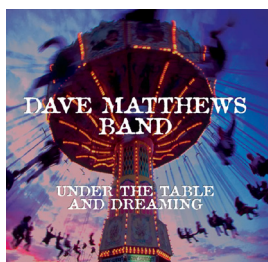
### Gulp! by Sports Team

Sports Team are back with their sophomore album, *Gulp!*, sticking to the sound of their debut. There's nothing revolutionary about *Gulp!*, a lot of it is filler however, as always with Sports Team, when they hit the spot, it's gold. Some standout tracks are 'The Game', 'Light Industry', and 'Dig!' - which I hated at first but has grown on me. Although the album is slightly underwhelming having followed their debut *Deep Down Happy*, it is still a fun, highly-listenable album, there's just something missing. Maybe it'll reveal itself after some more listens, maybe not, see for yourself.



## TODAY IN MUSIC HISTORY

IT'S 1994 AND AMERICAN ROCK BAND THE DAVE MATTHEWS BAND RELEASE THEIR FIRST ALBUM, *UNDER THE TABLE AND DREAMING*. IN 2004, P!NK LANDS HER FIRST SOLO HIT, 'SO WHAT' ON THE BILLBOARD 100. SIMULTANEOUSLY, ROCK PRODUCER, PHIL SPECTOR, IS INDICTED FOR THE MURDER OF LANA CLARKSON, CALIFORNIA STATE.



## Album Reviews

# Horseshit on Route 66: The Garden

## boiled down to its essence

*The Californian twins come back with a love letter to punk*

Written by Giovanni França Music Writer

The Garden has always been 'weird'. In my mind, I associate them with modern art galleries, where you spend ten minutes looking at a single sculpture not because of the technicality presented, but because you are trying to decipher its meaning. And in a way, a large part of the art punk genre, their primary outlet, works in this way. There is an anti-theatrical combination of rudimentary punk rock with sophisticated elements brought from, quite literally, anywhere else. *Horseshit on Route 66* samples media that ranges from the 1955 musical-comedy *The Court Jester*, to the YouTuber Jacksepticeye, all the while promenading on soundscapes reminiscent of surf rock to digital hardcore. Wyatt and Fletcher Shears, the twins who form The Garden, manage to make order out of this chaos with the new record, something they have often struggled with in the past. Indeed, that was their biggest sin in previous projects, often being classified as 'inconsistent' by critics and music fans. And that flaw is completely gone here. Compacting the track list to 11 songs spanning across just 24 minutes, the duo gets straight to the point, not spending energy on empty, cryptic tracks which often bloated previous albums, but making meaning out of disorder.

As I said before, *Horseshit on Route 66* does not cut any corners. It starts with the simple yet effective track 'Haunted House on Zillow', a tongue-in-cheek horror song about a ghost-ridden property listed for sale on the Zillow online marketplace, a theme that has generated countless BuzzFeed-style articles and dedicated Instagram pages. This kind of Generation Z humour is present all throughout the following tracks, whether it is with the absurdism of the scenarios painted, or with references to pop culture, such as the somehow Oscar-less stop-motion film *Chicken Run* (in which a 5-year-old Wyatt voiced the ever so famous Additional Chicken).

The album is short, yes, but it covers plenty of ground. Be it with the devouring 'Puerta de Limosina', an injection of adrenaline to the head, or with

'Chainsaw the Door', a motivational speech on stepping into the unknown, there is a common backdrop of punk, a DIY magic that glues everything together. The track that represents this concept the best must be the climax of the project, 'Orange County Punk Rock Legend', an ode to the dark side of being backstage, as in the ominous experiences that artists are submitted to by simply having a presence in the scene. It has a sweet guitar melody but borderline disgusting lyrics - sonically a cute homage to the twins' hometown, it is in reality a joke about the *horseshit* they have dealt with.

This naked punk-ness with which The Garden presents themselves is what make the whole thing so interesting to me. In a way it represents the dissatisfactions of the modern youth for what they are, without any pretentiousness or whininess; it being the downfall of the American Dream; the creeping urban violence present in any city or the struggle to maintain privacy in an online world. The gritty bass tone coupled with the delicate guitar riffs make up for an improbable bunch of songs, especially when you add a layer of drum and bass elements and lo-fi production. It is almost like having a bag of those mystery jellybeans: some are nice, some stink, however they all work together to put the consumption experience over the actual flavour. Don't get me wrong, I am saying that 'Squished Face Slick Pig Living in a Smokey City' sounds absolutely ugly, and it just... works. The duo tricks, deceives and bamboozles you - but of course. Look at the album cover. *What else could they be but jesters?*



View online here!

