**FCIIX** 

felix@ic.ac.uk

felixonline.co.uk

**Standard and cryptic** crosswords! > Pages 30-31 **Students supporting** staff > Page 3 **VVIPs visit Imperial's** CAGB for clean tech. talks > Page 6 FRIDAY 24TH FEBRUARY 2023

**Return of the Food and** Travel sections > Page 41

# **BSM Bottle Match Reports > Page 49**

Having a cuppa with Tea Society > Page 54

Talking fungi with Prof. Fisher > Pages 12-13

**Searching for the** planet > Page 16

A review of Nabokov's *Lolita* > Page 36

Love letters from **Imperial > Pages 20-21** 

Loving The 1975 > Page 37 **ICURFC Centrefold** 

**On Disney's** monopoly > Page 39

Take a trip to the Bookshop Theatre > Page 25

**Catnip reports on Bill** and Sunak > Page 32

# **ISSUE 1821** Blackett blues: Imperial Physics department "unhelpful",

# "dismissive" and "two-faced", say students

Jamie John Co-Editor-in-Chief Isabella Ward Co-Editor-in-Chief

**G** t was absolute chaos", says Alex, when we ask them about their time as an undergraduate in Imperial's Department of Physics. "It just felt like you were getting by somehow."

Alex (not their real name) is not alone in their sentiments. For several years now, the department at Imperial has had notably poor student satisfaction. In the 2020

National Student Survey (NSS), which was sent to all final-year undergraduates in the UK, Imperial's Physics department ranked bottom in the country for overall student satisfaction. It holds the unfortunate distinction of being in the bottom five Physics departments in the country on this measure, in every year from 2017 to 2022.

Physics is an aberration amongst Imperial's undergraduate courses; the College as a whole has consistently achieved high student satisfaction scores, and over the past few years, has been ranked among the best in the country. Last year, it won The Guardian's University of the Year Award.

Viewed in this light, the Physics department's performance is puzzling. Felix set out to understand what it was that led its students to express such dissatisfaction. We spoke to a range of undergrad-

### Continued on page 4...



# EDITORIAL

# This issue was produced thanks to the work of:

Jamie John	News Editor			
Isabella Ward	News Editor Sport and Societies Editor			
Angie Lo	Science Editor			
Taylor Pomfret	Science Editor			
Marie Mori	Environment Editor			
Simran Patel	Environment Editor			
Elif Civelekoglu	Comment Editor			
Isaac Winson	Puzzles Editor			
Amy Smith	Catnip Editor Arts Editor Arts Editor Books Editor			
Gilbert Jackson				
Sophie Pointon				
Zanna Buckland				
Joe Riordan	Music Editor			
Tara Palchaudhuri	Music Editor			
Jonah Hewett	Film and TV Editor			
Mike Buzadji	Film and TV Editor			
Charlotte Probstel	Food and Travel Editor Sport and Societies Editor			
Natalie Yu	Sport and Societies Editor			

# A Decade of Discontent

There is a certain amount of resilience required to study at Imperial College London. Within what most students agree to be a high-pressure environment, courses are academically challenging with high workloads. Nevertheless, student satisfaction scores for the College are excellent across the board – for all departments bar one: Physics.

Whereas most students seemingly find their university experience rewarding, many Physics students look back less favorably on their degrees. Over a decade of NSS scores in which Physics consistently underperforms the College-average show this.

Whatseemstobeattherootofthis, is the dismissiveness and disingenuity which students feel has been demonstrated by the Physics Department. Repeated failures to properly address complaints, and a tendency to explain away mishaps, rather than find solutions, have led many students to the conclusion that their department simply does not care about them.

There is a sense that things are improving

#### Illustration by Nicolas Geiseler Torán

as the years go by, and specific problems are highlighted and ironed out. But progress is slow, and overarching problems remain unresolved. Take, for example, coursework deadlines: for years, students have complained that deadlines are stacked up on top of each other – and yet still, little progress has been made. Firstyear students still make the same complaints that fourth-year students made when they started at the College.

Until the Physics Department is able to listen to its students, recognise their concerns, and find equitable solutions, it seems destined to continue as the laggard of Imperial, floundering in the depths of NSS tables.

Lastly, let us not forget the students whose entire university experience has been defined by the inaction of the Physics department. It has taken a toll on their wellbeing, and while their feedback to the Department may eventually lead to improvements several years down the line, it will not be enough to save their own experiences.

# Statement of Intent

At Felix, we believe that it is always in the interest of the students to be in the know. Transparency in the workings of the College and the work of your student representatives is key. Therefore we, the Felix Editors, 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.

Signed by: Jamie John, Isabella Ward, and Zanna Buckland Co-Editors-in-Chief 2023

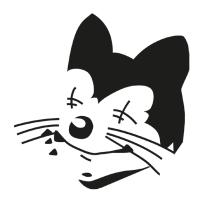
Felix Office Beit Quad, Prince Consort Road London, SW7 2BB
Tel: 020 79548072 Email: felix@ic.ac.uk
felixonline.co.uk
Twitter: @feliximperial
Facebook: @FelixImperial
Insta: @felix_imperial

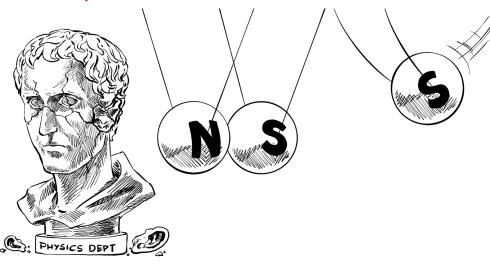
Printed by Iliffe Media Winship Road, Milton, Cambridge CB24 6PP

Registered Newspaper ISSN 1040-0711

Copyright (c) Felix 2023

And our numerous contributors!





Missing image credits from Issue 1820: Front page (Quiz Soc. over Imperial) by Isaac Winson Editorial (three Felix Editor cats) by Nicolas Geiseler Torán

# Anger as UCU calls off strikes

UCU general secretary Jo Grady explains controversial decision to Imperial staff.

### Isabella Ward Co-Editor-in-Chief

On Friday night, the University and College Union (UCU) paused strike action for two weeks after "real progress" was made in talks with employers over pay, conditions and pensions.

The decision has provoked anger amongst its members, who worry that alleviating pressure now will result in a worse offer as employers try to resolve the dispute. UCU general secretary Jo Grady attended an industrial action meeting in the Imperial College Union Bar, on the morning of Thursday 23<sup>rd</sup> February, to explain the decision to pause strike action and respond to queries.

Grady explained her decision as a reaction to employers' increased willingness to resolve the dispute, calling the UCU's current position "the most productive, positive place we [the UCU] have ever been in in recent memory." She therefore argued that it was not productive to remain on the picket lines, as the UCU now needed to "step into olive ter-



Staff and students alike protest outside the UCU London head office on Monday.



Jo Grady responds to striking Imperial staff in The Union Bar.

ritory" with employers. "Fundamentally, if we're going to get a deal, this is going to be a big part of getting that deal", she told the room.

A member of staff who was present at the meeting disputed this. He suggested it may be tactically naïve to alleviate pressure on employers. He criticised Grady for "demobilising" the industrial action and pointed out that the UCU had yet to receive a written offer from employers.

Grady responded, saying it was im-

portant to "switch up tactics when things change", and defending the the UCU's decision as "the right tactic for this dispute". She challenged the claim that this was a two-week pause in the trade union's action, noting "this is not a period of rest; it is a period of change."

She reassured staff that, if at the end of these two weeks, sufficient progress had not been made, strikes would continue and plans for an upcoming marking boycott, which was due to begin in April, would resume.

# Students form strike solidarity group to protect the 'future of education'

Imperial students aim to help bring end to disputes by increasing pressure on employers.

### Isabella Ward Co-Editor-in-Chief

As staff continue to strike, student support is becoming more visible, with a student-solidarity group having formed recently at Imperial. I spoke to founding member Natalia about the group's motivations and ambitions.

There is already evidence that students at Imperial overwhelmingly support the strikes, with a 2021 referendum on whether the Union should support industrial action over pension disputes concluding over 73% of voting students supported the strikes. Last month, the Union Council voted to continue supporting the strikes and, novelly, to support the marking boycott.

Imperial Students Support the Strikes has been set up as a way to actively support the strikes from the student side. Having held their first meeting last Friday, the group aims to elevate the pressure placed on employers by the strikes: "the more pressure we can put on employers, the sooner the dispute will end."

They have only formed recently but, having set up a WhatsApp group and

supported the strikes. Last month, the distributed posters around campus, Union Council voted to continue sup- hope to see their numbers grow.

> Natalia argues their cause goes further than solidarity with staff, to self-consideration for students as well:

> "Staff working conditions are student learning conditions. The strikes are disruptive to our learning, but that pales in comparison to the disruption we're already facing from staff being overworked and underpaid."

> The neglect of staff is apparently multi-faceted, as Natalia cites the "slashing" of their pensions and real terms decrease

in pay, as well as the increase in the number of casualised contracts.

Along the picket line, there has been much talk on the latter, with staff arguing that the short-term contracts and uncertainty of renewal has contributed towards the increase in stress and mental-health issues within the sector.

All this concerns Natalia about the future of higher education, as she tells *Felix* "The UCU conducted a survey of their members last year and 60% of re-

Continued on page 7...

### NEWS

### Continued from page 1... Physics department woes

uates, who painted a picture of a department remarkably out of touch with its student body.

A litany of problems plague the department. An unwavering insistence on maintaining academic standards leads to hefty workloads and tight deadlines. Then, a perceived reluctance to empathise with students and accept culpability for the resulting issues leads to accusations that the department is apathetic and defensive, and that its student-support mechanisms are perfunctory and tokenistic.

One student told Felix, "The workload is so high that it leaves students very stressed and very overwhelmed with what they're doing. That is not an environment that's conducive to good mental health or being able to enjoy yourself in London."

Many students speak of a problem of overassessment. "There are too many extra little tasks — an extra problem sheet here, an extra bit of coursework there. They don't add a whole lot to the course".

A fourth-year physicist gave the example of assessed problem sheets: "It was devastating — late nights and high stress for maybe 2.5% of a module." He said that he never received feedback on the problem sheets and was sometimes unable to identify where he had gone wrong.

Discontent with feedback is wide-

spread. Across year groups, students nuances of the experiment, and would week, with multiple falling on the same feel that the marks they are awarded are have to consult the heads of experiments day. not proportional to the quality of their work or the effort that they put in. Sev-

**THE BEST** REPRESENTATION **OF HOW THIS COURSE MAKES ME FEEL IS THE SCENE FROM INDIANA JONES,** WHERE THE NAZI'S FACE IS **MELTING.** 

put so much effort into a piece of coursework for it to be up to a roll of the dice", said one second-year physicist.

The quality of help provided by teaching assistants (TAs) varies significantly. "The TAs are a bit of a crapshoot", ex- culture of obstiplains a Physics undergraduate. "Some of them are excellent and some you learn department. A to avoid."

The same, students say, is true of laboratory demonstrators. They claim that year she had four demonstrators didn't understand the deadlines in one

- who were often not present.

random. "It was really very frustrating to whose response to some questions was simply, "Google it". One told *Felix*, "You ing out how to start the bloody project. That's one of the most frustrating parts."

### Deadlines

Exacerbating the problem is a tendency for deadlines to be stacked together. One student recounted an incident can't do that'. when they alerted the department to a deadline crunch; its re-

sponse was to bring one of the deadlines forward. "Responses like this just

lead students to think the department doesn't care about them", said a former student representative.

Even when empathy is shown by individual teaching staff, students feel that there is a nacy in the wider student told us how in her third

"We spoke to the lecturer of one of Others describe being paralysed by the modules, for which two of the aseral students felt marks were awarded at the demonstrators' inattentiveness, sessments had ended up on the same day due to the strikes. They were lovely and said, 'Yeah, that sounds fine. This doesn't have to spend so much time just figur- seem right that you're getting this kind of unfair knock-on effect because of strikes. We just need to check with some other people in the department.' We got a response from the

> department saying, 'No, you Credit: Jamie John/Felix

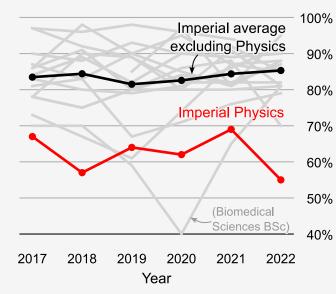
Felix

### Light-years apart

Overall course satisfaction, Imperial's Physics department versus its peers

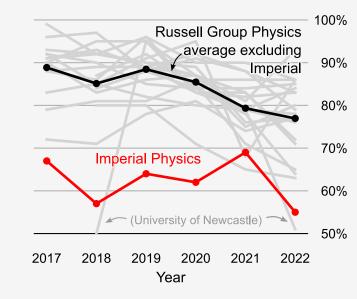
### **Imperial College London**

Source: National Student Survey (NSS)



Felix is the student newspaper of Imperial College London

### **Russell Group Physics**



Even though the lecturer wanted to."

Office hours are available for students with queries; yet, as a fourthyear student explained, "People are in two minds about it. Either they understand it so they've got nothing to ask, or they're too far behind to even bother going." This dichotomy seems to dissuade students from going, as one second-year student tells Felix. "No one who should go to office hours goes to office hours. People would much rather just struggle and not have any sort of contact with members of the university than actually attend office hours".

answer students' questions are attended of their way to attend. "The people that attending these events."

> the most. For example, many of those who are really behind

A welfare representative suggests this The current first-year cohort has asked is a consistent theme: optional events to its representatives to create study groups for them so they can solve more probonly by a small group of students who lems together. Most students find that are up to date on their work and go out their best source of help is their cohort's group chat, which several said was better are struggling — they don't actually get than the support provided by lecturers all this information because they're not and the department. Already, older students run a helpdesk (sponsored by the "I think it's these people we department) where students are encourneed to be reaching out to aged to take queries. One third-year student found this was the "most helpful" outlet she had during her degree.

### Welfare

Whilst the problems stem from a high workload, the department's attitude to wellbeing, and its welfare provision, have roundly criticised. There is a general sense that the department does not take its students' mental health seriously enough.

"I think for many people the best representation of how this course makes them feel is the scene from Indiana Jones, where the Nazi's face is melting", says one second-year student. "The department can see how stressed we are, o n but what do they do? Nothing. Do they been told, 'Maybe work harder, so you

A third-year student told Felix that her emails to admin staff — requesting additional arrangements to accommodate a medical condition during an exam - were ignored. It was only when she got the Head of Department involved that she received a response.

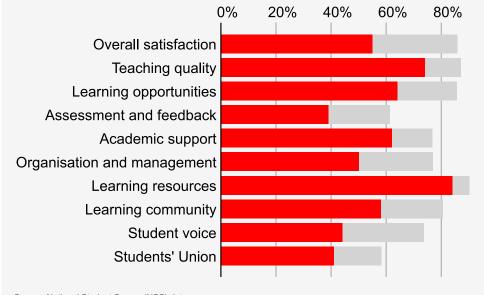
Welfare events held by the department have been mentioned by several ing out, they're not all just going to go students. "Instead of solving the probto this one person, because clearly the lem at hand, they provide support such problem is bigger than that. I mean, the as tea and biscuits, which just seems year group organiser] didn't really take like the complete wrong approach and doesn't actually help", says one student.

Students' experiences with their pergether to offer each other the learning sonal tutors vary. Some have praised

### **Breakdown by NSS guestion category**

Student satisfaction at Imperial College London, 2022

Imperial average excluding Physics Physics



Source: National Student Survey (NSS) data Felix is the student newspaper of Imperial College

find their tutors apathetic and indifferent.

b e e n ing: "I think my personal tutor doesn't really care. I tell him the same things every time, and he forgets them between the concerns of all these students." meetings... he's not really supportive."

> ment who are accredited 'Mental Health gone to for issues about mental health",

# WE'RE NOT BEING **TAKEN SERIOUSLY ENOUGH**

can take your mind off it."

Imperial's Mental Health First Aid (MHFA) course is accredited by MHFA England. Upon completion of the course, staff are added to the College's MHFAiders list. Nine members of the Department of Physics are currently on process required for mitigating circumthe list.

Physics students reserve praise for Mery Fajardo, the department's Disabilities Liaison Officer, who has been ety, they said they were put on the spot described as 'the backbone of the department'. In 2013, she was awarded a face meeting with the senior tutor. Faculty of Natural Sciences Award for Support of Excellence in Teaching.

department is held up by a couple of support they feel they are not receiving. them as "absolutely amazing," but others people", observes Anthea MacIntosh-La- Continued on page 6...

Rocque, current RCSU Vice President (Welfare and Wellbeing), and former One third-year physicist was scath- Physics Departmental Representative. "That puts a lot of pressure on those members of staff that have to deal with

Meanwhile, welfare representatives "There are members of the depart- despair at the department's responses to their feedback. "I feel like we're not First Aiders', who I know people have being taken seriously enough", says one current Wellbeing Representative. "I besays a former Wellbeing Rep. "They've came a Wellbeing Rep because I noticed that there's a very stressful and competitive environment in Physics. A lot of people don't really have a work-life balance, and the department doesn't really do enough to help you with that either."

> The rep alleges that this problem has been brought up with the Department at meetings, but that nothing has been done about it.

Mitigating circumstances are another topic of discontent. Students complain that there is too much bureaucracy, which leaves people who are already struggling unable to receive the consideration they need.

Alex found the evidence-gathering stances particularly onerous. During a period when they were suffering from depressive episodes, insomnia and anxiand asked pointed questions in a face-to-

Eventually, Alex was able to get support, but had to make "pointed" state-"I think in many ways, welfare in the ments in their application form and

lectures care? No."

don't actually know that they can get help with that, so they fall even further behind".

The representative reported these problems to the department, but said the year group organiser's response — "Tell person X about it" — was of no help. "If most of the cohort is stressany action on that."

Left adrift, students are banding to-

#### **KEEP THE CAT FREE**

### NEWS

press the department to defer their exams. "I know that my struggles are valid and real, but you had to make it seem like a huge deal to get the support you needed."

MacIntosh-LaRocque says the problem extends beyond Physics, but that the department could do more to reduce the administrative burden. "Students find the process very difficult — especially since you're already dealing with a situation that is causing you to submit these mitigating circumstances."

### The 'guinea pig' year

The current cohort of fourth-year students, alongside BSc students who graduated last year, feel particularly aggrieved at the actions of the department. In 2019, as these students were beginning university, the Department of Physics introduced a new syllabus.

Many feel that the rollout was conducted without sufficient planning; students described their cohort as guinea pigs. "It just doesn't feel like they thought it through at all beforehand — they just threw it at us and hoped for the best." One student tells us as a consequence of its sheer difficulty, the syllabus had to be revised dramatically for subsequent year groups.