## MUSIC

## Gig Reviews

## Self-proclaimed jazz punk band Warren's House rock

## The Beehive.

*I trekked to East for this so they must be good*

Written by **Amanda Paul** Music Writer

Having narrowly beaten Warren's House to second place in Imperial's Battle of the Bands with my band, (thank you to all 17 of my friends for coming and voting for us, I still owe you guys a pint) I was blown away by their sheer talent and skill. The four-piece's unusual combination of bassist, guitarist, drummer and saxophonist/flautist made for a sonically riveting set and I was hooked, so when they announced a gig all the way out in Bromley-by-Bow (I'm a West London girl), I didn't mind the 50-minute trek.



rushed inside and was greeted by Warren's House's distinctive, jazzy sound. A few things had changed since I saw them last, no wind instruments this time but they had added a vocalist which really allowed more of their personality to shine through in the music.

The set consisted of a mixture of rhythmically complex and harmonically rich tunes where all members could showcase their musicianship and a few noisier, punkier songs that filled the room up. My personal favourites were the final two where bassist/vocalist Flynn Mulcahy's raspy voice took centre stage. The sheer versatility and skill of guitarist Will Spires throughout their set allowed Warren's House to seamlessly shift genres yet maintain a cohesive, recognisable sound. Special mention must go out to Imperial's very own Jonathan Lillie whose tight drumming, groovy style, and com-

plex fills tied it all neatly together into one magnificent performance. Featuring a garish sweater-vest, a whole lotta mesh, and eyeliner for days, you never quite knew where to look when they were on stage. Not only were Warren's House a treat for the ears, but their stage presence and eclectic outfit choices made for a visually interesting performance too.

A crowd favourite of the night was definitely their cover of Dick Dale & His Del-Tones' 'Miserlou' (or what the Black Eyed Peas sampled in 'Pump It' if that's more your thing). The lively and iconic tune was a well-timed shift from the slightly more laid-back, chilled-out vibe of previous numbers and brought a whole new energy to the room before they transitioned to more upbeat songs as the set came to a close.

Overall, I'm glad I dragged my friends and made the journey to see them and would 100% do it again; they were great to watch and even better to listen to. Keep up with them via Instagram @warrenshousemusic.

## Felix Recommends

## Being in the Right Place at the Right Time

*Why you should care about classical music while living in London*

Written by **Gilbert Jackson** Music Writer

With Freshers' Week on the horizon and work coming swiftly on the heels of autumn, music can offer solace in these times. But music, like most things, is something that you need at the right time and at the right place; especially when it comes to classical music. For most, classical music seems like a chore; indeed, sometimes the prospect of it can seem daunting, but again, I reiterate – right place, right time. In fact, I argue that no field of music is more diverse than classical music. Therefore, for all of you coming to London for the first time and embarking on your student career or for those of you who are returning to once again head into the fray, I shall give you a few pieces to send you on your merry way and help expand your experience of this fair city and give you a newfound appreciation for the classics.

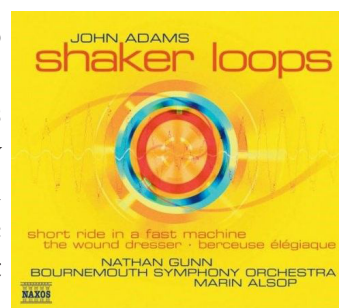
## The Concrete Jungle

London is a mesh of concrete criss-crosses, a network of narrow streets and bustling roads. For me in particular, it took a while to learn that one must have a sense of purpose and determination when navigating the streets of the city. While you find

your way across the city, be it by pavement, tube or bus, here is some music which will help you get into the zone and turn your steps into strides.

## 'Short Ride in a Fast Machine' by John Adams

John Adams, like so many East Coast American composers of this era, has his roots firmly within the minimalism tradition of music (the idea that music need not be complex to be effective or evocative). However, there is nothing 'minimal' about this piece at all. Subtitled by the composer himself as a 'fanfare', it is a fury of wind and percussion from start to finish. He compared it to the feeling of "[riding] in a terrific sports car, and then [wishing] you hadn't". Indeed, its quick pace and audacious orchestration certainly paint this bold picture. When you find yourself in rush hour traffic, let this piece make glory of your somewhat unfortunate situation.



## 'Candide: Overture' by Leonard Bernstein

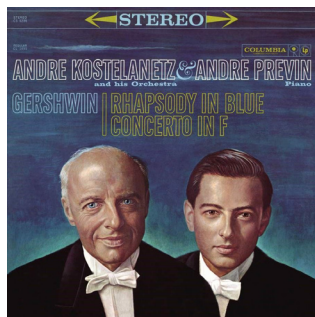
Leonard Bernstein was a pillar of 20<sup>th</sup> century music. Also coming from the East Coast, he spent much of his time in New York as conductor of the New York Philharmonic. Much of his music was influenced by the sights and sounds of that city. The story of Candide by Voltaire has two protagonists endure calamity after calamity in search of each other. Of course, I do not wish calamity on anyone but the music which Bernstein had so wonderfully orchestrated encapsulates the bustling life of the story's protagonists and the bustling life of city goers everywhere. When you have to shove past tourists occupying the wrong side of the escalator, let this piece give you the determination to tell them to move aside.