An example consistently cited by fourth-year students is the 'team-based problem solving' (TBPS) project. First introduced for their cohort in 2021/22, TBPS is a 25-person group project, in which third-year students are asked to solve a data-based physics problem together. Half the cohort completes the module in Autumn Term, while the other half completes it in Spring Term. Students in the 'guinea pig' year say that they were given very little information on the module until it began, beyond the fact that it was "some sort of group project". Unaware of TBPS, many had selected electives in order to spread their workload across the year. They were therefore caught out when, in the first week of Autumn Term, they were told it would require a significant time commitment.

As the project unfolded, other problems began to emerge. "It became clear that it [TBPS] had not been formally structured or planned out. The department waited until students got to an obstacle, and then released more information, which made it very difficult to plan around."

Throughout TBPS, students say they were not given enough support and had to figure everything out for themselves. The module leader, they allege, told them they would be "penalised for asking silly questions".

Halfway into the project, students realised they were expected to use machine learning (ML) to solve the problem despite having never been taught ML before. "It was luck of the draw whether you had someone in your group who knew ML or not", said a former student rep.

The anger and hurt is particularly palpable in the voices of those who took the module in Autumn Term. "A lot of people got burnt out from this project," says one student. "It made it really, really difficult to get through that first term. I developed some pretty serious mental health conditions during that time as well. In my group, we put a lot of effort





into it, but by the end, we just didn't have anything left to give."

### In summary

The responses to the TBPS project are reflective of a wider feeling amongst the so-called guinea-pig cohort, and beyond.

Across year groups, a sense persists that Imperial's Department of Physics does not care for its students. Throughout, what seems to frustrate Physics students the most is the department's dismissiveness and lack of understanding. "We don't feel seen or heard by the department at all", said one. Students talk of being "infantilised", and "stranded" — of decisions being made for them, instead of with them. They feel "powerless".

This was especially the case last year, when students say they were keen to return to in-person lectures, but the department opted to keep them online.

Physics undergraduates feel that they have tried their best to tell the department what needs improving, and convey their opinions through surveys and student representatives. Yet they see very little tangible change. "It's really frustrating. Why are you asking me for my opinion if you're not going to do anything about it anyway?", asks a recent graduate.

Course representatives talk of being side-lined by the department at meetings, and feel that they are not listened to. "Rather than taking the feedback and looking at the issue, the department explains to everybody, 'This is why we've done this', instead of asking, 'What can we actually do to fix this?'"

The lack of acknowledgement has led to disillusionment. Physics undergradu-

ates who spoke to Felix have called the department "two-faced", "survivalist", and "Machiavellian".

There is a sense that things are slowly — at a glacial pace — improving. Felix understands that over the summer of 2022, in response to its low NSS scores, the department commissioned working groups, consisting of students and staff, to try to understand the problem.

It remains to be seen what impact its future initiatives will have. But through talking to students, one thing is clear: the department's past actions have left an indelible mark on the lives of many of the Physics undergraduates who have passed through its doors.

Alex, the student we spoke to at the beginning of this piece, was part of the guinea-pig year. They chose not to stay on for a master's degree after their experiences at Imperial's Department of Physics:

"Whenever things go wrong, the department just shrugs its shoulders and is like, 'Oh well, we'll do it better next time'. And for them, that's fine because they get to have that learning curve. But for me, this affected my grades, my wellbeing and my whole experience."

"I no longer knew why I was doing Physics. The degree had very much taken the fun out of it. I think all of us, when we started, enjoyed learning, and that was taken away from us. It was just about surviving, not really about thriving, or being excited about the subject. I had my first anxiety attack at Imperial, and mental breakdowns became a very normal part of my life. I've been going to therapy for a year now."

The Department has been approached for comment.

#### FRIDAY 24TH FEBRUARY 2023

### Continued from page 3...

spondents said they're likely to leave the sector within the next 5 years because of either their pay, pensions, or working conditions. These strikes are for the future of education."

She emphasises the particular importance of recognising this within the Imperial student community, as many will go into academia, "so these strikes are for their future working conditions," she argues.

any money saved throughout the strikes by withholding pay will be "reinvested to support our students' experience", Natalia believes that any benefit to students from this is grossly undermined by fundamental flaws within the higher education landscape, and that students will suffer until the dispute is settled. She explains "The UCU opposes the marketised model of education that puts profit above the wellbeing of both staff and students — the same model that means Although the College have said that that we have to pay extortionate tuition

fees. Their fight is our fight."

Whilst striking staff welcome the extra pressure exerted by students, I ask what she thinks students can bring that striking staff cannot. Natalia explains how she feels that striking staff have been unfairly portrayed by the press, who often discuss the impact on students in a way that villanises the staff. She hopes that students visibily being on the side of striking staff will undermine these narratives.

Staff are grateful for the support from  $2^{nd}$  March.

students thus far, and hope to win over more, vowing in Thursday's meeting to "work and communicate closely with students who already support us, and talk to other students as much as we can."

Whilst the group gets off their ground, she advises frustrated students to continue to channel their anger into action by emailing the president and provost about the disruption.

The group will next meet on Thursday

# Launch of Cleantech for UK draws big names to South Kensington campus

**Co-founded by Imperial climate accelerator 'Undaunted', the Cleantech initiative** aims to increase funding and publicity for clean technology-based climate solutions.

### Zanna Buckland Co-Editor-in-Chief

t approximately 3pm on Wednes-Aday 15<sup>th</sup> February, crowds of students and staff began to form outside various entry points to Imperial Business School and the City and Guilds Building (CAGB). This followed circulation around campus of reported sightings via group chats, social media, and word of mouth - of Microsoft founder Bill Gates and UK Prime Minister Rishi Sunak with Imperial College President Hugh Brady and Vice Provost for Research and Enterprise Professor Mary Ryan.

Many people were wondering what brought the pair of VIPs to the university, and the following comment from Brady might answer just that question. He stated that "achieving net-zero will require an enormous step-change in our economy, industry, and civic systems. Imperial College London, one of the world's leading universities, has the talent, resources, and influence to help accelerate the world towards this goal."

Sunak and Gates were at the College for the launch of Cleantech for UK; a coalition of parties aiming to invest in and support the development of 'clean technology' (e.g., renewable energy generators, carbon capture technology). The PM hopes that "a new generation of talented British businesses can be confident that they have the backing to

unlock green solutions to some of the biggest challenges we face", and believes that "investing in renewables and cleantech is one of the best ways to strengthen energy security, create better-paid jobs, and grow the economy".

A founding member of the coalition is Undaunted, a new cleantech accelerator programme led by Imperial's Grantham Institute for Climate Change in collaboration with The Royal Institution. Breakthrough Energy, a collection of investment firms founded by Gates, which aims to stimulate change in the clean energy sector, is another co-founder of the coalition. Accelerator programmes act as a fast-track, supporting businesses - start-ups in particular - in preparing for and showcasing their product proposals to investors, who can then provide funding opportunities.

Gates believes that "the UK has all the ingredients to become a major player in the global push to build a net-zero emissions future, including world-class research facilities and forward-looking investors."

Three major clean technology scaleups were showcased at the Cleantech launch, each with ties to researchers and to accelerator programmes at Imperial:

Crop Intellect, an R&D firm in the agritech industry, is tackling clean technology for agriculture; their 'R-Leaf' technology converts nitrogen-based air pollutants into useful field-scale feed for

plants, simultaneously reducing pollution and enabling better crop growth and food security. The start-up's work has been supported by Dr Andreas Kafizas, a researcher specialising in light-activated materials in Imperial's Chemistry Department. H2Go Power is waiting

for a patent for their reactor that stores solid-state hydrogen, which can then be released on-demand. Through their patented cleantech products, they aim to improve the storage and management of the renewable fuel hydrogen to encourage progress towards net-zero emissions. Based at Imperial's White City Innovation campus, the start-up was co-founded by Dr Enass Abo-Hamed, a Royal Academy of Engineering Enterprise Fellow associated with the College, and entered into Imperial's Climate-KIC Accelerator Programme in 2017.

Finally, Econic Ltd. is developing technology to recycle carbon captured from the atmosphere into cheap, sustainable plastic materials. Their catalyst technology is used to react CO2 with epoxide chemicals to form them into short-chain polymers. These polymers are then used by manufacturers to tailor their materials' CO2 content depending on the properties desired. Econic was founded by Professor Charlotte Williams and Dr



for a glimpse of the PM and Bill Gates. Sunak's entourage drove past on Exhibition Road about 15 minutes later.

Michael Kember, who have both done work at Imperial in the past. After participating in an Imperial climate accelerator in 2012, the company has now been able to develop and patent many of their innovative technology designs.

The ideas behind these start-ups were all developed with the help and funding from investors, many of whom will have been introduced via climate accelerator programmes such as those at Imperial. Cleantech for UK aims to 'supercharge' innovation by making funding more accessible to these kinds of start-ups. There is reportedly more than £6 billion in investment funds available to young businesses that come up with viable cleantech-based solutions for the UK to reach the target of net-zero emissions by 2050.

Sunak also took the opportunity to publicise his recent restructuring of the Department for Business, Energy, and Industrial Strategy (BEIS) into three new distinct departments: Science, Innovation, and Technology; Energy Se-

### NEWS



curity and Net-Zero Security; and Business and Trade.

While at Imperial, Sunak and Gates also answered a series of questions that were generated for them by ChatGPT based on previous public speeches they had each given. This demonstrated the ability of natural language processing machine learning to create conversation.

The first question asked was 'how do you think tech will impact the global economy and job market in the next 10 years?' Gates responded that labour shortages, changes in healthcare and education, and increased efficiency would be important elements for the future economy, and that "hopefully tech like [ChatGPT] can help us be more efficient".

When asked about his vision for the UK economy post-Brexit, Sunak discussed the importance of technological innovation, and that it is vital to support young businesses and start-ups with funding to help them realise their potential. He also commented on how, in the aftermath of the pandemic, the ongoing Russia-Ukraine war, and Turkish earthquake crisis, "people can come together to support each other in difficult times".

Other questions the AI asked were about important advice they'd received and how it influenced their lives and careers; what advice they would give to their younger selves in their early careers and how they would work differently; and what part of their job they would most like an AI to be able to do for them. A video of the Q&A session has been uploaded to 10 Downing Street's YouTube account, for those who wish to see the full conversation.

Returning to the purpose of the Cleantech for UK event, a statement from Professor Ryan nicely sums up the

coalition's goals and the reason for holding it at Imperial College:

'We are in the centre of triple planetary crises - climate change, pollution, and biodiversity loss. Developing and deploying new technologies to build a more sustainable, resilient, and equitable future is urgent. This initiative will bring together key partners to provide the systems-thinking, solutions-focus, and resources to unlock the potential of the UK's innovators. Imperial is ideally placed to drive this revolution."



Rishi Sunak and Bill Gates speaking to representatives from Econic Ltd. in CAGB.

### **WOMEN @ IMPERIAL MARCH 2023 EVENTS** THURSDAY 9TH TUESDAY 7<sup>TH</sup> MONDAY 6<sup>TH</sup>

09:30-12:30 **Harassment training for** managers (online) 12:30-13:30 The Patriarchs: how men came to rule (South **Kensington**) 14:00-15:30 **Influence and Negotia**tion (South Kensington)

# 09:30-11:00

In conversation with academic women (online) 12:00-14:00 Women in STEM and entrepreneurship (South **Kensington**) 14:00-16:00 **Invisible Insecurity: how** to deal with Imposter syndrome (hybrid)

# WEDNESDAY 8<sup>TH</sup> (International Women's Day!)

12:30-13:30 Women in STEM - international insights (South Kensington) 16:00-19:00 **Inspiration beyond the** bend (White City) 19:00-20:00 Women in STEM seminar: conservation (South Kensington + online)

12:30-13:30 **Being allies to survivors** of sexual and gender based violence (South **Kensington**) 14:00-16:00 Springboard development programme taster (online)

# FRIDAY 10TH

12:30-13:30 **IAO Belonging interview** with Professor Priscilla **Reddy (online) 17:00 onwards** Women at Imperial Party (South Kensington -**Oueen's Tower Rooms)** 



### **BLAST FROM THE PAST** THIS MONTH IN... 2017 **Students campaigning** It is often said that journalism is the first rough draft of history. for LGBT-friendly Here at Felix, we'd like to offer you a glimpse into the history of the College, as told in the pages of our very own news section. Each issue (space-permitting), join us as we explore stories from our extensive archive, which spans 74 years, all the way back to our founding in 1949. medical curriculum If you would like to browse the archive for yourself, scan the QR code. Email us if you find something interesting!

riday 10 February 2017

- A few years ago, medics at Imperial realised that there was a lack of good training in caring for LGBT patients.
- The result was a campaign to improve medical staff's attitudes towards patients in the LGBT community, through pushing for more comprehensive inclusivity training.
- **This month in 2017, Felix** reported on the campaign. The story was featured in *Felix* issue 1656 (right).

# Imperial students launch campaign to make medical curriculum LGBT-inclusive

Michael Wilkinson discusses the lack of LGBT training in the NHS and the steps that are taken to improve services for the queer community

\ There's the ersistent refusal of ne GPs to even ake referrals to

d by IQ (Imperia) iociety), echoed thi

\\ A shocking 24% of NHS staff have heard colleagues making negative remarks about LGB people \\

bisecual men are used to ing from the Daily Mail buncing HIV prevention PrEP), but not something spect from our doctors. LGB p Attitudes revealing that a 24% of NHS staff ha leagues making narks about LGB people. 10% of ing the bellef the opte can be 'oured conversion therapy practice that has demned by most rejor medical organisations. factors have been quoted tatingthat "beingtransgender mostly a mental condition" na are not to be ed by mainstream attitudes that don't

actery, attructes that don allong in this century, neve nind our public services. The belief held by many hat LOBT people are now no equal Scaling with their traight counterparts does counterparts does the experience of

facing prejudice wrance from health mals that discourage rom seeking help a Dean, chair of the re advising the NHS Serv "Pe but they ce and de to

to be inclusive in their teaching, but a basic distinction between gender ing on the specific faced by LGBT

affort to be in



runity. Is no diffe is arena. One might expect n internationally renowned LOBT

\\ Some lecturers have made an effort most fail to maintain

and Dr. He od and De kfully, the faculty to be seen whether this result in meaningful chang teaching, but we are hap that this will be impleme this will

\\ One of the most cited problems by Imperial medical ents was that all gay men in our practice ex ĤIV \\

- and make a real of to the future LGBT p

# Write an LGBTQ+ Piece for Felix



# Interested in being featured in Felix?

Then write a LGBT+ book/film/art review, LGBT+ science and environment article or about your personal LGBT+ experiences!

Original artwork and photography are also welcome!

Write either half a page (300-400 words), or a full page article (500-600 words).

Submit it felix@ic.ac.uk by the 1st of March



Imperial College LGBT+

SCIENC

Edited by: ANGIE LO TAYLOR POMFRET

# SCIENCE & TECHNOLOGY Scientists probe first observational evidence linking black holes to dark energy

Roughly 70% of the universe is made of dark energy, an unknown force that can affect the universe on the largest of scales. Scientists claim they've found its source through the 'cosmological coupling' of black holes.

### Taylor Pomfret Science Editor

Efforts to construct a black hole model in general relativity have been ongoing for nearly a century. Exploring the motivation for this project, 17 researchers published a series of papers in The Astrophysical Journal and The Astrophysical Journal Letters, claiming that the astrophysical origin of dark energy is black holes, reaffirming theories of the universe outlined by general relativity. The team leveraged data from three astronomical surveys: Widefield Infrared Survey Explorer (WISE), Sloan Digital Sky Survey (SDSS), and the Cosmological Evolution Survey (COSMOS). Analyses of their results were published across two papers, titled 'A Preferential Growth Channel for Supermassive Black Holes in Elliptical Galaxies at  $z \le 2$ ' and 'Observational Evidence for Cosmological Coupling of Black Holes and its Implications for an Astrophysical Source of Dark Energy', which featured the study's first author, Dr Duncan Farrah, a University of Hawai'i astronomer and former Imperial PhD student, and co-author Dr Dave Clements, reader in astrophysics within the Department of Physics at Imperial.

# What is the motivation to study dark energy?

The study revealed, through the measurements of galaxies, that black holes are growing more than expected, aligning with a phenomenon predicted by Einstein's theory of general relativity, first postulated in 1916. Motivation to explain this phenomenon was explored in 1998 following observations from the Supernova Cosmology Project and the High-Z Supernova Search Team, which demonstrated that the expansion of the Universe is accelerating - such that everything in the universe is moving away from everything else at an increasingly fast rate. This result was counter-intuitive: the pull of gravity between all objects in the Universe should be slowing the expansion of the universe down. To account for gravity, it was proposed that a dark energy was responsible for pushing things apart more strongly than gravity - which linked to a concept Einstein referred to as the cosmological constant,  $\Lambda$ . The constant also refers to a kind of energy included in spacetime, vacuum energy, which pushes the universe further apart, thus accelerating its expansion.

### Black holes: their properties and importance in general

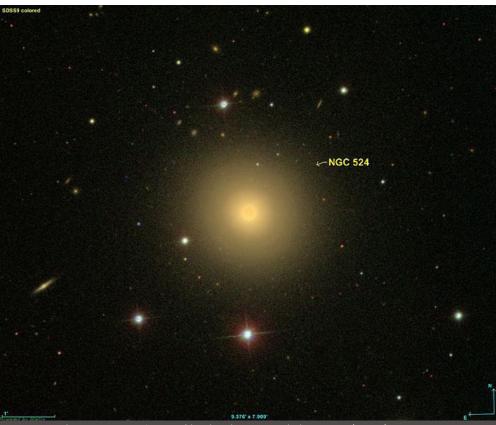
### relativity

Modelling black holes using Einstein's theory of general relativity has been met with limited success. Black holes are problematic; the point of infinity, known as a singularity, residing at the centre of a black hole results in an intense gravitational field from which nothing, not even light, can escape. Results from this study reveal that black holes gain mass in such a way that is consistent with them containing vacuum energy, a fact that would remove the need for singularities to form in their centre. This is compatible with Einstein's concept of gravity. The team made a series of observations of black holes in dormant galaxies which revealed that they were seven to 20 times more massive than expected. Dormant galaxies are galaxies which have finished forming starts, leaving little material available to accrete and contribute to the mass of the black hole. Any additional growth cannot therefore be explained by the accumulation of mass. It is instead claimed that black holes achieve this growth through a phenomenon called 'cosmological coupling', which allows black holes to grow and gain mass without consuming gas or stars.

### What next?

Researchers of the cosmological coupling study have probed a radical rethink of black holes through their observations of dormant elliptical galaxies. The cosmological coupling model neatly provides a possible origin for dark energy in the universe, concluding that black holes are capable of providing enough vacuum energy necessary to account for all of the dark energy that is measured in the universe today. Further observations confirming this phenomenon of cosmological coupling will redefine our understanding of what a black hole is, one that is compatible with Einstein's theory of general relativity and capable of sourcing dark energy. The question of the nature of dark energy is perhaps the most important, unanswered question of modern physics. Scientists acquiring the first observational evidence of dark energy and cosmological coupling is an exciting, yet premature, proposed solution to this question. More work and research on the long-standing mystery of dark energy will continue to expand our understanding of the fundamental physics of our universe and will hopefully confirm a long sought-after component of our models of the cosmos.

Credit: Wikimedia Commons



Dormant galaxy NGC-0524 imaged by the Sloan Digital Sky Survey (SDSS)

**KEEP THE CAT FRE** 

# Could The Last of Us really happen? An interview with a fungal expert

Resident mushroom enthusiast (read: vegetarian) Sam Lovatt sits down with Professor Fisher to discuss their favourite mushroom recipes.

### Sam Lovatt Science Writer

behaviour known today as the Salem symptoms. An explanation more likely damage its host unscathed. than 'bewitchment' is ergot poisoning, Continued exposure causes ergotism — first signs that the HIV/AIDS epidemic also called St Anthony's Fire — so named for the intense burning pain it causes in are likely to get worse. Obesity rates are the extremities, ultimately leading to soaring across the world, particularly gangrene as blood supply is consistently in the West, where an abundance of cut off.

just one of many excruciating, fascinating Fungi thrive in sugary environments, of Fungal Epidemiology at Imperial College gives me, as we sit down to talk bloodstream. Steroids prescribed to treat about HBO's new hit series The Last of general. My idea to interview a fungus the doors for fungi to slip in. expert in the wake of TLOU's release

is an overall good thing for the field; millennia evolving to thoroughly infect behavioural changes and would not be fungal diseases are largely overlooked and control specific species of insect. transmissible to other humans once in In 1692 Massachusetts, several young by the public as a major health concern, They can't even jump from one type an initial host. This would essentially girls became suddenly ill with bouts even though fungal infections cause of ant to another. The odds of such a leave it with a similar effect to C. of unnerving symptoms, including around 1.6 million deaths per year, more specific infective agent adapting to temporary blindness, skin lesions, than those caused by HIV and malaria infect humans are vanishingly small, and hallucinations. A local doctor, combined. Fungus research receives as everything the fungus uses unable to think of a medical reason only 5% of the funding that the 'sexier' to infect that one insect is for such afflictions, diagnosed the girls fields such as bacterial-antimicrobial exquisitely honed to its with 'bewitchment', a proclamation resistance, malaria, and others receive. body. That being said, that led to the mass hysteria and mob This lack of attention leads to deaths there is an analogy that would be avoidable if medics were to be drawn with Witch Trials. As the field of medicine trained to spot fungal infections as well To x o p l a s m a has advanced, scholars have sought a as bacterial ones; fungal meningitis gondii more robust explanation for the girls' treated with antibiotics will continue to malaria-like

The scope of fungal infections, even that infects caused by the ingestion of by-products in the developed world, is astounding. m i c e, of the fungus *Claviceps purpurea*, well- Professor Fisher tells me that as many as causing suited for colonising moist rye crop. 30% of ICU patients whose lungs were them to People who ingest rye grains infected badly damaged by COVID-19 also went be have with C. purpurea may be consuming on to be infected by Aspergillus — a erratically dangerous quantities of lysergic acid, common mould present in almost every and present an LSD precursor that can wreak havoc breath we take, but which is normally themselves on the nervous system. People suffering shut down by our immune system even to cats to be from ergot poisoning may appear before we know it's there. For this same eaten). T. hysterical and report crawling sensations reason, abnormal fungal infections in gondii across the skin as well as hallucinations. the lungs of gay men were one of the has a was taking hold during the '80s. Things fatty and sugary foods lead to weight The damage caused by C. purpurea is gain and increased risk of diabetes. examples of fungal infection and and the saccharine blood of a diabetic toxicity that Matthew Fisher, Professor is an optimal environment for some fungal pathogens once they enter the severe SARS-CoV-2 infections down- lifecycle Us (TLOU), and fungal pathologies in regulate macrophage activity, opening t h a t

After spending far longer than it be eaten was not as original as I had hoped, I planned jumping from one astounding by a cat, but quickly learned. The day prior, Mat pathogen to another (I did suggest that can also infect had done an interview for American Mat write a popular science book on the humans, which are broadcaster CNN on the same topic, subject, but he valiantly said he was too almost never preved upon. as one of a relatively small network busy with his research) we get to the meat Infected humans also undergo of fungus experts who have recently of why we're doing this interview. Could behavioural manipulation, but much found themselves inundated with public a pandemic such as the one seen in The more bluntly, where they essentially interest (Mat pronounces it 'fun-ji' Last of Us, caused by a brain-controlling are just more likely to partake in risky rather than 'fun-guy', if any pedants fungus, actually happen? No, is the short behaviour. It's possible that a similar were wondering). While media requests answer. "Fungi such as Cordyceps, the jump could be made by a fungus, but no doubt take their toll, the attention infective agent in The Last of Us spend it would almost certainly just result in

pathogen

requires



purpurea. We've not seen this sort of expert behavioural manipulation infection spill over from insects into other animals before." The opening scene of the series is of a

drug resistance if no drugs exist? "Dr Neuman is partially right. He was

recent

• G

talk-show host interviewing a scientist, speaking half a century ago when anti- career as a zoologist, studying at can cause infection through as few as one that harm fungi often

Credit: Matthew S. Grainger

to human cells. Anti-fungal dosage has to be very specific and most just to limit

would look like, saying that there treating an invasive fungal infection, and most parasitologists spend their careers significant dose is normally required for is no treatment and no cure. today it is still very difficult. Fungi are a studying, in his words, animal shit, led an infection to take root, and very large Conversely, Fisher's most sister kingdom to animals, and drugs to a change of heart and a move to post- doses of even the most commonplace doc work in a lab researching the valley fungus that one would find in a garden also cause damage fever fungus at University of California, compost bin can cause a fatal infection Berkeley. Now, having been at Imperial in a healthy human. "Dosage is hugely for 18 years, his office is on the 11<sup>th</sup> important. Macrophages, immune cells floor of the Sir Michael Uren building that normally swallow anything unusual at the White City campus, which has they come across in the blood, are the first one of the most astounding panoramic line of defence against fungal invaders. If act views of London I've ever seen. Stepping the dose is high enough to overwhelm into his office I am bombarded by frogs. the macrophages present in your blood, f u n g a l No real ones, as far as I could see, but an infection can get a foothold in your growth artwork of a frog sitting next to some body. Some fungi also have the ability rather mushrooms flank framed copies of the to manipulate macrophages and survive t h a n prestigious scientific journals *Science* even after they've been swallowed, which and *Nature*, displaying amphibians on turns the macrophage from a defensive their front covers in reference to Mat's player to a vehicle that traffics the fungus work on fungal epidemics that have around the body. We think this might devastated global frog populations. Why be because macrophages are a lot like do amphibians get such a hard time from amoeba, single celled organisms that fungi?

"Amphibians were the first things have evolved defences against." on four legs to leave the oceans and come into contact with the fungi The World Health Organization recently that already existed on the land, and released its first fungal priority pathogen their skin is a two-way exchange that list, signalling to the medical research provides a perfect entry point for fungi. community that fungi are a force to They had to evolve defences against be reckoned with. The first ever fungal invaders immediately and today's vaccine has recently shown promising amphibians produce an amazing array results in preclinical trials, targeting of antimicrobials from bodily glands. the three most common human fungal They are actually very resistant to fungal pathogens all at once. infections, so it was quite shocking for the scientific community to see, around but the best option is always to not the middle of the 20<sup>th</sup> century, swathes open Pandora's box of pathogens in of amphibians dying across the world as the first place. History shows us that a result of a fungal infection. The culprit, we have terrible global biosecurity, a chytrid fungus, was spread partly as a and improving this through screening result of human globalisation exposing for fungal pathogens and reducing the fungus to amphibian populations contamination where possible keeps that hadn't seen it before, and is the the risk of new pathogens emerging most destructive infectious disease ever as low as possible. If there's one thing in terms of damage to biodiversity, I could bring to the public's attention including all viruses and bacteria. In Asia, it would be that we really don't know this fungus has evolved alongside native the ecosystem-level effects of spraying cells. Once a fungus amphibians and doesn't cause them fungicides in the quantities that we do colonises a bodily compartment, any harm, but other populations are today. We're starting to see the inklings work has been on the spread of drug which might be totally obscure, it can defenceless. If you go to the neotropics of consequences in global ecosystems, resistance in fungi. How can there be be very hard to actually deliver the anti- now you will hardly hear a frog calling, and I don't know where that's going to as a result of this infection."

actually

killing the

fungal to the correct area."

Professor Fisher started his academic

Some viruses, such as SARS-CoV-2.

Dr Neuman, who paints an exceptionally fungal drugs had not been developed Edinburgh University whilst focused virus particle entering the body. This is bleak picture of what a fungal pandemic and there was no effective way of on parasitology. The realisation that almost always not the case with fungi; a prev on fungi in the wild, which fungi

There is still some reason for positivity.

"These advances are promising, end up but it's not going to be good".

# SCIENCE The redemption of mustard gas

Wang Guo on how a weapon of warfare has been harnessed for battling cancer.

#### Wang Guo Science Writer

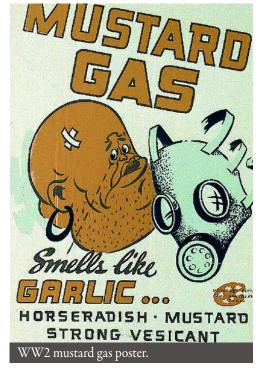
Mustard gas was a compound used in World War I as a chemical weapon, causing painful internal and external burns and ending 100,000 lives. However, inanimate objects are not inherently prejudicial or beneficial to humans; it is the usage of them that really matters. In the case of mustard gas, this was proven years after WWI when it shifted from ending lives to saving them.

# The horrors: origins and use in war

Mustard gas was created by Frederick Guthrie in 1860. With a yellow colour and mustard odour, the synthesised compound was toxic to humans in two ways. First, mustard gas is a blistering agent and irritant, affecting the eyes, skin, and respiratory system. Second, mustard gas can lead to DNA mutations by adding unnatural carbon-hydrogen molecules to the nitrogen bases of DNA, which causes base mispairing. The effect of mustard gas is dosedependent, ranging from simple skin and eye irritation to an agonising death with blisters all over the body.

The employment of mustard gas as a chemical weapon started in WWI and was developed by the scientist Fritz Haber, who also invented nitrogren fertiliser. Mustard gas was very effective

Credit: Wikimedia Commons



secluded in trenches, as their small space increased the gas's lethality. In addition, unlike other chemical weapons, the effect of mustard gas could not be countered with gas masks as the gas could be absorbed through the skin. The affected soldiers were in a critical situation as two options were presented to them, both equally hopeless: exit the trenches and be an easy target for enemy fire, or stay to be poisoned. The suffering caused, and the fact that mustard gas does not discriminate between enemies and allies, triggered the fighting countries to agree to never use chemical weapons, including mustard gas, ever again in warfare.

Credit: Wikimedia Commons



### The redemption: chemotherapy

From tragedies, hope can be restored. In 1943, US president Theodore Roosevelt sent a ship called SS John Harvey to Bari, Italy, with the secret mission of delivering 100 tons of mustard gas to the Allies. This was due to all the participants of WWII having chemical weapons stocked in case the other side were to use them. Unfortunately, Germany bombarded Bari, which sank SS John Harvey and

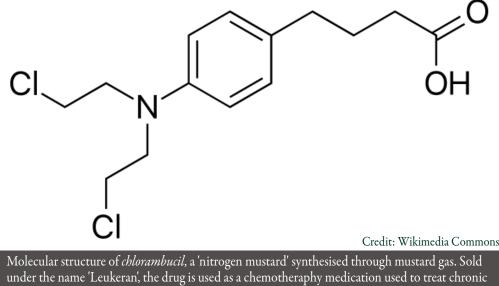
against enemy soldiers that were secluded in trenches, as their small space increased the gas's lethality. In addition, unlike other chemical weapons, the effect of mustard gas could not be countered with gas masks as the gas could be absorbed through the skin. The affected

When looking through the victims' medical records, doctors Louis Goodman and Alfred Gilman noticed that they showed a significant decrease in white blood cell counts, presumably due to mustard gas damaging their Goodman and Gilman DNA. hypothesised that mustard gas could be used to kill cancerous white blood cells as well, seeding the idea for a novel chemotherapy for blood cancer. A cancer patient known as JD suffered from advanced lymphosarcoma. He had a huge tumour in his jaw that did not allow him to eat properly and multiple tumours in the armpits that disrupted his sleep. Doctors said his future seemed hopeless. Without many options, he decided to undergo a clinical trial with nitrogen mustard (the substrate to synthesise mustard gas) conducted by Goodman and Gilman. Surprisingly, the tumours regressed and JD could sleep and eat properly again.

A huge breakthrough occurred in the fight against cancer using the same compound that killed thousands 25 years ago. After WWII, chemist Alexander Haddow modified the chemical structure of nitrogen mustard to reduce its side effects while enhancing its therapeutical properties. This modified drug is called chlorambucil, which was approved for medical use in the United States in 1957. *Chlorambucil* belongs to a group of drugs called alkylating agents. The drug works by means of sticking to one of the cancer cell's two DNA strands. This blocking of the formation of DNA prevents the cancer cells from separating – thus slowing or stopping the growth of cancer cells. The medication is sold under the name Leukeran, and is used to treat certain types of cancer (such as chronic lymphtoic leukaemia, Hodgkin lymphoma, and non-Hodgkin lymphoma).

The work of Goodman, Gilman, and Haddow was instrumental in the development of modern chemotherapy, as it showed that toxic compounds can be modified to cure cancer. This fostered investigation from other scientists across the globe into other chemicals with cancer-killing properties, resulting in the wide variety of chemotherapies available today.

The story of JD did not have a happy ending. His cancer was too advanced to be completely reversed by nitrogen mustard and he passed away six months after being treated, but JD's quality of life improved significantly in his final months thanks to the treatment. The case of mustard gas shows that even the most sinister chemical can be used for good purposes, we just need to find out how. It is only the selfishness and hate of human nature that make them become weapons of mass destruction.



lymphocytic leukemia (CLL), Hodgkin lymphoma, and non-Hodgkin lymphoma.

# What's on in Science?

Your guide to science-related shows, events, and opportunities around the city!

Scan the QR codes for more info on each event!

## **Exhibition:** Cut + Paste

Date: Running now until 2<sup>nd</sup> December 2023

Price: Free (no registration required)

Location: The Francis Crick Institute, Manby Gallery, I Midland Road (short distance from King's Cross St. Pancras station)

Accessibility info: Wheelchair accessible with seating throughout; Braille + large print books available; sensory backpacks available; induction loop installed; + variety of other access resources (scan QR code for full list!)

The Francis Crick Institute recently opened Cut + Paste, an interactive exhibition on genome editing and its social and ethical implications. Cut + Paste explores a variety of issues, from altering DNA to treat inherited disease to the application of genome editing to solve environmental crises. The exhibition invites visitors to make their voices heard on these issues, with various stations where they can share their thoughts and see others' opinions Visitors are also invited to "write, draw, or record" their comments and questions on paper or on social media, where they'll be shared with Crick scientists and staff.

## Panel discussion: Challenging Misinformation

Date and time: 2<sup>nd</sup> March 2023, 7:30pm-9:30pm (doors open 6:30pm)

**Price:** Free (no registration required, first-come-first-served)

**Location**: The Royal Society, 6-9 Carlton House Terrace (short distance from Charing Cross and Piccadilly Circus stations)

Accessibility info: Wheelchair accessible (for those with impaired mobility unable to queue, book in advance to reserve a seat); induction loop installed; live subtitles available

In an age where fake science info runs rife on websites and social media, how do we deal with misinformation? Hear from a panel of experts on the ins and outs of scientific misinformation and how to fight it. Topics discussed include how the Internet affects our interactions with science, and how policymakers and online platforms should respond.

# Fun night out: Imperial Lates: Play

**Date and time:** 9<sup>th</sup> March 2023, 6:00pm-9:00pm

Price: Free (register for tickets in advance)

Location: Imperial College Main Entrance, South Kensington Campus

Accessibility info: Wheelchair accessible; email lates@imperial.ac.uk if you have any specific needs

Get ready for Imperial Lates, a series of engaging drop-in events and talks on a new science theme each month. This month's theme is Play, where visitors will get to explore science through all things fun. Highlights include the chance to play in a game show on antibiotics, annihilate your friends at science board games, and enjoy beautiful music made from the sounds of nature. There'll also be events to celebrate International Women's Day, including talks from scientists on the future of women's healthcare.

## **Opportunity:** Science Museum Lates call for contributions

The Science Museum Lates are free after-hours events aimed at adults ages 18-35. Each Lates event features talks, performances, and interactive activities focused around a different science-related theme each month. Currently, the Science Museum is having an open call for participants, offering the chance to run an activity at the Lates. The Science Museum is looking specifically for fun and/or engaging activities accessible for audiences with varying levels of scientific knowledge. The theme for March's Lates is "Fake Lates", delving into all things artificial--think cryptocurrency, lab-grown meat and conspiracy theories. April's theme is "Craft Lates", exploring the science behind various trades and celebrating their creativity. For more info on the Lates in general, guidelines on running activities, and how to submit contributions, scan the QR code!

EXHIBITION





PANEL DISCUSSION

FUN NIGHT OUT



OPPORTUNITY



### ENV RONMENI

in 2016. Google and parent company

Alphabet are answerable to investors,

so may place profit as the top priority.

minded individuals. They don't create

personal profiles based on search

histories, don't use external tracking tools,

and don't sell user data to advertisers.

Searches made on Ecosia become

anonymised after a week. Google and

other commercial search engines, on the

other hand, will keep hold of search data.

company working actively towards

conserving our environment. According to the Ecosia website, if they were the

size of Google they could absorb 15%

of all global CO<sub>2</sub> emissions. That is

why there is such a need to increase

the number of people using Ecosia.

engine, we'll be helping the environment

and be a part of many universities

over the globe having successfully

If we manage to get the College to switch over to Ecosia as the default search

Ecosia is a financially transparent

Ecosia is also better for the privacy-

# ENVIRONMENT Searching for a carbon negative campus

▶ Imperial Environmental Society joins the global Ecosia on Campus movement.