## 'Piano Concerto in F: III. Allegro agitato' by George Gershwin

This has to be one of my favourite pieces of music of all time. Many people know Gershwin for his other famous work, 'Rhapsody in Blue'. While stunning, I believe it pales in comparison to this virtuosic flurry



of keys. Heavily influenced by the New York jazz scene, this piece has been the show-stopper for many famous pianists - Oscar Levant and Andre Previn to name but a few – and it's very easy to see why. It is a huge wake up call from start to finish; never faltering in its pace and never relinquishing. You may wake up one morning and find yourself already late to your lectures and workshops (trust me, it will happen) and what better peace to give you the strength to run all the way to campus than this exhibition of the fusion of jazz and classical music.



### Stately Grandeur

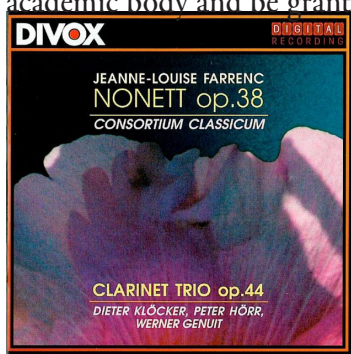
I should, of course, highlight that London is not always a frantic bundle of streets and pavements. Upon coming here, you will already notice the sheer number of extravagant and elegant buildings dotted just around South Kensington. It would be nice if there were music to accompany your visits to the many museums and galleries. I jest, because of course there's music for that!

### 'Westminster Waltz' by Robert Farnon

Robert Farnon is a proponent of 'Light Music'. And 'light' is certainly the word for it! It's simply lush swelling strings and schmalzy melodies from start to finish. But what makes this piece stand out, as its title may suggest, is that it has all the familiar sounds of Westminster which you will become acquainted with. Often referencing the chimes heard from Big Ben, one can imagine traversing the streets of Westminster in the early evening when there is a stillness around you that can be found beneath the gothic halls and classical columns that dot the landscape.

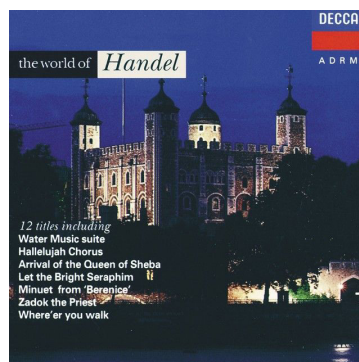
### 'Nonet in E-flat Major: III. Scherzo. Vivace' by Louise Farrenc

Farrenc was a masterful composer and professor of piano at the Paris Conservatoire in 1842. Her determination and stunning compositions allowed her to stick it to the governing academic body and be granted equal pay along with the rest of her male counterparts. And the piece that finally brought her to the front of Parisian music society was her Nonet – a wonderful treatise on how stunning music can be made with so few instruments. The 'Scherzo' movement I've chosen here is perhaps the highlight: it's stately without being pompous, well-paced without being hurried. One can picture listening to this while journeying through all the art galleries of London, soaking in every last drop of culture.



### 'Solomon: Arrival of the Queen of Sheba' by George F Handel

I'm not above making basic song choices at all. In fact, this piece is almost perfect for the vibe it sets. Everyone has heard this piece at some point in their life as it often features heavily in film and television when depicting London as a stereotypical English city with good manners and tea and the like. But one can easily see why, the subject matter is about the state visit of a monarch and the music clearly conveys it very well with its fluttering strings and very stately wind section. It seems an obvious choice for a London listen.



### The Secret Gardens

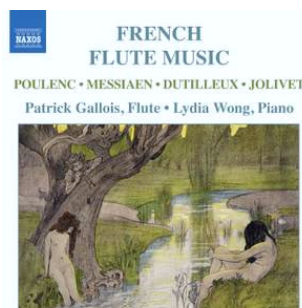
One can find London filled with some of the most gorgeous green spaces in the UK. Once you've hurried along the marble hewn streets without getting run over by a bicycle on the crossing to Hyde Park, you'll finally be able to get some peace of mind. Or maybe you'll go further afield to the wild untamed landscapes of Richmond Park. If only there were a piece of music to go with this!

### 'Flute Sonata, Op 164: I. Allegro malinconico' by Francis Poulenc

Poulenc's music is so quintessentially French it might seem like an odd choice to have when walking about the London gardens but this piece creates an atmosphere of mystery; of intrigue. When you walk through the gardens of London, often we do it to explore and take in our surroundings and this piece fits the bill. The florid melodies from the flute evoke the sounds of birds and the ever present piano the rustling of trees. A must listen for anyone who decides to explore the green spaces

### 'Symphony in E Minor, Op. 32, "Gaelic Symphony" II. Alla siciliana - Allegro vivace' by Amy Beach

The green spaces of London themselves can be impressive as well as quiet and contemplative. Hyde Park and Kew Gardens are huge stretches of green space that boast bold and striking scenery. Amy Beach has captured the rolling landscapes of the UK perfectly with her grand orchestration and incorporation of traditional folk melodies from across the British Isles. One cannot help but imagine pastoral landscapes filled with meadows and babbling brooks upon hear-



ing this symphony – the first symphony ever written by a female American composer.