### Anand Doshi Environment Writer

mperial College Environmental Society is adopting a campaign to switch the College's default search engine to Ecosia – a search engine that's private, carbon negative, and plants trees in biodiversity hotspots.

Ecosia on Campus (EOC) is a campaign that aims to make our searches greener and has spread to over 300 campuses around the world. 30 universities have already made the switch, and that number is growing.

#### Why should anyone care?

According to Imperial Climate Action, about £150,000 of sponsor funding to Imperial CSPs since 2013-14 is sourced from BP, Shell, Schlumberger, and ExxonMobil. Meanwhile, Sheetal Handa from the BP International Centre for Advanced Materials calls Imperial "one of BP's key UK university partnerships", and Imperial worked with Shell and Qatar Petroleum on a \$70 million Carbonates and Carbon Storage Research Centre. Essentially, the College and the Student Union collaborate with companies that are actively degrading the environment for profit.

In contrast, Ecosia is a not-for-profit company that reinvests its revenue into planting trees around the world. The main source of Ecosia's income is serving ads to its customers. Since Ecosia started operations, they have managed to plant over 167 million trees in over 13,000 planting sites thanks to the 20 million users actively searching using their engine. Switching to Ecosia would reduce our collective carbon footprint.

In fact, students at Imperial College London have already contributed to

these figures! Ecosia has provided unique link (https://ecosia.co/ ImperialCollegeLondon) to Imperial College London, as part of the EOC campaign. Using this link, the students using Ecosia have already caused over 1,000 trees to be planted through over 135,000 searches.

The Imperial Sustainability Strategy for 2021-2026 lists goals to achieve carbon neutrality as an institution by the year 2040. It plans to implement various changes with

sustainability mind, including

tackling

this

energy use.

Strategy,

t h e

In

Spanna College's Sustainability Strategy Advisory Group write that they will "continue to upgrade and

enhance existing building services infrastructure to improve sustainability and energy performance." Making Ecosia the default search engine across campus is in direct support of this vague goal.

NO

Credit: Ecosia

You can join in and help with this campaign. All you have to do is scan the QR code and download the Ecosia browser extension and the mobile app. Start searching through Ecosia,

and you'll be able to see how many trees you've helped plant. This will also count towards Imperial College's statistics. The more students and staff use Ecosia, the stronger of a case there will be for the college to switch to it.

Why should people use Ecosia over Google?

Google has been carbon neutral since 2007, but Ecosia is carbon positive. Ecosia doesn't

just plant trees — it also SOSIA ON CAMp produces renewable energy to power its operations.

to

profit-minded

They pay their taxes diligently and honestly, helping fund schools, nature

conservation, and foreign aid. Google is

known to have exploited legal loopholes in the past to pay less tax than they are due,

using shell corporations to direct money

to offshore accounts. In fact, Google

was accused of tax avoidance policies for

several years, and they had to pay £130

million in back-payments to the HMRC

making it greener.

corporation.

Ecosia is not a

It produces twice the amount it needs a n d

implemented the EOC campaign. supplies Scan me to plant trees the remaining the grid,

with every search!



# ENV RONMENT Flipping rocks – a beautifully absurd hobby Scan me to see more of Shreyas's

# cute invertebrate finds!



### Delve into the world of invertebrates hiding under logs and rocks.

### Shreyas Kuchibhotla Environment Writer

**V**ou are taking your customary evening stroll in a local park. Next to you is a lanky, hoodie-clad figure seemingly doing the same, when they suddenly crouch beside a log and pull it upward. Pausing for a minute, they take a quick scan, and suddenly reach out their hand to grab something. Justifiably suspicious, you watch. They take out a camera and a small glass jar, drop something into it, and start clicking like a madman. Suddenly, they tip the jar on its side, and then lie on their stomach on the muddy ground for several minutes as they continue taking photos. After a few minutes, the surreal scene unfolding before you is over. You are thoroughly confused, and you continue on your way, looking at them one last time.

The series of events above is far from fictitious. Just a few days ago, I was in Hyde Park, London, searching for various invertebrates, when I happened to find a brown centipede (Lithobius forfi*catus*), what is often called Britain's most common centipede, but always a delight

to see scuttling for cover. As is required of to replace one, I saw a reptilian head us log-lifters, I had to match the animal's speed by grabbing it as fast as possible, before putting it in a contained environment so I could get some shots. I then released it onto the soil to try taking some in-situ photos before letting it dive into leaf litter. It is hard to compare the feeling of finding something under a log to anything else; exhilaration at peering under some cover to suddenly catch a glimpse of a lizard, amphibian, spider, or centipede on the ground underneath. There is the anticipation as you see the object, approach it, and pull. In that splitsecond, you have to process the information that there is something there, and catch hold of it if required, or simply revel in what you have unearthed (pun intended).

I have had my fair share of interesting sous-cover finds. The first time I lifted a log and actually saw something to my liking was in Richmond Park, London, in September 2022. It was a warm afternoon, and the sun was just beginning to show some desire for the horizon. I was almost robotically turning over some logs when suddenly, as I was just about writhing underneath. The excitement rapidly reached an acme as tiny legs and a tail surfaced from under the grains of sand. I had managed to disturb a Viviparous lizard (Zootoca vivipara) from its afternoon siesta. The generally speedy little reptile took a solid thirty seconds to properly awaken and then jolted around before disappearing into nearby shrubbery. I've seen four other lizards underneath rocks, three geckos (only one of which was slow enough to photograph), and one skink, all in Hyderabad.

More recently, I had lifted a rock on Hyderabad's Kasu Brahmananda Reddy National Park's outer jogging trail. A little black centipede lay on the soil, wondering whether it was worth the effort to escape. I took a quick look and was about to place the rock back when I noticed what seemed to be a mottled eight-legged alien pancake beside my hand, on the underside of the rock. What I had found was a massive female Pantropical Huntsman Spider (Heteropoda venatoria). As I lay the rock down and brought out my clip-on macro lens, she remained quite calm for a few

seconds. Then, in a blinding flash, she was gone — under the rock, that is. I turned it over again, only for her to dart to the other end. When I finally managed to flush her onto the main path and get some photos, a considerate dog-walker suggested I put her back into the foliage on the side so she wouldn't be attacked by pedestrians, bipedal or quadrupedal.

I have no intention of giving up this little pastime. It's a great way to spend a small part of my day connecting a bit with nature while experiencing little bursts of joy — even an hour of disappointment is instantly compensated by a single interesting discovery. It's also a great workout - the best animals are often to be found under the largest boulders! Even if it's just woodlice and earthworms (some of which, mind you, can get almost unbelievably large), there's always a living creature inhabiting the rich ecosystem that is the bottom of a rock. And while I don't expect everyone to lift every one they see, it might be a little change of pace every now and then to walk up to a rock, peer underneath, and open a vista to a world you've never seen before.

Credit: Shreyas Kuchibhotla





# Sophia Prize

*Felix* is offering a £400 prize to one outstanding, inspiring and accessible article that helps tackle climate defeatism and covers, or conceives of, an economic, cultural or scientific innovation that helps fight global warming.

Send your submissions to fcomment@ic.ac.uk environment.felix@ic.ac.uk science.felix@ic.ac.uk

# COMMENT On religion and meaning

Joseph Canavan urges the reader to find their own personal meaning to life regardless of societal expectations, and religious affiliations and doctrines.

### Joseph Canavan Comment Writer

Religions and spiritual traditions have been a staple of civilisation from the beginning of time, and they are not going away no matter how hard some people want them to. A lot of people are brought up religious, and are taught to follow the dogma without questioning — if they just follow the rules, they'll be fine. Many religions teach valuable things about morality, selflessness, altruism, wisdom, showing kindness and compassion to others, and setting aside time to reflect. The act of worship, whether it is done alone or with others, is central to the lives of most people.

Unfortunately, religions do have some bad aspects. Followers can develop very firm beliefs, becoming excessively uncompromising. They can begin to think that their religion is the true one, the only correct one, and that other religions are beneath consideration. Others may become suspicious, hateful, or hostile towards other religions and their respective followers. In another extreme case, there are plenty of individuals or groups who believe that being religious is required to be "good". This is completely wrong — it is entirely possible to be a good person while being non-religious. Furthermore, there are some religious people who, despite claiming otherwise, perform actions that go against what is considered to be 'good'.

It is important to question authority. It is important to criticise and scrutinise any belief or system of beliefs whether they be religious, spiritual, political, social, economic, environmental, or otherwise. Each person must judge for themselves if their actions and words are suitable ways to interact with the world around them. I am not trying to tar everyone with the same brush here – I am emphasising the importance of questioning and analysing beliefs carefully, as well was doing your best to get along with the people around you, regardless of whether or not they hold the same beliefs as you. It is important that people choose their religious beliefs – every person should have the freedom to change what they believe in for any reason. It is important to have meaning in

# YOU YOURSELF HAVE THE OBLIGATION TO DECIDE HOW YOU WILL LIVE, AND WHAT SORT OF LEGACY YOU WANT TO LEAVE BEHIND

life, and there certainly is meaning in the lives of both religious and non-religious people. Any person, regardless of their religious affiliation, is capable of living by good values, morals, and principles among which are kindness, generosity, altruism, compassion, love, respect, courage, and humility. People can come to have these qualities through different ways, be it through religion, philosophy, nature, science, or introspection. Everyone needs meaning, but not everyone needs religion to get to this. There may not be a God, or gods. There may not be a higher purpose or a grand plan, and that is okay — you can still live a meaningful life. You yourself have the obligation to decide how you will live, and what sort of legacy you want to leave behind. Additionally, such ambitions do not have to be big or world-changing. At the end of the day, almost everyone commits at least small acts of rebellion against what society expects from them.

While avoiding the trap of relying too much on religion for meaning, one must be careful not to fall into the trap of nihilism. The world (and the larger universe) can seem so big, so vast, so complicated, that one can feel as if they do not matter in the grand scheme of things and that their life cannot be meaningful. It is important to remember that no one asks to be born, no one can know or understand anything, and no one has it all figured out. Life is about learning as you go along, being willing to make mistakes and learning from them, while being considerate to the people and the world around you.

The point of life is to truly live – to give things a go, to be willing to learn, to try and improve, to make your own meaning. Life involves many different experiences and emotions, and not all of them are pleasant. Whatever happens, keep going. Keep trying. Give life a chance. Love, kindness, friendship, compassion, laughing with family and friends, solving problems, educating others, and having discussions are all among what gives life meaning. The world is not without problems, but it is certainly very beautiful, as is the life that inhabits it. Finallly, we are not just living in the world — we are also a part of it, we are made of stardust. We are capable of many things, both good and bad. So let's choose to do good where we can, when we can.

Credit: Wikimedia Commons, Journalist Seaman Ryan McGinley



**KEEP THE CAT FREE** 

### **COMMEN'I**



No need to thank me for my hotness

1st year Materials Science and Engineering

Dear Amber, I regret so much not expressing my feelings to you sooner. I love you and hope you see this and message me. I'm sorry for all the pain I've caused you.

-K **3rd year** Bioengineering Enjoy my music taste, **ROCK ON!** 

1st year Geology

### COMMENI

Thou maketh me recall my days long passed, days filled with cheese and... ever more bountiful amounts of cheese... 'Twas during those days thine obsession began, for it was with you I first opened these nostrils of mine to the most smelliest of aromas. At first I was scared, the scent was too much for my brain to comprehend but oh so clearly mine opinions changed, overtime I began to look past the foul fragrance and discovered what beauty lie within. And who else was with me every step of the way, on my journey towards transcends? You were my dear, guiding me towards the light of a cheese filled world which has now left me satiated for decades passed, which is why now I must ask upon thee to help me guide others, as you did me. Guide them to a glorious future filled with cheese by my side. Together we can live for an eternity, basking in the most beautiful of stenches. I ask of you now to take this hand of mine, oh sweet valentine.

#### 1st year

Dear future valentine

Hey babe, out of curiosity, what on earth are you thinking? Good for me, but may God have mercy on you. Unless if you are doing this for the plot, in which case you have my begrudging respect, I struggle to understand your thought process here. Since you're here with me anyways though, I might as well give you some tips; buying me books and food is the way to my heart and listening to top pop girlies and sad indie girlies forms a large chunk of my personality. Good luck darling, and just remember: if this doesn't work out, at least we will both have a great story to tell to our friends someday.

1st year **Biomedical Engineering**  Dear Deputy President of Finance and Services,

I just wanted to take a moment to tell you how much I love you. Your smile, your intelligence, and your generous spirit are just a few of the things that make me fall for you more and more each day. I cherish every moment we spend together and I cannot imagine my life without you in it. You are the missing piece to my heart, and I cannot wait to spend the rest of my life showing you just how much you mean to me. I definitely didn't write this on chatgpt and I meant everything I said. I wouldn't have rather spent Valentines in any other way than running late to a meeting to buy u flowers, be stuck in a meeting with u for 2 hrs and get unnecessarily drunk in a random club in Camden. Because it was with

Forever and always, The future Union President xx

you.

-Bjorn Lee 4th year **Electrical and Electronic Engineering** 

> Wasowski, light of my life, fire of my loins. My sin, my soul. wa-sow-ski: the tip of the tongue taking a trip of three steps down the palate to tap, at three, on the teeth. wa. sow. ski. She was Wa, plain Wa, in the morning, standing four feet ten in one sock. She was Wasowski in slacks. She was Mike at school. She was Mike on the dotted line. But in my arms she was always Wasowski.

1st year Aeronautical Engineering

To my partner in crime,

Thank you for always being my pillar of support and love!!

I love you!

2nd year **Biological Science**  Hey....it's been a while. For me at least. I know time passes differently for trees than it does for people. I know that over the centuries countless rogue schoolchildren have scrambled over your gnarled roots, countless young couples have paused to lean into the rough bow of your warped trunk, and countless old ladies have paused to let their dog sniff around your trunk, looking for a spot to claim as their own. We probably weren't special to you. Just another pair of aimless wanderers who paused one too many times under your branches. But even though we may not have been yours, you were always ours. Our "talking tree." You were there when we needed an excuse not to part ways, not to wander alone. An excuse to simply "stop dear, and stay a moment longer." You witnessed our heartache and laughter, incessant sobbing and hysterical hugging, the good, the bad, and the ugly. You were where we met at the beginning of each day, our recovery spot after each long run. You were the meeting point of every meandering walk, and the spot where we perched like birds, confusing the cars that paused to allow two silly girls to cross... and we never did. Cross, that is. One more minute always became five, then ten, then a million. And l would trade anything for a million more. A million more moments as a scared 14 year old, quaking in athletic shorts in the bitter cold, searching for any excuse to hover for one more instant. Any excuse to continue to ponder what our lives meant and why. Any excuse not to go home and let each day fade into the next. My best friends are mine because of you. And each bittersweet memory, a morsel that sprung like plentiful fruit from your nimble branches. Your shade in the blistering summer heat, your auburn leaves blazing fiery trails through the crisp autumn sky, your branches iced with delicate snowflakes in January, and your budding leaves a reminder of new life each spring. You were our shelter and our safe space. Home base. HQ. And I know there may be a million more high school girls that make our spot their own. But the home we created with you took root somewhere in this silly girl's young heart. And that piece of home still travels with me, even when home feels oh so very far away.

1st year Bioengineering

# Are you an alumnus or staff member of Imperial?

Felix isn't just for students! It's also a great place to discuss matters relevant to staff, and showcase what our alumni and researchers are up to!

Send submissions in to felix@ic.ac.uk, or get in touch on our Instagram account @felix\_imperial WHY YOU SHOULD VISIT THE BOOKSHOP THEATRE

ARTS

# **Architecture Article**

# **High-Fidelity Wren-ditions**

**THE ART OF CHURCHES** 

London's finest. most well-hidden architecture.

#### Gilbert Jackson Arts Editor

fter a rather tedious set of exams and coursework Alast summer, I found myself 'un-busy' in London. As such, I decided to waste my time more wisely by finally exploring the city that had evaded my sights as a result of the many cruel years of COVID-19 and its accompanying lockdowns. I set my sights firstly on the City itself; the original square mile of London encompassed by ancient Roman walls which, when one first journeys to the City, feels like a completely separate entity entirely from the rest of the 'London: Expansion Pack'. Its somewhat estranged and separatist nature was exactly why the City warranted an exploration, but what I didn't realise was that my initial attempt to explore the city would lead me to having an unusual side project.

What I learnt from my now frequent visits to the churches within the City walls (I should add: not for religious reasons, purely for architectural reasons) is within these buildings is a plethora of art and history encased within granite walls and illuminated by chromatic glass: gorgeous architectural styles, unique installations within the buildings, and extensive chronicles regarding the buildings themselves — and the people that would have frequented them in the old days — lead to my fascination with these buildings and the start of my project; to visit every church within the City.

Whatever your view is of church buildings, one must admit that they are pinnacles of the various architectural styles that shaped Western Europe. The churches in London are no exception.

What distinguishes them is that they were built in the English Baroque style, instead of the more common Gothic style found in other churches in the UK. In Europe, baroque dates from the late 16<sup>th</sup> to mid-18<sup>th</sup> century and was characterised by flamboyant neo-classical (Greco-Roman) stylings which features large columns, porticos and heavily decorated reliefs. In England however, baroque came along much later than in other European nations, in the mid-17<sup>th</sup> century. The birth of this new creative style was, ironically, born in the aftermath of destruction, namely the Great Fire of London of 1666.

London's buildings had been decimated by fire which destroyed most of its churches and houses. With Charles II on the throne of England at the time, love for art and music had returned after a period of deep-rooted puritanism. The City in ruins was the perfect opportunity to embrace contemporary styles of architecture, and Christopher Wren stepped up to the plate to usher in the English Baroque style which we see to this day in his magnum opus, St Paul's Cathedral.

However, there's more to see in the City architecturally than just St Paul's. What we don't see as clearly is that Wren's style of architecture is featured in a majority of all the churches in the City. Most Wren churches aren't as rotund as St Paul's but they can be easily marked out by their tall tiered towers and

work on the roof, —

ed — and intricate-

rinthian columns

other signature

Wren's architec-What Wren

white marble stone. Inside, you will be treated to stunning plaster sometimes paintly carved Cowhich are styles of ture.

achieves in his buildings are a luxurious and stately form of architecture which, unlike European baroque and rococo art, is still reserved and not outrageously gaudy. They maintain a sense of dignity and religiosity while remaining beautiful, but not entering the realms of extravagance; he creates a balanced and tasteful form of art which is exemplary of English sentiments at the time; keeping its Protestant and post-reformation ethics.

But there is more to see in these churches besides stunning plaster work and carved columns. One thing that you might be surprised to find in these fairly old buildings is stained glass, which looks completely out of time compared with the rest of the building.

If one takes a trip to St Mary le Bow, St Michael's Paternoster Royal or even The Temple Chur, ch you will find jaw-droppingly stunning stained glass. The style of the glass is fragmentary, jagged and twisted. The colour of the glass is also unusual; strong reds and greens embolden

the glass and make it noticeable as soon as you enter the building. The reason for this modern installation is once again a flourishing of creativity af-

> ter de-

**KEEP THE CAT FREE** 

# ARTS

struction, this time in the form of the Blitz.

The Blitz resulted in the gutting of most of the City's churches and thus artists like John Hayward and Henry Moore were called in to redesign interiors for the ruined churches. The result is that the churches within the City have a unique fusion of Romanesque, gothic, baroque and modern art and architecture which makes each church a hotbed of artistic expression and history.

The artistic styles of London are numerous, and each style is rooted in some aspect of the City's history. By visiting these churches, one can truly gain a first-hand experience into the ever-changing styles of London's art and thus learn not just the history of each church, but paint a picture of the history of the City itself from its greatest architectural representatives.

# Did you know...?

Windows like this one - as seen in St Mary le Bow - are often made with jagged fragments of glass and feature bold colours which makes them stand out as modern pieces of stained glass work.

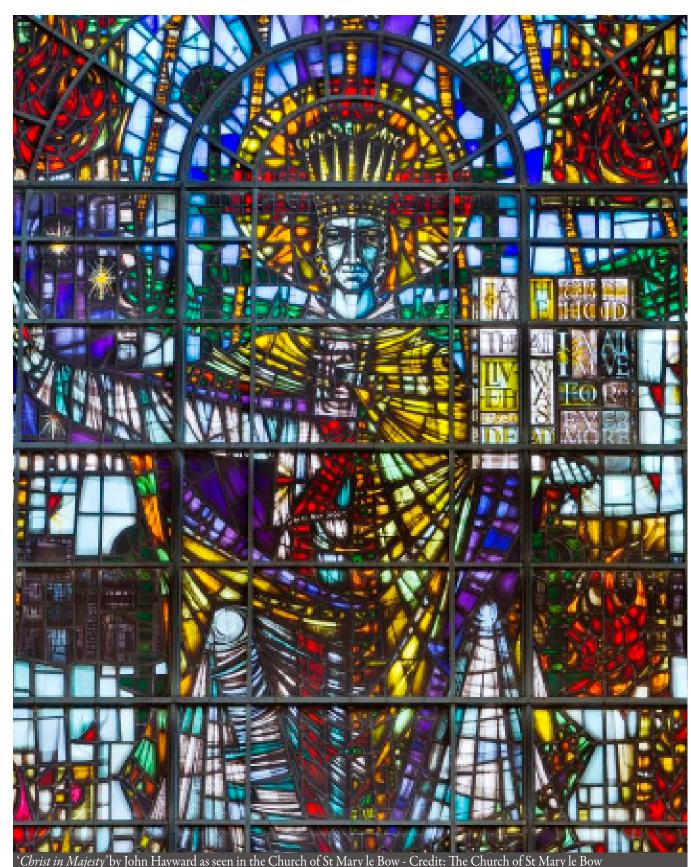
In examples like this, some of the glass fragments used were actually broken shards from windows destroyed during the Blitz.

# Attention Art Lovers!

If you like art, musical performance, or the theatre, and want to write about it, then get in touch with the Arts editing team!

We are happy to read all your art related reveiws and opinions and we'll work to get your articles published and edited where necessary! You can also come to us with ideas for an article you haven't written yet! We can't wait to hear from you!

Email: felart@ic.ac.uk



# Things to do in London The Bookshop Theatre

A thespian's daydream, *realised*.

Sophie Pointon Arts Editor

It sounds like something too good to be true. Take a stroll a little way down from the Old Vic down The Cut to number 51, and there, just across from the New Vic, you will find a little gem of a bookshop with a twist: it's all about theatre.

An outstretched awning will signal the shop is open, shading a collection of plays

and books seemingly handpicked to lure you inside. There, you'll find second-hand copies plays on the left-hand side and new ones on the right, with something for practically every taste. I assure you even if you have only the slightest of inclinations for going to the theatre, there will be something in there for you. They also have sections on philosophy and politics to boot.

The Bookshop Theatre may only be the size of Study Room 2A in the Central

Library, but it's lovingly curated, has a cat, and, in case that wasn't enough, if you peek round the back you can catch a glimpse of the 32-seater theatre almost bashfully hidden away. They put on two plays year, memorialised by the multitude of theatre posters hanging near the door. When I ask for the co-owner's favourite, she responds immediately with Verde, Agua y Luna, which was inspired by the writings of Federico García Lorca (speaking of Lorca, the Cervantes Theatre will begin a run of La Casa de Bernarda Alba on the 20th of February.)

First set up in 2002, the Bookshop Theatre used to be a part of Calder Publishing (founded by John Calder, poet, opera-lover and a friend of Samuel Beckett, among other things), but was taken over by a group of four friends several years ago. During lockdown, they received a grant from the Arts Council that allowed them to refurbish their theatre and to plan a new fronting for the bookshop.

There are only a handful of similar specialists around (another example of a bookshop for plays would be the one in the National Theatre, and the Samuel French Bookshop at the Royal Court in Sloane Square). But this bookshop is the only one that offers acting sessions on Saturday mornings.

When I leave, a newly purchased  $\pounds 4$  copy of The Government Inspector in my bag, I know I'll be back.



### Find out more...

...at *https://calderbookshop.com/*, or @calderbookshop on Instagram. They are open **every day 11-8pm**, except for **Sundays from 1-6pm**. The next play that will be put on at the Bookshop Theatre is 'September' by Tereza Briggs-Novaes, a friend of the owners', and is scheduled for **March** (from the **1st to the 25th**). Tickets are £15.



Tredit: The Bookshop Theatred The Galder Bookshop & Theatre Theatre The Galder Bookshop & Theatre Theatr

### A new play by Tereza Briggs-Novae From March 1st until 25th (Wednesdays to Saturdays) @ 7:30pr Coming soon!

# What's On...

The Royal Academy of Arts (RA) is hosting an exhibition on Spanish art titled: 'Spain and the Hispanic World: Treasures from the Hispanic Society Museum & Library'. The exhibition will feature art by legendary Spanish artists such as Goya, Velazquez and Soralla.

The exhibition will run until April, and tickets cost £22 - £24.50 per person. The RA also runs a scheme for people aged 25 and under who can receive half-priced tickets on all exhibitions at the RA when they sign up (for free) to the RA under 25s membership scheme.



## Advertise your art projects here!

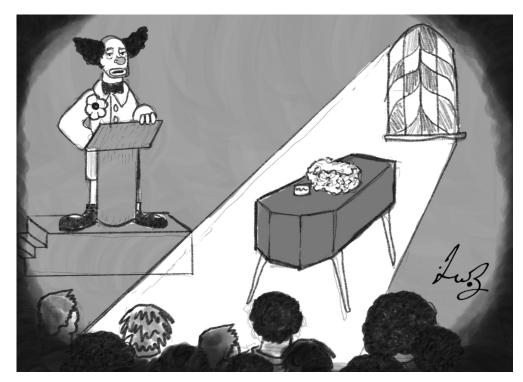
If you, or your club or society wish to advertise your art projects, concert, or performance then get in touch! Email: **felart@ic.ac.uk** 

# COMICS

26

# **CAPTION COMPETITION**

### This week's winner - Jonah Hewett



"So it turns out there is a maximum number of people that can fit in my car."

# WANT TO DRAW COMICS FOR FELIX?

**CONTACT US AT:** 

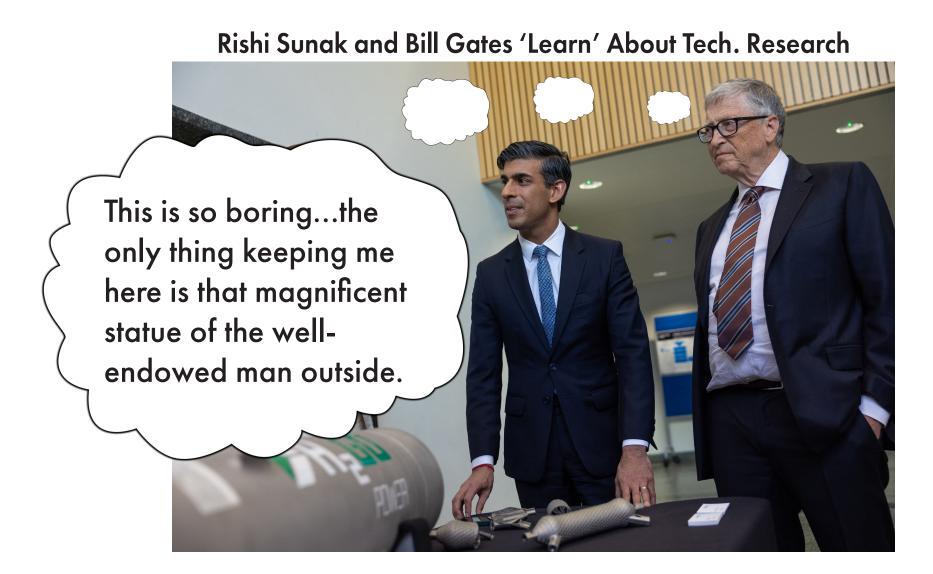
### PUZZLES.FELIX@IMPERIAL.AC.UK

TO GET INVOLVED



If you want to contribute comics to Felix, or a cartoon for the caption competition, please contact us at puzzles.felix@imperial.ac.uk

# HEADSHOTS



# Tea Soc. Reveals Secret Ingredient





#### 30

KEEP THE CAT FREE

### PUZZLES

# CROSSWORD

### 4 points

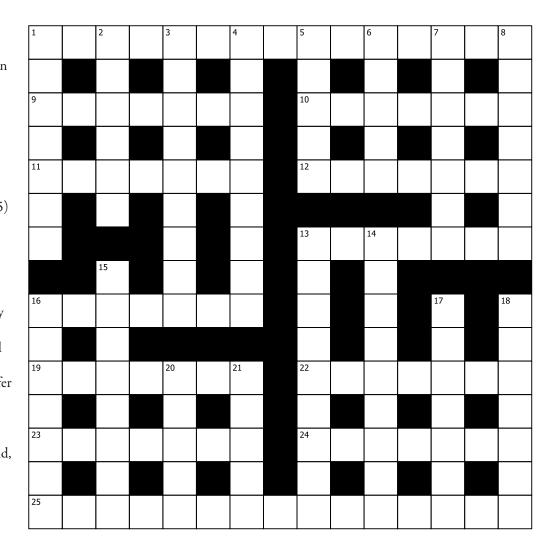
#### Across

1 Found at the top of the royal mile (9, 6)9 A zero-toll dual-carriage road (7) 10 Surname of American actress best known for Veep and Seinfeld (7) 11 Can be found in the Fallopian tubes (3, 4)12 For the new Felix comic, \_ 26 (3, 4)13 Series of films from 1958 - 1979 starring Kenneth Williams and Barbara Windsor among others (5, 2) 16 Relating to the external sac that contains the testicles (7)19 The events or property of another (7)22 Long, thin, filled with cream - topped with chocolate (7)23 To enjoy oneself or celebrate in a boisterous fashion (7) 24, 8 Down - Notorious sex offender and owner of black book (7, 7) 25 Small black predatory insect which spins on the surface of still water (9, 6)

#### \_, famous British comedian 1 Harry\_ and impressionist (7)2 Film franchise released by Blue Sky studios, first released in 2002 (3, 3) 3 Worn by Charlie Chaplin (9) 4 Currently in industrial action, famously red (5, 4) 5 Greek god of the dead (5) 6 Singer, with best selling album of 2015 (5) 7 Jewellery company headquartered in Manhattan (7) 8 See 24 Across 13 Trophy presented to the winner of the Golf Open Championship (6, 3) 14 Daniel \_\_\_\_, actor in Swiss Army Man (9) 15 Physical \_\_\_, 1975 album by Led Zepplin (8) 16 Red \_, 2018 film starring Jennifer Lawrence (7)17 British detective series starring Rowan Atkinson (7) 18 Doing something in an impressive, grand, or luxurious way (2, 5)20 Relating to a seizure (5)

21 Motion of indifference (5)

Down



## **Picture Hunt**

3 points

This photo was taken somewhere on campus - know where?



# From the Editor

Hello there,

Cryptic crosswords are back this week, alongside a standard crossword. However - and I must make this very clear - any pedantry regarding poor clue setting will be strictly... rewarded with points, so please, complain away if you spot anything.

The leaderboard will also be returning to the paper soon, so please do send your responses to us if you wish to see your name in the paper, and also to be in with a chance of winning our grand prize... more to be revealed next issue.

If you have any requests for puzzles, perhaps ones more or less difficult than those currently presented, then please write to us at puzzles.felix@imperial.ac.uk.

Happy puzzling!

Sincerely,

Isaac Winson, Puzzles Editor

# 5 points

# **CRYPTIC CROSSWORD**

### PUZZLES

#### Across

### Down

1 Check O2 status at end of outing for clean breathing (3-12) 8 Addictive protagonist loses back of her needle (6) 9 Curvy nose's cavity infected by end of void (8) 10 Blade? Diamond cut steak (3-5) 11 Two nibbles chew yet born head (4) 12 The copy-editor's gone potty! Messed up by losing a T (4)13 Food at muddled Bed and Breakfast serves to make fat Dr. scram (5, 5)14 Confused raindrop lost north heading, now falling from the sky (3-4)15 Large chest in sale item gives support (6) 18 One-hundred noisy years can make things a little unclear (6)19 Frocks altar-boy wears inside due to season (4-4) 22 Posh old place in St Moritz (4) 23 Sharp blow within campaign for appeal (3) 24 Swallowed alive! And is shaken with a lack of din (6) 25 Tube passage will loop back to large organ (9, 6)

 Lo, mascara applied by Jesus? It's a tale everyone should know (1, 9, 5)
Self-referential problem preceded by argumentative utterance (9, 6)
Benjamin was shaken by the loss of his member, for the empire had sent a silent assassin (5)

4 Susie was animated by this very paper (5) 5 Chap from Berlin put nine up in the frameless window to rude effects (9) 6 Noble steed gets disturbed over a dropped tonne, causes muzzle tear (4-5) 7 Clever contraptions get half a dagger up

them (7) 13 Killer cleavage container (5-4)

16 Get another scan, then they can pull it (-)

out (7) 17 Nothing at the tomb, it's a virtual kind of living (6)

20 Call-in to Lewis' wardrobe

for barrels (5)

21 Raise around fifty for the most power in the sun (5)

### Crosswords by: POMPI

## **Missing Vowels**

### 1 point each

**CATEGORY: Imperial Eateries** 

Put the correct vowels and spaces in these jumbled-up consonants to find the answers. Send your answers in along with your puzzler-name to puzzles.felix@imperial.ac.uk for points on the leaderboard:

i) q nst wrr ms

ii) fs ncff ft yfr

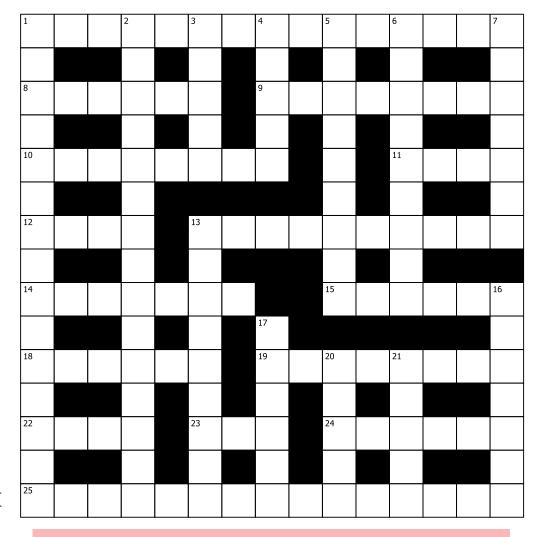
iii) sn rc mm nrm

iv) srl xn drfl mn gcf

### Solution from Issue 1820



Apologies for the missing G!



# Sudoku

### 2 points

	1		2			7	8	3
		7	9		1			
4	2		7	8				
9	6	2			3		7	
	5		8		9	3		1
8	3			7				
	7	6		9			5	
2			4	6		1		
3		8		1	7			2

SEND ALL YOUR ANSWERS IN BEFORE 12:00 ON WEDNESDAY 8<sup>th</sup> MARCH TO GET POINTS ON THE LEADERBOARD

Edited by: ISAAC WINSON

# CATNIP

# **PM** sells Britain to Bill Gates in exciting corporate acquisition

### Author: Feb Senton

Rishi Sunak and Bill Gates met at Imperial last week to agree on the purchase and division of the United Kingdom for £159 billion, a sum some analysts are calling 'generous'.

Gates, the founder of Microsoft and now prolific investor, told Catnip reporter Feb Senton that the UK had "strong growth potential but needed to jettison its underperforming divisions" having expanded into new markets in the less economically challenging climate of the 15<sup>th</sup> century.

Sunak continued: "Some of the expansion decisions of the last 600 years were misguided. The entire Scottish operation has been a source of nothing but trouble." While Scottish nationalists were initially delighted by the news, they were alarmed to hear that a buyer had already been found for the nation. Japanese billionaire Masayoshi Son is reportedly planning on relocating the country to the Pacific to create an all-inclusive 'authentic Scottish holiday resort experience'.

Sunak defended the Indian expansion, however, saying that it still had growth potential, and accused Ghandi of 'loving red tape' and 'economic protectionism'.

Other divisions to be auctioned off included Yorkshire, most of Wales, and parts of the Midlands under the 'Anywhere you can't get an authentic flat white' scheme in order to make the new country as attractive and familiar as possible for new international investors. The London Stock Exchange rallied at the announcement, hitting a century high, with similar celebrations in the business press.

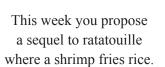
While plans for the new nation are still not fully fleshed out, all current British natives will have automatic citizenship in the new nation, which will be based on principles of inclusion and tolerance. An exam to weed out anyone not aligned with the country's new direction will reportedly check that potential citizens have at least a bachelor's degree, or \$100,000 in assets.

NIMBYish planning decisions are also reported to be destined for the scrap heap, with the Cotswolds being converted into an 'interactive VR exhibit' that will let visitors experience what it was really like to 'go to the countryside' from the comfort of their own homes.

One commentator from the Financial Times told Catnip that he was 'relieved that grown-ups were back in charge' and that finally Britain could get back to doing what it was meant to: "Generating lots of value for shareholders."



ARIES



LIBRA

This week a crate of

Omega 3 falls on you,

but you're ok, your

injuries are only super

fish oil.