### 'Partita for 8 Voices: No. 2, Sarabande' by Caroline Shaw

I must admit I only found this piece the other week upon recommendation from a friend of mine. However, upon listening I was transfixed and enamoured. Caroline Shaw won the Pulitzer Prize for her Partita and it's very easy to see why. It's an exploration of the range of the human voice and incorporates spoken word, sung passages and throat singing all used to wonderful effect. To top it off, the Partita (a collection of Baroque dances) fuses conventional harmony with modern minimalist harmony and texture to create a truly thought-provoking experience. The Sarabande movement I've chosen here is perhaps my favourite of the set and brings a sense of calm which will go nicely when exploring the gardens of London.

### 'The Legend of Ashitaka' (from 'Princess Mononoke') by Joe Hisaishi

Studio Ghibli as an institution that has brought joy, emotion and wonder to our generation. Miyazaki (founder) is a storytelling genius and a true artist but particular regard must go to his resident composer, Joe Hisaishi, who I hold as one of the greatest composers still living today. It would be impossible to tell these wonderful stories without such epic and heart-wrenching scores of music to accompany. This piece in particular accompanies shots of wild Japanese scenery, untainted by Man. For those of you wanting to live your 'main character moment', I give you the tools to do so.



Classical music is a rabbit hole that keeps on going without end and you will always find new music to fall in love with. I leave you with some advice: London is very much a cultural city; make use of the student deals that theatres and concert halls offer and go indulge yourself in the arts. I highly recommend the Young Royal Opera House membership. It's free for students and allows you to buy any seat in the large theatre for just £25 during the week! And here's the Spotify playlist to get you started:



# INVESTMENT

Hello and Welcome...

## An Overview of the Society's Plans



*We're back... and can't wait to welcome returning, as well as new members! Whatever you investing knowledge, there are events for you!*

**Harry Schlote**  
Investment Editor



In my first year, I remember the buzz around campus during freshers week, signing up for numerous societies, and attending countless welcome events.

One of them really appealed to me. They had events for all types of members, and being one of the largest societies I got to meet so many new freshers.

Imperial College's Investment Society. Founded in 2015, it has grown rapidly year-on-year to over 1300 members last year. Ryan and George, the societies presidents discuss the aim of the society on the following page in more detail, but to summarise it, we are looking to provide educational events, hands-on investing opportunities, and build a community for anyone looking to learn about finance and investing.



Having spoken to some people about the society, they sometimes feel that they don't know enough about investing to understand topics at events, but so many of our events are looking to teach from the very foundations of investing, and the first career steps that you can take in it.

I believe that even if you don't want to go into a financial career, being part of this society will help you to understand so much of what you may be seeing in the current news, with economic factors being at the forefront of many political events we are seeing.

For example, you may be asking what impact central banks raising interest rates has on the stock market, or the bond market, and why we have seen companies stock prices such as Netflix and Meta fall so much since mid-2021. Many people started investing in 2020 when they saw other people getting great returns, but they didn't really understand why share prices go up and down. These are the kind of fundamentals that Imperial Investment society aims to teach our members, to help them better understand financial markets and the general economy.

These Investment columns in the Felix newspaper will be filled with weekly articles from members on the writers team, as well as containing the latest events the society is running.

There are so many opportunities for members to get involved this year. The Securities Education Certificate (SEC) is a course that aims to teach members the fundamentals of securities, and with an exam at the end it is an achievement that you can mention in future job applications.

There are also more specialist events and courses we provide, such as learning to code your own trading strategy, taking part in stock pitches and networking with industry professionals. For those interested, we also run our own investment fund, Queens Tower Capital, where we have a team of analysts (both new and experienced) managing a portfolio, another opportunity for members to get hands-on experience investing and managing capital.

### JOIN INVESTMENT

Membership **Free**

Join

*Join the society as a member for free through the Unions activities page*

To keep up to date with the societies latest events, they will be posted on our social media channels linked at the bottom of this page, but also by signing up for our free membership on Imperial College's Union page. You will receive the latest information straight into your inbox and be the first to sign-up for events with limited capacity.

**So again, a very warm welcome to the Investment Society, I really encourage you to join, make the most of it and see you soon!**



ADD OUR SOCIAL MEDIA PAGES FOR THE LATEST EVENTS, NEW & OPPORTUNITIES



ic.investmentsociety



ic-investment



ic.investmentsociety

## An Interview with the President's of the Society...

# 'We Look Forward to Welcoming You!'



*Harry recently caught up with Ryan and George, president's of the society, to discuss their plan for the academic year ahead.*

**Harry Schlote**  
Investment Editor



**G**reat to catch up with both of you and discuss the societies plans for this academic year! First of all, I wanted to ask what you both see as the society's main aims and vision going into this year?

Investment Society is Imperial's one-stop shop for any student looking to immerse themselves into the world of finance and investment. From education courses on investing and the basics of finance, to networking sessions with professionals and the opportunity to participate in our investment fund, Queen's Tower Capital, our society provides members with valuable learning opportunities and a platform to meet other like-minded and enthusiastic individuals.

Seen as one of the most prestigious industries to enter after graduation with a high barrier of entry, we are particularly focused on making sure that our members, especially from STEM backgrounds, are well-equipped to become leaders of tomorrow. We are especially proud to say that many of our alumni are now in some of the most coveted roles within the industry!

Regardless of prior knowledge and whether you aim to work in the industry or just want to learn something new, Investment Society has you covered!



**Amazing - it sounds like you are looking to cater for all kinds of members! So what kind of events can members expect for the society to provide for them, and key ones to look out for?**

This year our flagship beginners course, the Securities Exchange Certificate, is returning bigger and better than before! This course aims to break down the finance and investment industry in a way that is easy to understand for both beginners and more experienced members.

We are also excited to expand our investment team at QT Capital, our society's very own investment fund. Consisting of both an equities and systematic team which undergo training on investing and conduct pitches throughout the year, our analysts are given valuable opportunities to put themselves into the shoes of professionals without having any prior knowledge. This year, we are excited to introduce an alumni advisory committee to form even closer ties with past members currently working in the industry!

On top of this, we have several other opportunities for members to get involved such as joining our editorial team and our quant trading course, the Systematic Trading Educational Certificate. We will be running networking events and panel discussions with key players in the industry throughout the year, aimed at demystifying the industry and providing members with opportunities to explore different roles at different companies.

We are planning for our events to be in person to ensure members can make the most of these opportunities!

**Lots of events to attend then! Finally, I know that the Investment Society is unique in Imperial in that it is one of the few to offer its own range of courses to its members. Is the society more focussed on students with prior investing knowledge or people looking to learn with no previous experience?**

Our committee is dedicated to making Investment Society an open and inclusive platform for our members regardless of their prior knowledge of investing.

Whether you are seeking to break into the industry or just want to learn something new, there is something at Investment Society for everyone and we look forward to welcoming you during Fresher's week!

**Thanks Ryan and George – it will certainly be a year for our members to look forward to and enjoy. Especially with no Covid-19 restriction, we are looking to have almost every event in person so it should be great!**



*Ryan Ling is a 4th year Biomedical Engineering student, as has just completed an Investment Banking internship at BNP Paribas.*



*George Spencer is a 4th year Chemical Engineering student, and has just completed an investment banking internship at Deutsche Bank.*

*Under their leadership, the society will aim to give you the members of Investment Society the best experience possible!*

## INVESTMENT

**Freshers' Fair***Tuesday 4<sup>th</sup> October 2022**South Kensington Campus*

**Come over and have a chat with some of our new 2022/23 committee!** Freshers' fair is back for another year, where you'll be able to meet the Investment Society in-person and come have a chat with us about who we are, what we do and how you can sign up to our various programmes, events and our own lecture courses.

You'll be able to ask any questions you might have, make some connections, and give us any suggestions for the coming years events!

We encourage you to sign up to our free membership through the Student Union's A-Z listing. Log in using your Imperial credentials and click on the big "Join" button underneath the heading 'Join Investment' (see to the left).

**An Investment Society Introduction***6 Oct 2022, 18:00 – 20:30**Location - Huxley 213*

The societies introductory event is to get all our members excited about the year ahead, showcasing events, courses and programmes that you can get involved in! You'll hopefully be able to find us in Huxley (in the Computing department) and speak with the committee and members. Location will be confirmed closer to the date.

**Valuation Workshop with Justin Wong***11 Oct 2022, 18:00 – 20:00**Location - Huxley 311*

Join us as Justin Wong, a final year mathematics student and former intern at Invesco and Credit Suisse, takes us through the basics of fundamental valuation of companies. This is event is not to be missed for anyone looking to enhance their investing skills and/or to join our student investment fund, QT Capital!

**Securities Education Certificate (SEC)***15 Oct 2022, 11:00-13:00**Location - Huxley 213*

Our 7-week flagship education course starts here where Ryan Ling, our Co-President, will take us through a background of the finance and investment industry and dissect the role of key market players. At the end of the course, you can sit an exam and receive a certificate for passing. Sign up forms will be sent out in due course!

# SPORT

## IC Dance Club Triumph in Blackpool

IC Dance Club  
Committee

The first few months of the year are always the busiest in a dancer's calendar. Three of the four major competitions of the year are scheduled during one hectic month between the end of January and the end of February, culminating to the biggest UK university dance competition of the year - Inter Varsity Dance Competition (IVDC) - held at Blackpool's Winter Gardens.