This week you realised they just don't make guys like Dracula anymore.



**SCORPIO** This week you confuse politics and poultry when you try and stage a coop.

This week you sign a petition to carpet the M25, to make it the smoothest motorway in the world.

GEMINI



### SAGITTARIUS This week you keep your circadian rhythm on its toes and forget horses are real.

This week you conclude that boring people should have to hold up subway surfers clips while they talk.

CANCER



**CAPRICORN** This week you consider yourself a nepo baby because you use your parents' Netflix, Prime Video AND Disney+.



This week you never

LEO

cover a book by its judge.



### AQUARIUS

This week you spice up your chemistry lectures by pronouncing molecules like the name of a hero from Greek mythology. VIRGO

This week you realize that your favourite song is actually a recipe for beef stroganoff.



**PISCES** This week you fry rice in an eggless place.

# **Catnip Office Noticeboard**

"Nape Your May to a Respiratory Adventure!"

Clear a room in seconds with the brilliant new flavours from Catnip Vape Co!

Fresher Nomit! "Freshly regurgitated, straight from the stomach to your lungs!"

Wet Socks! "For the ultimate foot fetish experience"

Sweat! "Experience the refreshing taste of a hard day's work with every puff!"



WANTED: A flatmate who doesn't haunt my dreams. Must be <u>HUMAN</u>.

Wanted: people to stop telling me to come out of my shell that's something a bird would say to a snail so he can eat it NICE TRY MURDER BIRD I'M ONTO YOUIII

Wanted : flatmete to share a glat with me in Last's court, had to get ridey my had one after he nigpronounced foir gras. Must: wear a waistroat, bring my pool on a silver tray and have the inability to blink.

# CATNIP

# ICL returns to its imperial roots and announces plans to create its own empire

### Author: Jor Jor Well

In a shocking turn of events, our very own Imperial College London, one of the most prestigious universities in the world, has announced plans to establish its own empire. The move comes after years of dominance in the field of science, with the institution already boasting several Nobel laureates and groundbreaking research. However, sources close to the university claim that this isn't enough for Imperial, who now have their sights set on conquering the world.

Meetings with PM Rishi Sunak and Bill Gates on Wednesday proved fruitful and they both pledged considerable funds in support of Imperial's student army – notorious for being the most intelligent, motivated, and caffeinated militia in the world. Speaking to Catnip reporters, a spokesperson for the PM said, "We feel that Imperial College London has the knowledge, the resources, and the sheer brainpower to establish its own empire. They're not content with simply being the best in the world at science, they want to be the best in the world at everything, and we are fully backing this sentiment as part of our Levelling Up Britain campaign."

Plans for world domination are said to be in early stages, but already rumours are circulating about the empire's possible structure. It is thought that the university's various faculties will be split into separate territories, with the Department of Medicine taking control of healthcare, the Department of Engineering dominating industry, and the Department of Mathematics ruling over finance. It is unclear what sector the Business School may control, but it is expected that it will certainly be vocal about its role in the empire's overall success; according to an informant,

**This Week's Comic:** 

Joe Biden Gets It Done





Created by: your mum

they've already got plans for a new currency system based on 'vibes'.

"I'm really looking forward to being part of an empire," said one Imperial student, who wished to remain anonymous. "I think it will look great on my CV."

Of course, not everyone is on board with Imperial's plans. Some students are concerned about the potential for conflict with other countries, while others are worried about the empire's impact on their studies. "I mean, I'm trying to pass my exams here," said a final-year student, clutching a Redbull, "I don't have time to conquer the world."

"I'm not sure how I feel about this," said another, "I've heard they've assigned my lecturer to run Scotland but I asked him and he hasn't even tasted Irn-Bru."

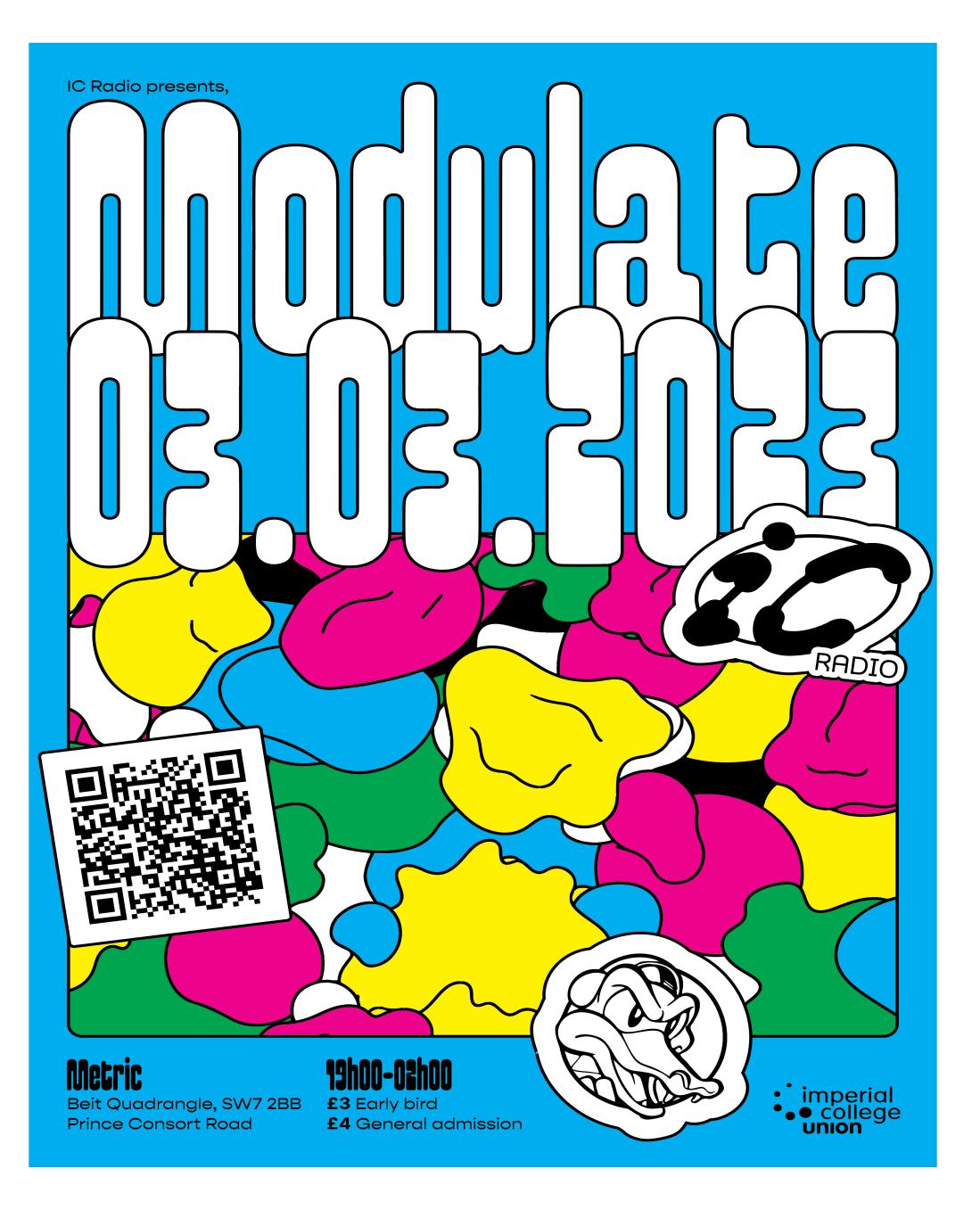
But for the most part, the student body seems to be excited about the possibilities. After all, who wouldn't want to be part of an empire that can cure diseases, create sustainable energy sources, and build skyscrapers that reach the heavens? It's like a real-life Wakanda, only instead of vibranium, they've got Bunsen burners.

Imperial College London has yet to announce an official launch date for its empire, but sources say that preparations are already underway. In the meantime, other universities around the world are said to be watching with interest, and some are reportedly considering following in Imperial's footsteps. Only time will tell whether Imperial's plans for world domination will come to fruition, but one thing is for sure – the scientific community will never be the same again.

# Want to write for Catnip? Well tough luck, you can't.

Please don't email us at catnip@imperial. ac.uk to submit an article to be featured in Catnip because the email address doesn't exist and we don't want your silly little article anyway.

Love, the Catnip Team xx



# BOOKS

BOOKS Book Review

Note from last issue (1820): Kenan Malik's talk on 28<sup>th</sup> Feb. has been cancelled/postponed until further notice. Stay tuned for updates!

# R.I.P. Kierkegaard: you would have loved Lolita

Books writer Mohammad shares his thoughts on the 'aesthete' character in Vladimir Nabokov's most notorious novel.

### Mohammad Majlisi Books Writer

I spent the first week of my supposed winter 'break' reading, amongst other things (Susan Sontag essays and G.H. Hardy's *Apology of Mathematics*), Nabokov's most infamous work *Lolita*. It was certainly something. It was a book, but in fact, to describe *Lolita* as just a book would be to do it a disservice. It is a study into power and the abuse of it, narrative power, and of the English language, in how the events of the book play out and how they are related and revealed. *Lolita* is the perfect modernist text to sink into; it's not as densely clever as James Joyce, nor is the reader's basic understanding of the characters obstructed by the lack of speech marks in, for example, in Virginia Woolf's works. What is most striking about *Lolita* is the protagonist, Humbert Humbert, being a perfect character study of Kierkegaard's idea of the 'aesthete'.

Kiekegaard's model aesthete can be seen, or understood, in a few key characteristics: it is the basest form of existence, and is defined by revelry in the sensual, egotism, flightiness from boredom, and a fatalistic use of irony and scepticism to the end.



The aesthete, according to Kierkegaard, is entirely self-serving and seeks to escape reality through fantasies and idealism. The ego of the aesthete seeks to 'recreate the world in his own image...' and to '[transform] the boring into the interesting.'

This exhibits itself almost perfectly in Humbert, the protagonist of *Lolita*. Humbert himself is a self-described aesthete and hislove for nymphets is derived from a perverted need to see the pure, un-sexualised form of an adolescent girl absorbed into his mind and spat out as an object of his desire. Humbert's desire for Dolores ('Lolita') is actualisation of the impossibility of his original love, Annabel. To Humbert, the fact that Lolita exists and he can abuse her isn't his goal in and of itself, but rather a way of consummating the love he could only dream of previously. This love of Annabel births the concept of nymphets; Humbert creates his own rules and justifications for committing his perversions that numb the pain of his unrequited love.

Textually, the world is created in Humbert's image - we as the reader only know his thoughts, and retellings of the events of the novel through his confessional. His memories are coloured by his own feelings, and parts of the novel even hint at the unreliability of his recollection. But, more importantly, the language used represents everything that Humbert is - the actual novel is a delightfully colourful mass of language being masterfully used, sometimes to horrific effect. Similarly, the English in the novel never truly reaches native flow. Nabokov, as Humbert, constantly reminds us of Humbert's self-imposed pomposity, and his alien nature in America as a landed old-world European. Ultimately presents him as an intruder in suburbia and in the ideal life that Dolores is forced to leave behind, despite Humbert attempting to paint himself as someone who naturally fits in, someone who is adored, perfect, and above all of the other characters in the novel. If the reader gets the impression that Humbert is above it all, that is because Humbert, the aesthete, has deemed himself so.

In addition, in a more metatextual way, Americana and common American tropes are morphed by Humbert's aestheticism. Nabokov subverts several events into twisted versions of the tropes common to American literature and Americana in general. Humbert, the voyeuristic lodger in the home of the Hazes, becomes a twisted version of the identikit 1950s suburbia dream. The horrible honeymoon of Humbert and Dolores a riff on the popularity of cross-country travel á la Twain's *Huckleberry Finn* and Kerouac's *On the Road*, and even the violent, bloody climax is a play on the theme of vengeance in the Wild West, with Humbert armed with a pistol to boot. The novel *Lolita* itself is an extension of Humbert imposing himself and his ego onto the traditions of American literature, on top of Humbert oppressively imposing himself on Lolita.

Not only is Humbert the perfect description of the Kierkegaardian ego, but *Lolita* as a whole is just that too – an aesthetic tale about the dangers, or rather the folly, of purely aesthetic existence. Kierkegaard would undoubtedly have revelled in the tale of little Dolores Haze, but for many readers, including myself, despite the richness of the text I couldn't help finishing *Lolita* and falling into a dolour.

### felix Books x IC Book Club host Ava Glass at Imperial

Ava Glass's debut novel The Chase is a modern take on your classic spy thriller. It presents a woman's version of what it's like to work in espionage and secret intelligence, based in part on Glass's own experience working as a civil servant in the UK. The event promises to be a fascinating one, with focus on how women can break into stereotypically male lines of duty, and

their presence in literature. Details below!

Date: Thursday 16<sup>th</sup> March Time: 18:00-19:00 Location: The Union Bar (through FiveSixEight) Cost: Free!

### **REVIEW BOOKS AVAILABLE!**

If you love reading but don't know which books to write about, we have a number of titles that need reviewing - these are usually recent or upcoming releases, hot off the press.

### Crime/Thriller

In The Shadow They Cast by Paul Graham Red Light and Bell by Richard Cobourne The Department of Conspiracy by Cal Georgeson Languages

*The Anglo-French Exchange* (Textbook) by Dr. Allswell E. Eno

Email books.felix@imperial.ac.uk if interested!

MUSIC

MUSIC

Edited by: JOE RIORDAN TARA PALCHAUDHURI

# Felix Recommends The 1975: at their very best

Album of the Week

### Cuts & Bruises by Inhaler

Hailing from indie Dublin, rock band Inhaler released just their second studio album. which takes heavy inspiration from the Killers' most recent album – just in



a happier, Irish outfit. Think: soft yet passionate reverberating vocals against warm, shiny guitars. Although 'Valentine' features a Radiohead arpeggio-driven baseline, the album as a whole tilts along an alternative pop axis, wavering only slightly with unconventionally sharp song intros.

I don't agree with all of Matty's political viewpoints, but I respect that he has taken a stance and, more often than not, he packages arguments in a funny and ironic way where you can never really tell if he's joking or not, just have a look at his chicken shop date with Amelia.

Anyways, to end on a more positive note, I hated The 1975 when I was 16. I just fell in love with the Arctic Monkeys and they came out with Tranquility Base Hotel & Casino and The 1975's Brief Inquiry into Online



A very biased, positive and late obsession of the 1975's new album Being Funny In A Foreign Language.

### Isaac Ng Music Writer

Editor's Note: This article was written in response to my article *against* the album in Issue 1809 (check it out for a different view). My opinion has since changed and I also love the album now even though Matty Healy is still a preachy, arrogant, cocky asshole.

isclaimer: I never meant for this to be a review but more of an expression of love for the new 1975's album and hence the complete self-sabotage of all dignity and reputation.

Being Funny In A Foreign Language (BFIAFL) is an espresso commercial that distils all the most popular and familiar sounds into a short 43-min Polaroid album.

Compared to their other major pentatonic scales led albums, *BFLAFL* (I feel like a real fan girl now) has no electronic fillers to kill the mood during the shower karaoke, just bangers through and through. You just can't listen to the 'Looking For Somebody (To Love)', which is currently my favourite track, and not be tapping your feet, skipping down the street or belting it out on your bike.

The album doesn't fall short of the famous 1975-style acoustic tracks either. 'All I Need to Hear' & 'When We Are Together' are pure bait for the hopeless romantics, which if I am honest, is a nice change of pace from the

### Don't Miss the Gig Nick Hakim @ O2 Forum Kentish Town, Sat 18th March

Washington D.C.'s Nick Hakim is a master at genre blending, effortlessly combining elements of soul, jazz, psychedelia, folk, and blues under his drifting, hazy vocals. His third album Cometa is a 'collection of romantic songs written through different lenses, an angle not-so-subtly referenced by the cover, which features a pair of his glasses and



inadvertently suggests quite a literal interpretation of his method. Hakim is performing what will inevitably be an unforgettable show at the O2 Forum in Kentish Town, so grab tickets while you can.

heavier acoustic songs like 'Nana', 'She Lays Down', or even 'Be My Mistake'.

'Wintering' was perhaps my favourite Christmas song of 2022. It is so candid and filled with harmless witty conversational lyrics like "Olivia has been a vegan since ten" and "Ben is obsessed with fat asses and he is ten years old". It also served as a gateway into the Spotify "Indie Christmas" Playlist, which, by the way, is also very good.

The best lyrics of the track have to be from 'Part of the Band' and my god it is a gold mine. It is hard to even pick out a line to highlight because every line is so damn good. Here are some of my personal highlights:

"I like my men like I like my coffee/Full of soya milk and so sweet, it won't offend anybody"

"Am I ironically woke? The butt of my joke?/Or am I just some post-coke, average, skinny bloke/Calling his ego imagination?"

"The worst inside of us begets/that feeling on the internet./It's like someone intended it/(Like advertising cigarettes)"

Before I quote the entire song, I'll just address the elephant in the room which is the all-too-controversial Matty Healy. All kinds of names have been thrown around (e.g., 'preachy', 'arrogant', 'cocky', and 'asshole') and to that I will give the same answer as what Matty would say if you asked him

what genre The 1975 falls into — yes!

He is all of those things, and they are not things I necessarily admire. Yes, he is annoying in those aspects, but the quality that I admire is his sincerity (is scary) and 'post-modern' humour, which is very apparent now because he basically reviewed himself again and again in every single album, making the reviewers' job redundant (note how I didn't say my job).

I think his lyrics masterpiece such as "I know some Vaccinista tote bag chic baristas, sitting in east on their Communista keisters, writing about their ejaculations" is controversial and by no means subtle, but it has brilliantly captured the more controversial political debates and expressed a viewpoint on it. You can't possibly say that is preachy, it is just having an opinion!

### MUSIC

*Relationships* won the NME and to me, it was like my ture enough to think that pink is a manly colour, Guinhome football team losing the league, except if they played every 6 years. I mean everyone hates Spurs, but I don't actually know, I don't do football.

ness is the best beer in the world and The 1975 is my new favourite band.

The only thing is that the Arctic Monkey's new al-My point is, I am now better than the haters and mabum "The Car" won the NME album of the year award.



Sad.

# Let's Start Here. is a good place to start A definitive guide on how to listen to Lil Yachty's new album.

Matija Conic Music Writer

**J** ip hop artists pursuing different genre directions do not always deliver, especially when it comes to rock excursions, with instances like Kid Cudi, Logic and MGK coming to mind as horrendous examples. These ventures often come from a rapper's desire for their art to be "taken more seriously", as Lil Yachty put it in his recent listening party for his new project, Let's Start Here. A lot of reception to Quadeca's last record, which is a heart-shattering, mind-blowing masterpiece, was similar, praising it for pursuing a more indie direction, framing the approach as artistically superior. This sentiment rubs me the wrong way, as it shows that a lot of people remain dismissive of hip hop as an artform. It takes a lot more to impress me than a simple genre diversion. If Yachty made a trap record that was great, I would be applauding that achievement as much as I'm loving the moodier, psych rock vibes permeating the tracklist of Let's Start Here.