Coming off of highly successful appearances at the University of East Anglia friendly and the Southern Universities Dance Competition, the Imperial College Dance Club was in the best possible shape to succeed.

The weekend fun started on Friday with a Blackpool Coach Trip Quiz where GCSE science, Disney song knowledge and Alistair's French accent were put to the ultimate test. Then Saturday began early. Most were putting the finishing touches to their hair and makeup, whilst others followed their strict pre-competition shower rota and others

practiced their Ballroom frame in the mirror for two hours.

Upon arriving at the Empress Ballroom in the Winter Gardens, it's easy to be intimidated by the sheer size and grandiosity of the dance floor. However, such a dance floor is necessary, as several hundred dancers from all across the country were in attendance.

The day began with the Ballroom rounds where presentation, precision, posture and poise are key. Considering most people had had maybe only four hours of sleep the night before, the morning proved to be fruitful for Imperial, with eleven couples making a final, and many more making a semi-final. Big shout-out to Jake Woolley and Alys Dally who, out of almost 150 couples, came first in the Beginners Quickstep event.

In the afternoon, the Latin rounds began where showmanship, syncopa-

tion, sharpness and style are all essential. By the time finals came around, some

people had been dancing solidly for nearly nine hours! Despite this, ten couples qualified for their respective finals, and again, many more made it to the semis. Lewis Ng

and Momo Chen won the Pre-Intermediate competition by Cha Cha Cha-ing and Jiving their way to victory!

The whole Dance Club can be very proud in placing at least one finalist in fifteen of the twenty available individual events; Ben Biggs and Zoë McGeer should be particularly proud as they were one of only two couples to make Advanced finals in both Ballroom and Latin, solidifying themselves as Imper-

al's leading 10-Dance couple!

But, if the last few years have proven anything, it's that the ICDC is much stronger as a team. Evidence for this can simply be found by the sheer exuberance with which Imperial's dancers cheer for and support those out on the floor; we really turn the volume up to eleven! There is surely not a stronger team spirit to be found at any other university.

The Team Match – where universities go head to head – is where Imperial truly shines, and this isn't a new phenomenon; in fact, throughout the 90s, Impe-

“  
**IT'S EASY TO BE INTIMIDATED BY THE SHEER SIZE AND GRANDIOSITY OF THE DANCE FLOOR**

“  
**SOME PEOPLE WERE DANCING SOLIDLY FOR NEARLY NINE HOURS!**

Credit: IC Dance Club



The Imperial College Dance Club celebrating their various triumphs in the Winter Gardens

rial won seven team matches, including four consecutive wins.

Put simply, the Team Match is where the team captain creates a team using four couples. Each couple competes in one dance: Waltz, Cha Cha Cha, Quickstep and Jive – the four cornerstones of Ballroom and Latin. Their scores are combined, and the team with the best overall score wins. There is both a student Team Match and an ex-student Team Match.

The student Team Match is split into two divisions. Imperial's A, B and C teams all qualified for Division 1, with Team A making the final after four highly competitive rounds. Not even the likes of Cambridge (IC's arch-rivals) could knock Imperial out of step as Team A scored half as many points (the lowest score wins in Team Match) as the next best team. It was an outstanding, yet unsurprising (humble IC brag!) achievement considering the talent each of the four couples has out on the dance floor.

The Ex-Student Team Match is slightly easier to describe; no divisions, simply a quarter-final, a semi-final and a final.

Credit: IC Dance Club



Imperial Team A: Ben Biggs, Bowen Kwan, Zoe McGee, Sophia Jiang, Tash Tiger, Iris Roatis, Victor Solecki, Maya Thomas and Kennedy Au

Imperial's Ex-Student A and B teams both comfortably qualified for the final. Team B came fifth and were the only B team to make the Ex-Student Team Match final, but it was Team A that really shone through, just nudging ahead of Edinburgh and Cambridge, claiming the win by one point.

IC therefore became the first university to win both the main Team Match and the Ex-Student Team Match in the

same year - an incredible accomplishment. These victories, coupled with the deafening chant of, "IC, IC, IC, IC...!!!" that nearly shook the Winter Gardens to the ground, made for a magical end to the competition.

A quick pizza pit-stop, followed by a revolutionary rave and some DMCs back at the hotel concluded the evening, although quite what the absolute boss was doing remains unanswered for

lead up to the 2022/23 season which begins with a competition in Nottingham in late November.

This was my fourth time at IVDC, and it was easily my favourite, for which I must thank each and every dancer who took part. The sense of community in the club has never been stronger, and happy dancers usually make for better dancers.

Thanks must also go to Bowen Kwan,

now...

Such an event really showcases Imperial on the national stage. In front of a plethora of academic institutions from up and down the country, the members of Imperial's Dance Club not only demonstrated their talent for dancing, but also their solidarity and strength as a team. We're now hitting the ground

Sophia Jiang, Izabela Jaszcz and Madison Doerrzapf for organising the weekend; without them, we simply wouldn't have been there and, even after seven months, I hope they've each managed to catch up on sleep!