That being said, what Yachty has done here makes me start to take him more seriously. For one, he utilised his resources extremely well, having enough of an open mind to collaborate with people more experienced than him while still maintaining a significant level of executive input to keep the project his own. One particularly frustrating thing about rich and influential artists like Drake is their reluctance to establish good collaborations and dishing out piles of crap like Honestly, Nevermind - a record born out of this sort of arrogance, showing Drake as impressively unaware of any forms within the house genre. Yachty, however, did his homework here, kicking the year off with an album that, though by no means perfect or super left field, is a wholly enjoyable listening experience. The opener, 'the BLACK seminole.', is a truly grandiose track with an impressive climax. I wasn't as mind-blown by this song as many fans were, but it excited me about the places in the record Yachty was going to take me deeper into. As for many others, my main qualms regarding tracks like 'the BLACK seminole.' are Yachty's vocals, with the autotune and the heavy processing sometimes doing him a disfavour and coming across as a bit jarring. This issue is most glaring on the track 'pRETTy', which is a thoroughly painful listen, be it because of the vocal editing or the annoying lyrical content. The track's opening line is "come bust this pussy open", immediately followed by Yachty's autotuned moaning and bars about grabbing tits - truly zero things going for this track, absolute lowlight.

Nonetheless, I'm reluctant to claim that his vocals are bad by any conventional metric and I really think it's a matter of personal taste, as it's clear that Yachty doesn't take himself as some singer extraordinaire. Sometimes the vocals complement the vibe of the melody fairly well too, like on the track 'sAy sOMETHINg' - a laid-back, dreamy ballad that engulfs you in its pretty atmosphere, with tastefully incorporated keys and Yachty's yelpy singing sounding confident as ever. This is also the case on 'WE SAW THE SUN!' – a lovely cut where Yachty really shines through and the autotune feels weirdly soothing and appropriate.

The features on this record are fantastic as well, with Diana Gordon smashing it on the front end of 'drive ME *crazy!*', a low key, disco-adjacent banger. Nothing super new or inventive, but very pleasant on the ears, with Yachty finishing off the song with some slower verses, a pace I think is very much his strong suit. Another great feature is Nick Hakim on 'REACH THE SUNSHINE', one of my top moments, which sees him kicking the track off with this almost sedated tone sung over a minimal, but nonetheless quite tense instrumental. The creepy guitars and eerie synths maintain this tension very well, keeping the listener attentive. The song then explodes into these space-filling, expansive synth lines with spooky laughter samples. All these elements just come together so neatly. The way Yachty enters the track by finishing Hakim's verse was a detail I particularly enjoyed, with the string sections at the back end making for a fantastic way to finish things off.

'Ride', on the other hand, while having certain enjoyable elements, features Teezo Touchdown, whose

singing really takes me out of the vibe for reasons I'm not sure I can pinpoint. The keys and the melody are great, however, and it's definitely a moment that deserves its place in the tracklist. The follow up track, 'running out of time' is the most brilliant and effective cut on the record in my view. The signature dream pop synth lines provided by Magdalena Bay – a duo I absolutely adore – are amazingly executed and run over easily the smoothest baseline on the album. The track truly makes me feel like I'm on top of the world and fills me with this optimistic, confident sensation, while doing comparatively little on the production front as opposed to many other moments. And this - this ability to generate a

beautifully captivating and laid-back energy with such a minimal approach - is precisely its charm, an approach I wish there was more of on the album.

Standing on the opposite side of the production isle is 'I'VE OFFICIALLY LOST ViSiON!!!!' which does a lot. And by a lot, I mean *a lot*. It's an insane, indecisive cut, chaotically shifting through different landscapes of sound, but doing so in the best way possible. The employment of dark, murky guitars and hard-hitting drums that boil your blood, interspersed with contrasting and low key moments where Diana Gordon sings over some gentle piano keys, makes this track the most experimental out of the bunch.

The middle portion of the record unfortunately remains quite forgettable, however, with '(failure(:', 'THE zone~', 'paint THE sky' and 'sHouLd i B?' being just okay – really nothing as captivating as the highlights I numbered. Overall though, we have to give credit where credit is due. Who would have thought Yachty would be as present as he is on my Spotify rotation in 2023? To all the pretentious music enjoyers who are currently rubbing their noses and going "AkcHUally, the album sucks, is derivative and not experimental enough" and endlessly posting their different, super unique opinions online, I don't care, nobody cares, stop. I love that he's trying new stuff and I very much applaud this (hopefully) defining moment in his discography. With a bit more experience in such genre lanes, I'm sure Yachty can take us to some exciting places going forward that will stop people from making constant Tame Impala comparisons and allow him to craft his own, recognisable sound.



Edited by: MIKE BUZADJI JONAH HEWETT

# FILM & TV Monopoly: the movie(s)

Film Editor Jonah Hewett discusses the implications of the money and power behind the film industry.

as

rative

Iron

the

long

#### Jonah Hewett Film Editor

n 1948, the Supreme Court of the United States L changed the fate of Hollywood (and, by extension, the entire English-language film industry). From the silent era onwards, the 'Big Five' film studios (and the 'Little Three') were establishing a de facto oligopoly on film production and distribution; they owned the films, the film laboratories, the writers, and the majority of movie theatres (which, at the time tended to only have one screen). This, evidently, gave them a significant amount of control over what showed, and what didn't (with a charming preference for films they themselves owned). United States v. Paramount Pictures, Inc., under the USA's anti-trust laws, decreed a separation between film distribution and exhibition, and outlawed and regulated various nefarious practices that the studios used to strongarm

the few theatres that they didn't own. The result was a huge increase in the number of independent (of the main companies) producers, studios and movie theatres.

It isn't hard to see the parallels to the current state of the film industry. In 2021, Disney alone owned over 25% of the market share for film studios in North America with Sony following close behind at 23.1%. In Disney's case, the majority of that revenue came from Shang-Chi and the Legend of the Ten Rings, Black Widow, and Eternals. For Sony; Spider-Man: No Way Home and Venom: Let There Be Carnage. The common thread there, if you haven't spotted it, is that they are all

Marvel properties.

In fact, the first film on the list that isn't a continuation or reboot of a pre-existing franchise is Free Guy, at  $10^{th}$  place, from 20th Century Studios – although it does contain cameos of lightsabers, Hulk fists, and Captain America, thanks entirely to the fact that 20th Century Studios was acquired by Disney in 2019.

Note that this isn't a self-indulgent Marvel-bashing

article (although that would still be warranted) – the issue isn't necessarily with the quality of Marvel films, but with the zeitgeist chokehold they've held for over a decade. The acquisition of Marvel in 2009 allowed Disney to more than double its market share in the first five years and dominate the box office for the whole of the 2010s. They pioneered the concept of the 'cinematic universe', and showed the rest of the industry the money-making power of pre-existing intellectual property. Obviously, the MCU wouldn't have had as much staying power if it hadn't produced some good films to begin with, but Disney quickly realised that

as they had the same narlink and formula – be it Man, Spiderman, or illustrious 'crossover' they could pretty much churn out any milquetoast, fanservice feat u r e

> and still make the big bucks.

These franchises became even more valuable as the age of streaming emerged, where the production of spin-off shows could drive customers

towards the individual streaming services operated by each studio. Streaming also precipitated a huge rise in 'consolidation' of the industry – the purchasing of legacy studios by the dominating companies. In 2016, AT&T bought Time Warner (Warner Bros. and HBO); in 2019, Disney made the hugely significant purchase of 20th Century Studios for \$71 billion; and recently, in 2022, MGM Studios was bought by Amazon for a paltry \$8.45 billion. The effect of these purchases is giving those companies

## Film Comment

control over an entire century of cultural backlog, even more existing popular films and shows (think about how many times you've seen the 20th Century production logo at the start of a movie) to entice people onto their streaming sites. After Disney's purchase, they immediately began blocking the licensing of old 20th Century films to independent theatres – many of which rely on archive screenings to stay afloat.

It also provides more content for future reboots – no one else really had a chance at making *Rings of Power* once Jeff Bezos set his sights on the Tolkien estate. The deep pockets of Big Tech (Amazon, Apple, Netflix) as they entered into media production also drove up prices. All this has the effect of 'altering the cultural output', as Paris

Marx put it in his



Disclaimer: This image was AI generated using OpenAI (DALL-E) article for Tribune – which

projects get greenlit, which films and shows we see on our favourite streaming sites, is all dictated by the boards of a small number of multimedia conglomerates. It's almost uncanny how similar the current situation is to that of the 30s and 40s; a few huge studios that control both production and distribution. Except this time, no one is going to get in their way (and certainly not the US government).

In 2020, the Paramount Decrees, as they became known, were terminated – citing a shift in the media landscape, from movie theatres to streaming, that rendered the clauses obsolete. At this point, it might not have a very big effect on the state of the industry, but it is a poignant knell that heralds its direction; never send to know for whom the bell tolls.





£30 for a half page (1620x2696px) £50 for a full page (2696x3336px) +£30 (on top of print) for 3 days of screen advertising (1080x1920px)

email: felix@ic.ac.uk insta: @felix\_imperial if you hate that we used Comic Sans for this as much as Tara the Music Editor does, why not replace it with your own prettier ad?



We know people are interested in reviewing their best (or worst) food experiences, but we need a competent editor to manage the section: check the food email, lay out articles in Adobe InDesign, and fill out the section with your own writing.

I mean, sure but, what about MG ARDV

If you're up for the challenge, let us know: felix@ic.ac.uk @felix\_imperial Edited by: CHARLOTTE PROBSTEL

# FOOD & TRAVEL Greenwich: home of the Meridian

### Why chase the equator when the Meridian is so near?

### Zanna Buckland Co-Editor-in-Chief

Greenwich, where the Prime Meridian line lies. Despite spending every summer in the UK since I was born, I had never visited the area, and felt it was some- than travelling through tunnels! where I should explore for its history.

connects you to DLR - Docklands Light with hunger, I only noticed the name were also able to people-watch while Rail. The Light Rail from Bank will On a drizzly day in January, a friend take you directly to Greenwich station, our servings of delicious cod and chips. (If you don't quite want to travel as far and I had decided to take a trip to which is more or less in the centre of While the food was excellent, they went as Greenwich, their original branch is Greenwich. It's a scenically interesting viral a couple of years ago for their not- located in Whitechapel (the original journey through part of Zone 2, including Canary Wharf – much nicer regret it one bit!). Their décor is fun and

We got on the tube at South lunchtime, we went in search of a the latter a fitting addition given they're spending too much time browsing Kensington and headed for Greenwich traditional English meal, and, not located right across the street from a its extensive stock of vinyl and CDs station. Citymapper shows you a couple finding a proper pub (barring a gigantic comprehensive record store. The staff to ensure we could see all the sights of line changes, but you can take the 'Spoons'), we landed in London's - nay, were super friendly and helpful, and nearby. The Greenwich area looks a lot District line to Monument and walk the UK's - most controversial fish and made sure we had everything we needed. like a quaint English town, as if you'd a little way to Bank station, which chips joint: 'Jack the Chipper'! Faint Sitting in front of the store window, we travelled outside of London, except that

of the restaurant once we had received so-PC name (although the owner doesn't hunting ground of Jack the Ripper).

Credit: Zanna Buckland



we ate – which is always a fun pastime.

We dipped into the record store whimsical, with portraits of old movie 'Casbah Records' - for a few minutes, Getting off the Light Rail at around stars, retro adverts, and vinyl records; - but as much as we wanted to, we avoided when you reach the edge of the river the skyscrapers on the other side are a stark reminder that you're still in the city.

Besides the Meridian, Greenwich is also known as the resting place of Cutty Sark, a 19th century sailing ship that gives off pirate vibes – a cool monument to take pictures in front of! Giving into our STEM student nature, we rejected the tour of the ship's history in favour of exploring the Greenwich Foot Tunnel, the neighbouring under-river footpath. The tunnel spans the width of the Thames and emerges at the Isle of Dogs on the other side. Cutty Sark also alludes to the Old Royal Naval College nearby, which earned Maritime Greenwich its name. The college was a training base for naval officers, teaching them how to sail 'the High Seas' (probably with the goal of more colonisation...?).

Neighbouring the Royal Naval College is Greenwich University. While not exactly high-ranking in the university leagues, there's no doubt that the University of Greenwich has a beautiful campus. It featured in Thor: The Dark World, and it's easy to see why (besides the mystical connotations of the meridian itself), as the grand buildings could match those at Oxford and Cambridge, and there are vast lawns for students and visitors alike to enjoy.

Greenwich Park is a mixture, between Hyde Park and Primrose Hill, of sprawling expanses of grass and a

slightly run-down bandstand with a steeper, more hilly section leading from the university up to the observatory. Despite having come to Greenwich to see the Meridian, we opted not to pay to enter the Royal Observatory, although at £10 for student entry the price isn't extortionate. We admired the exterior of the Observatory and its various outdoor exhibits and sculptures, like the Airy Transit Circle Telescope, then left in search of deer, having spotted a 'Deer Enclosure' sign. Unfortunately for us, the deer had been relocated to - you





### FOOD & TRAVEL



bad shoe choice (five-year-old worn-out Converse sneakers with broken soles) meant that my feet were drenched, but I was satisfied that we'd explored all the significant parts of Greenwich. There are lots of nice cafes and eating places around to cater to hungry tourists, as well as tranquil park areas to get away from the crowds of central London.

I would definitely recommend a visit here if you ever have a free day or afternoon! The journey isn't as long as it seems, and you can also make an extra fun day of it and take a ferry from

guessed it - Richmond Park, and we had also managed to visit during the week when the Flower Garden was being revitalised. Nevertheless, we entertained ourselves for a while walking up and down the grass-bordered promenades.

To give our feet a rest, we decided to stop at 'The Pavilion Café', an eatery designed in the style of a pagoda. We purchased a couple of coffees (an oat latte and a flat white) and a piece of chocolate cake to share. These were lovely, and a great way to warm up after the drizzly walk. By the end of the day, a



Westminster to Greenwich Pier along the Thames. You'll feel as if you've stepped into a different time in history, a land simultaneously standing still in time and spanning all of it.



# **Phoenix** is returning as a section of **Jelix**!

creative writem

OF TWORK

submit your writing/poetry, photography/artwork to: editors.phoenix@ic.ac.uk felix@ic.ac.uk

1

ographers.

0

comment.felix@ic.ac.uk | environment.felix@ic.ac.uk | arts.felix@ic.ac.uk | food.felix@ic.ac.uk | sport.felix@ic.ac.uk | felix@ic.ac.uk

# THINGS TO WRITE ABOUT

### or tell us your opinions!

for Environment

### for Arts and Theatre

'Top tips for saving energy at home.'

> 'Explaining hydrogen fuel cells.'



'Exploring Yayoi Kusama's Infinity Mirror at the Tate.'

'How art can be

utilised for healing

trauma.'

'A review of & Juliet

on the West End.'

'The role of biodiversity in fighting climate change.'

'How governments make decisions about environmental matters.'



'The most underrated art museums in London.' or illustrate for us!

for Food and Travel

for Societies

'Where to find the best Mexican food in London.'

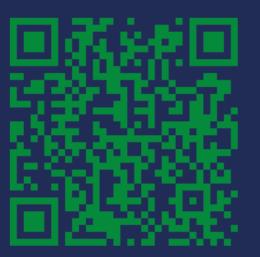
'The science behind self-raising flour.'

'A week in Berlin on a budget.'

'A recipe for perfect fluffy pancakes.'



'Using the flight simulator with Pilots society.'





'Outdoor soc.: beautiful places to go hiking nearby.'

'A day in the life of a Netball 1's player.'

'Review of a networking event held by Consulting society.'





## For more information please scan here:





For more info visit: imperialcollegeunion.org/le23



# **The Timeline** Nominations open: Monday 13 February, 12:00 Nominations close: Friday 3 March, 12:00 Candidates revealed: Wednesday 8 March, 14:00 Voting open: Monday 13 March, 09:00 Voting closes: Thursday 16 March, 14:00 **Results announced: Friday 17 March, 18:00**



### **SPORT & SOCIETIES**

Edited by: Isabella Ward Charlotte Probstel Natalie Yu

# SPORT & SOCIETIES One Punch Yian

▶ With Student Fight Night London fast approaching, Yian 'Zinger' Zeng has mastered floating like a butterfly — but can she bring herself to sting like a bee?

### Isabella Ward Co-Editor-in-Chief

"A mathematician steps into the boxing ring" sounds like the start of a very poor joke. But for Yian 'Zinger' Zeng it is a prospect that is getting realer by the minute as she counts down to Student Fight Night London.

On the 9<sup>th</sup> March around 100 students (most of whom have never boxed previously) will enter the ring in front of a 1000-strong crowd at the Clapham Grand. The black-tie event aims to raise funds for testicular cancer charity The OddBalls Foundation.

Fighters are given seven weeks of boxing training, with sessions running four times a week. When Imperial Rugby were contacted about the chance to feature in Fight Night, Zinger "grabbed the opportunity".

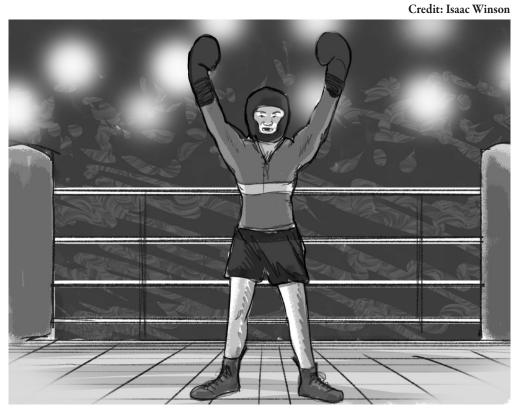
It sounds like a gruelling programme, so how does she stay motivated? It's simple: "I don't want to get clarted."

"I'm enjoying the training," the young fighter tells me, "a lot of it is just: keep drilling the basics because in a fight, you're not going to remember 'duck, hook, jab'; you've just got to remember to punch straight and protect your face in the fight."

The unforgiving schedule has inevitably made her fitter than ever; "I'm cycling to uni so fast," she brags. Moreover, it's remoulded the way she views exercise and physical fitness. Admitting that she previously prioritised her gym routine around aesthetic goals, Yian tells me "I've learned how nice it is to be aerobically fit... I can now do more press ups than I used to and not die as much." A keen member of the Women's Rugby Club, it sounds like she's running circles round the other rugby girls: "To be that fast person, even on a warm up lap, is really nice."