But most importantly, we must thank our unbelievable coaches Marika Doshoris, Laura Fox and Damiano Soldati who give up so much of their time and energy for the club and us dancers. We can never thank them enough!

**IC Dance Club can be reached:**

**Facebook - General:**

<https://www.facebook.com/Imperial-CollegeDanceClub>

**Facebook - Ballroom & Latin:**

<https://www.facebook.com/groups/461867898747352>

**Facebook - Salsa & Bachata:**

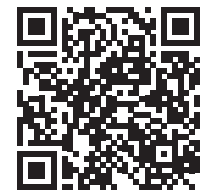
<https://www.facebook.com/groups/620535802999022>

**Instagram:**

[https://www.instagram.com/dancers\\_of\\_imperial/](https://www.instagram.com/dancers_of_imperial/)

**... and their website,**

<https://www.union.ic.ac.uk/acc/dance/>



## Join Felix here!

Credit: IC Dance Club



Imperial Ex-Student Team A: Alistair McMurray, Izumi Kurokawa, Devon Anthony, Katie Chow, Matthew Abdul-Rahim, Emma Gilbert, Elema de Lean and Philip Kaloyanov

Has your society done something interesting lately?  
Would you like to encourage new members to join?  
Looking for a place to advertise your society?  
Get in contact with the Sport section!

Email us at: [Sport.Felix@imperial.ac.uk](mailto:Sport.Felix@imperial.ac.uk)

Do you want to get exclusive access to articles before they come out?

Are you a nit-picky perfectionist?

Decent at grammar and spelling (or want to improve)?

Become a Felix Section Editor!

Email us at: [Felix@imperial.ac.uk](mailto:Felix@imperial.ac.uk)

# FILM

## BFI London Film Festival 22

The LFF returns to London with plenty to see

Jonah Hewett Film Editor

The BFI London Film Festival returns for its 66<sup>th</sup> appearance this year, with screenings running from the 5<sup>th</sup> to the 16<sup>th</sup> of October in various cinemas in London and around the country. The festival opens on the Wednesday with the world premiere of Roald Dahl's *Matilda The Musical*, and will feature over X feature films, short films, documentaries, and more.

Some of the more highly-anticipated films of the latter half of the year will see pre-release screenings at the LFF, including Rian Johnson's *Glass Onion: A Knives Out Mystery*, Martin McDonagh's *The Banshees of Inisherin*, Guillermo del Toro's new stop-motion *Pinocchio*, and *The Whale*, among others. Unfortunately, a lot of these have already sold out (though not all, at the time of writing!) but you're in luck: this year, the festival continues on the BFI

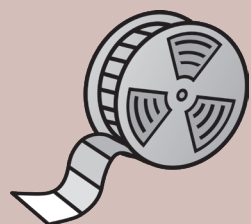
Player, where many of the festival films will be available to watch online from the 14<sup>th</sup> to the 23<sup>rd</sup> October.

Happily, it isn't only mainstream films that will be featured during the festival; a plethora of international and lower-budget works are also being screened, both new and old, and many of these still (again, at the time of writing) have tickets available. In fact, these are the ones you should try to go and see, since for some of them this might be their only UK showing. The festival also contains six curated programmes of short films, 90-minute collections of several contemporary short films that are grouped together on a common theme.

If any of this sounds interesting to you (and it should), you can sign up for a BFI 25 & Under account to get festival tickets for just £5. This isn't an advert I promise – but you really should go.



Credit: BFI



### Write for Film!

Have YOU ever watched a movie?  
Why not write about it!

We're always looking for new writers who are interested in film, whether you want to write reviews, scholarly articles or rants!

Email any articles or article ideas to  
[film.felix@imperial.ac.uk](mailto:film.felix@imperial.ac.uk)

Edited by: JONAH HEWETT  
EVA BORRAS

### Films to look out for this term...

*The latter third of the year (or 'the fall season' if you will) is always an exciting time for film releases, and this year is no exception. It is also often a time of much university work, so, dear reader, we at Film decided that we ought to give you a reminder to not miss out on many of the potentially excellent options that you will soon have for your procrastination-viewing pleasure. And, since it's OUR opinion about what is (and isn't) exciting, you know you can trust it.*

#### Glass Onion: A Knives Out Mystery

Release: Oct 16<sup>th</sup>

A sequel-of-sorts to the widely acclaimed mystery from the undeniably consistent Rian Johnson, this promises to serve up just as much delightful comedic intrigue.

#### Bros

Release: Sep 30<sup>th</sup> \*

Romantic comedy might not be something you'd expect us to recommend, but as this is the first mainstream romcom about a gay couple, featuring a main cast of LGBTQ actors, we think it's definitely too groundbreaking to miss. \*In the US; as of yet, there is no scheduled UK release. Unfortunately, I can't think of any other ways that you could watch it.

#### The Banshees of Inisherin

Release: Oct 21<sup>st</sup>

From the director of *Three Billboards* comes an Irish black comedy, starring Colin Farrell and Brendan Gleeson. I don't know if it's fair, but I really hope this is as good as *In Bruges*.

#### She Said

Release: Nov 25<sup>th</sup>

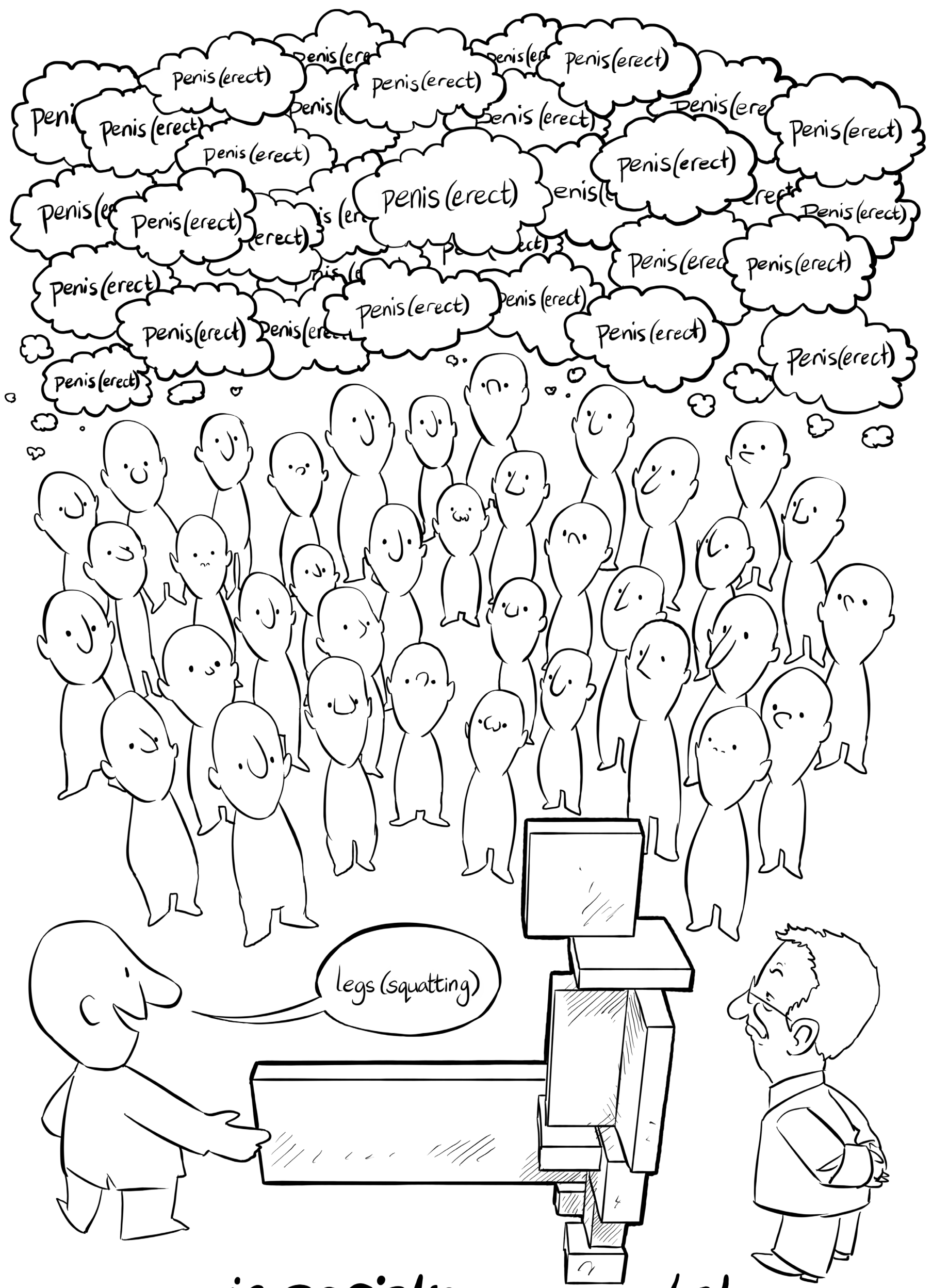
From director Maria Schrader (Netflix's *Unorthodox*), *She Said* chronicles the story of the two New York Times journalists, Jodi Kantor and Megan Twohey, who began the investigation that exposed Harvey Weinstein's serial abuse of women and catalysed the #MeToo movement.

#### The Whale

Release: Dec 9<sup>th</sup>

The long overdue comeback of Brendan Fraser, a man who needs little introduction to those of us whose grandparents would play George of the Jungle on VHS every time you visited (on request). Oh, was that just me? Regardless, the film, and specifically Fraser's performance, is receiving plenty of acclaim.

Illustrated by Nicolas Geiseler-Toran



imperial's statue  
~~THE EMPEROR'S~~ NEW CLOTHES