She will, however, have to make sure she looks after herself, citing the thought of being injured on the night as one of her biggest worries. Recently, the training sessions have moved beyond drills and attendees have started sparring. Yian has been struggling with this transition, telling me "I hate it." It seems that the biggest challenge to Yian may not so much be the fitness of her body, but more of her mind. The hardest thing she has had to learn so far is "taking a punch and not being upset at that person because it's fight. She hopes that this will change as time goes on, explaining "the more I've been training, the more I really want to win." However, she's still not sure that she will be able to fully throw herself into it until the big night: "I'm just hoping the atmosphere will just slap me in the face."

Initially, it seemed like she was rather unbothered by the whole idea of



hard going." In the words of Rocky "It ain't about how hard you're hit, it's about how you can get hit and keep moving forward."

Yet this "moving forward" isn't something Yian is used to; she explains "It's not like in rugby when you can whistle the ref. My opponent can hit me however she likes." A skilled basketball and netball player as well, the dramatic difference in discipline struck her, as she explains "I feel like I'm so used to doing things properly. Even if I miss a tackle, I try to do it properly. But now in boxing, all bets are off."

Having spent so much time training alongside her potential opponents, Yian finds it hard to throw herself into the Fight Night. When I ask why she signed up, expecting some [*insert boxing film here*]-style monologue, she rather anticlimatically responds "I thought this would be really funny." However, with less than three weeks to go until the big bout, this is beginning to change. "The more I've been doing it, the more I really want to win," she tells me.

When she explains "I plan to start going to the gym for strength training because I don't punch very hard", I query whether this is a purely physical issue, or linked to her mindset. My question must have thrown her off, and I watch it dawn on her that perhaps it is time to start swinging, "My big fear is [on the night] getting so scared that I don't punch," she



tells me, "but I don't know how to train mentally". She thinks aloud "I'm not going to start punching people [outside training]. Maybe I should."

As for what she's most looking forward to, her eyes light up at "the idea of winning in front of all my friends, or even just being cheered on." This is the first time Yian is competing in an individual sport, and she finds the idea of all eyes being on her exciting too. "I just want to put on a show and entertain my friends. It's like the Olympics." She knows that, win or lose, a performance she will put on. Even if she does "get clarted", she still feels fortunate to have had the experience of learning to box.

Yet no matter how glorious the olympics-level attention and chance at stardom may be, the idea that it soon will all be over seems to bring relief to the ringster, as she tells me "I wouldn't say I enjoy boxing that much. I prefer team sports." With her heightened physical and mental resilience, she will be a bigger asset to her rugby team than ever before.

Until the final fight, Yian clearly has a long way to go. She evidently doubts her own ability to throw herself into the fight, but is hoping that doing so will not just make for an entertaining spectacle for her friends, but strengthen her in the long run. "I really don't think I have that fighter's instinct in me," she concedes, "I think that's such an important part of boxing and I don't quite have it. But I feel that if I can train and I can do it, then it will be of huge benefit to my self confidence."

As she battles the physical and mental demands of white-collar boxing, she is driven by an inspiring mantra: "It's clart or get clarted".

# RSM: did they bottle it?

**Royal School of Mines clash with Camborne School of Mines in first** London Bottle Match in four years.

### WOMEN'S HOCKEY

The RSM Women's Hock-

ey Team kicked off the

day's sport with enthusiasm

and intensity, providing

an electrifying 70 minutes

of fantastic hockey. De-

spite the early start, the

strong crowd

pres-

ICL

ICL

VS. CSM

Phoebe Houldsworth-Bianek Hockey Captain

2 - |

ence made for a great atmosphere. Watertight defence, strong saves from Emma in goal, energy and drive in the midfield, and single-minded determination from the forwards led the ladies to a well-deserved win. 1-0 up by the end of the first half, the team stayed calm and continued to deliver, with a spectacular second goal from Helen securing a solid 2-0 victory. Despite CSM's confidence in their team's strength (to the point of not

bringing the trophy with them to London), the Golders cup will be returning to its rightful place in the Union Bar this year the for first time since 2014!



NETBALL

Lorna Macrae Netball Captain



A nother year of bottle done and with a 9-62 result, we couldn't be prouder of RSM Netball. Keep CSM under 100 and score more than 6 goals? Smashed it.

Our players never let the energy drop and even gave CSM something to panic over when we led the first quarter 2-0 up! Thank you to everyone who stayed out in the rain to watch us play; as always, the RSM sideline support was unmatched.

We'll be continuing the fight next year. It's time for double digits. Look out Bottle 2024.

### BADMINTON

Justin Chan Badminton Captain



With a hastily put together team we managed to win a few games, but the opposition were strong, with CSM displaying impressive skill and teamwork.

Our team suffered a defeat but gained valuable experience. Imperial Men's lost 6-2, Women's lost 6-2, and Mixed conceded 7-2. Nevertheless, our teammates showed a cracking effort despite all the last-minute scrambling to find players!

### MEN'S HOCKEY

Matthew Cooper Hockey Captain

Following on from the Women's impressive victory, the pressure was on for the Men's team. CSM came out the gates hard but thanks to the brilliant efforts of Marshy (Materials), Jimmer (EPS) and Sammy (Geophysics), we managed to hold off their attacks. CSM were put in the shoes of the pro-

tagonists of Michael Rosen's We're Going on a Bear Hunt when they were left with no choice but to go through the middle. Our midfield stopped them in their tracks. There were a couple of questionable decisions from the chuckle brothers (umpires) and at half time the score was 0-0.

> After a half time team talk by captain/leader/legend Matthew, which has been compared to some of the great speeches of history (think Winston

Churchill mixed with Barack Obama), the troops were raring to go. Not long after those words, Ed James finally arrived and sent one of his flicks top bins. Things were looking up and it seemed like the age-old question of whether CSM could do it at a windy day in Harlington had been answered...

The game started to get a little bit feisty but luckily Barry and Paul kept a firm handle on the game. In the final moments of the game CSM put two in the net — a heartbreaking way to lose. We will come back stronger next year.



# SPORT ICURFC fight for title

▶ Imperial Rugby XV IIs pull off an impressive second-half comeback down 24 points to keep their title hopes alive.

#### Louis Beucher ICRFC IIs Captain Wilson Huang ICRFC IIIs Captain

s the season end approaches, our Asix victories and one loss put us in a comfortable second position in the league. To keep our title hopes alive, we needed a five-point victory, and we head to Harlington with the ambition to win with at least four tries.

The game started off slowly with Imperial scrambling to put pressure on Roehampton. Being the bigger team by a significant margin, Roehampton adopted the crudely simple, but highly effective strategy of running forwards. Amidst a blood injury reopening on Jonty's ear, and shoulder injuries inflicted on both Ben Shacks and Antoine, we strugbackfield. gled to cover the

The accumulation of mistakes and knock ons did not play in our favour, nor did their dirty play in the rucks and scrums. All in all, this made for a first half to forget, as we conceded four tries and two conversions. We felt our hopes of taking the title slipping away.

Starting the second half supercharged and with a new strategy, we sent them right back to their own half immediately after kick-off. Putting them under enormous pressure, our pack obliterated theirs in a stellar scrum on their five, overcoming the weight deficit. We felt our comeback slowly but surely creep in.

On the next sequence, our very own captain 'Finn Russell'ed' a pass over the blitzing Roehampton backline to send Dylan over. Try converted: 24-7.

A few plays later, on a set play off scrum, Ferrari drew

three defenders all to himself to set up Dylan for yet another magnificent try. The conversion was a formality: 24-14.

Both on the sideline and on the pitch, Roehampton's spirits were crumbling as our confidence only grew. They couldn't seem to withstand the pressure, as a repetition of foul plays in their 22s ended up with a well-deserved yellow card. From there, using a tactic from their playbook, a series of pick and goes resulted in our third try of the day through Geraint Eickermann. The conversion narrowly sailed right, 24-19.

After a few well-handled defensive sequences in our own half, the pressure was back on Roehampton as we recovered the ball on the 50m line. Whether described as a stroke of genius or of luck, a kick over the Roehampton defence by

Louis was recovered after a favourable bounce by Dylan,

who proceeded to celebrate before he had crossed the line but dived over anyway for his third try on the day to bring us back level. We watched as Louis kicked the conver-



## **COCKS OF THE** COMPET

### TOBY IC HOCKEY MEN'S IVS

Gave a new meaning to 'getting your head in the game' whilst piloting a new tackling technique involving his face.

### ANDY

### **ICURFC COACH**

Sent off the pitch during the first half of ICURFC's game against Roehampton after arguing with the ref. Left shouting "I can't be the only one fighting for you guys."

### WESTMINSTER DRAGONS **NETBALLIS FELIX SPORTS**

**PERSONALITY OF THE WEEK** Key tip: when staging a fake injury to eat up game time, don't brag about it on your university's official sports Instagram.

sion to bring us 26-24 up.

With ten minutes to go, we knew that we just had to maintain pressure on their now fatigued players, and stop their flyhalf, to bring us to victory. A last knock on by the Roehampton players brought forth the final whistle as we completed our comeback victory to keep our title hopes — now more than ever — alive.

# **ICUNC IIIs avenged**

► Westminster Dragons sent home with their tails between their legs after unprecedented defeat by Imperial.

### Sophie Mosselmans ICUNC IIIs Captain

his was undoubtedly the toughest match of our season, playing the terrifying Westminster Is. They sit at the top of our league and have a goal difference of +322, with the second best team at +76. In our away match against them last term we got thrashed 66-26.

When Iman offered to buy everyone a round of drinks at team dinner if we won, I took a large risk in making a joke that I would buy everyone a car if we did. This was because I was certain that there was no chance that we could win!

In the first quarter, Lorna played a very strong centre and the defence, covered by Kalea, Hollie, Vania and Nadia, managed to get us some key turnovers. As a result, we won the first quarter. The energy was high and the chemistry between the shooters, Iman, Amelie and Mia, has improved considerably since last term. The entire match was tense and fast paced, with every second counting...

In the third quarter, Hauwa had to go off due to an ankle injury, but Vania came straight back on and we kept fighting. I was so impressed at how well the energy was kept up by the team. In the

final quarter, Imperial had a strong lead to run to ToysRUs to buy everyone cars. and the Westminster girls appeared to I learnt my lesson to never underestigive up. They were clearly getting tired mate ICUNC IIIs and cannot wait for as they faked an injury just to get a rest our Varsity match! (which we discovered was fake from

their Instagram post)! The final score was 40-35 to

Imperial! Hauwa got

player of the match for her fearless performance, and I had



SPORT

# Sweeping success for Dance Club

► Dance Club bring home armfuls of trophies from Birmingham friendly competition.

#### Esme Lynch First Team Crew

There's nothing quite like waking up before the average Londoner has returned from their Friday night out, and – drenched in hair spray, fake tan and foundation – waiting for a coach to arrive on a cold Kensington street. But for nearly sixty seasoned members of the Imperial College Dance Club (ICDC), this was no real hardship as we were on our way to compete in the Birmingham Friendly Dance Competition.

Having started the season triumphantly at the Bath Friendly two months before, and with two of the year's most prestigious competitions less than four weeks away, the club was keen to succeed. With many, many hours of training under our belts and a sense of comradery only ICDC knows, we charged into a ballroom-based battle against the likes of Oxford, our main rivals Cambridge, and, of course, Birmingham, among others.

The morning saw the competitors take on the ballroom dances – the slow, sweeping waltz, the passionate tango, the dizziness-inducing Viennese waltz, the stylish and suave foxtrot, and the aptly-named quickstep – and Imperial started the day strong; Imperial couples made the finals a total of sixteen times. We were especially proud of Keven Du and ICDC President Izabela Jaszcz who triumphed in the beginner/novice foxtrot, while George Bull and Alessia Oliveri who won the intermediate 3-Dance, as well as Dominic Cronie, Nina Anderson, Ben Biggs and Zoë McGee who all made three ballroom finals.

The afternoon saw us tackle the Latin American dances; the six hours of dancing we had already done wasn't going to stop us from attacking the sharp and powerful Cha Cha Cha, the Brazilian carnival of the Samba, the romantic rumba, the Paso Doble, which mimics a Spanish bullfight, and the lightning-fast jive. Imperial couples made their respective Latin finals twelve times another great achievement, with Athos Vacanas and Adela Capilnasiu

taking the crown in no less than three events (advanced 3-Dance, open rumba and open Paso Doble), sharing the latter award with Ballroom & Latin Team Captain Kennedy Au and Iris Roatiş. Au, Roatiş Devon Anthony, and Katie Chow all made three Latin finals, whilst Biggs and McGee brought their total finals tally to four in the Open Rumba.

By the end of the Latin rounds, everyone had been dancing for nearly thirteen hours. However, we were not going to put on the breaks as the team match



Imperial College Dance Club sashays their way to success at the Birmingham Friendly.

round – which sees four couples compete across four dances (waltz, quickstep, Cha, and jive) as a team, with the best-scoring team being crowned the champions – was about to begin.

Imperial's four teams all quickly qualified for the top-flight team match event (an impressive feat considering the standard of the competition), and from there we saw tough competition from the Universities of Birmingham, Bristol, Cambridge, and especially Oxford, who all teemed with impressive dancers.

Just before 10pm, the eight best teams

fought for the day's ultimate crown in the team match final. We nervously waited for the recalls, hoping to retain our now-legendary dominance during competition team matches.

We need not have been nervous, as three ICDC teams qualified for the final, affirming that our days of governance of the team match were not yet over. The atmosphere in the crowd during any final is electric, but the team match final always creates a bottled-lightning feeling throughout the ballroom, and it really helps the finalist perform at their best.

# Imperial face off UCL

▶ Imperial Hockey Men's IVs' variety of tactics fails to secure them victory over UCL, despite early lead.

### Tristan Hall Imperial Hockey

A fter a strong start to the season where they found themselves *not* at the bottom of the league, the Men's IVs came into the new year with renewed spirits and fresh faces.

This would quickly change for Finesmaster Toby (holder of the coveted Dick of the Day), who, in keeping with tradition, managed to stop the ball with everything except his stick. This included an enthusiastic tackle using his face; a strong performance in A&E almost rivalled his outstanding stick skills.

Leon Christie, aka The Unit and our most decorated Man of the Match, demonstrated his excellent impersonation of a bulldozer, blitzing through almost the entire UCL team. Our resident rattlers Joe 'JBug' Robertson and Lars Dautlich continued their mental warfare against the other team, this time by using jaffa cakes and a stella can as

shin pads, improved on only by Lars' vivid knee-length neon Grinch shorts.

Despite a great effort from the boys and a convincing lead for the first half (dampened only by a comeback from UCL in the second half, bringing the final score to 1-4), our relentless spirit and unmatched technical skills were not enough to overcome UCL; our welldeserved victory, much like our Vice-Captain Neil Patel, failing to materialise.



A brief tube ride later (and a small diversion via Charing Cross Hospital for Toby), the boys put their bruising loss behind them, got glittered up, and hit ACC. Our egos (and eyes) bruised, but our spirits unfaltering, we look keenly towards our next League battle.

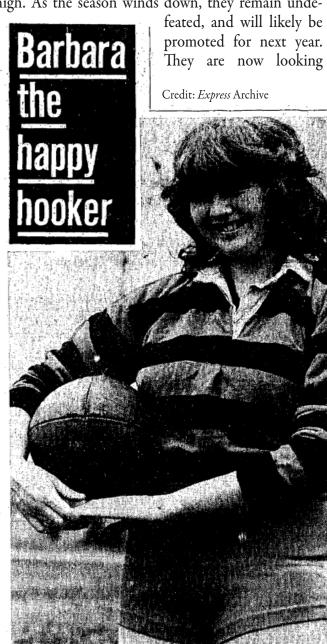
### SPORT

# The continuing saga of the famous women's rugby team

As Women's Rugby go from strength to strength, Felix looks back on the sport's rich history at Imperial.

Isabella Ward Co-Editor-in-Chief

perial College Women's Rugby Club (ICUWRFC) are flying high. As the season winds down, they remain unde-



A Daily Express article on the Imperial Ladies' Rugby team, published in 1980.

forward to showing off their impressive gameplay at the City Varsity (TCV), their exhibition match against LSE.

But it's not only recently that they have gotten into their stride – Imperial College was a founding member of the Women's Rugby Football Union in 1983. By that point,

he Imthe Imperial Ladies' Rugby team was already well seasoned, having established themself as a competitive team throughout the late 1970s.

In 1980 the team became of particular interest, when their game against University College London (played at Harlington) was filmed by the BBC for the news programme Nationwide and the team was featured by the *Evening News* and *The Sun. Felix* wrote that

the team had even sparked the interest of the BBC World Service.

The team were also featured, but less favourably, in the Daily Express, in WE'RE FEELING an article which *Felix* later apologised had "trivialised" the team. This is of REALLY POSITIVE no surprise to ICUWRFC Club Captain Martha, who, 40 years on, still feels that women's rugby is not taken seriously. She tells Felix "Lots of people don't really think it's a proper sport," saying there is a tendency to view the team as "childlike" and that "we get talked down to by coaches, who say things like 'do you know the rules?'" It's chilling to see little has changed since the Daily *Express* article, which incorrectly writes "the girls are still learning the rules", although Martha notes that they now explicitly ask coaches to not call them "girls" as not only is this demeaning, but it would actually refer to under-18s rugby.

In the same article, Imperial Ladies' team member Barbara dispels the idea that women aren't inclined to aggressive sports, which is an idea that Martha nevertheless finds still pervades the sport. She doesn't understand: "it's a great outlet for women. Our players find it very cathartic."

Where the game does depend less on physical strength, Martha argues is an advantage that further drives the team's diversity, explaining "[in women's rugby] there's less brutish force and a higher level of skill. You

can kind of play wherever you want to on the pitch, whereas with the men's it's like who's the biggest who's the strongest. But because of the level of skill that we have in the women's game and the higher priority skill takes, it has a unique advantage really."

She feels this draws women to rugby, as girls rarely play rugby at school, so many new members turn up to ICUWRFC having never played before. "I think what also draws people to women's rugby is the diversity, acceptance and variation," Martha explains, adding that it is "also true for body sizes, which is not a lot the case for a lot of sports."

Despite having featured on national television in what Felix called a "thoroughly entertaining and absorbing match," the club struggles to draw supporters.

Women's rugby was once again featured in the na-



tional press in 2015, though for less positive reasons. This should have been a good year for the club, as they headlined Varsity. However, few people were

there to see the College victor over the Medics, as poorly organised travel arrangements made by Sport Imperial meant most supporters deserted the pitch, leaving the team stranded following the game. They felt they had not received the same level of consideration as their male counterparts.

An investigation launched by Imperial supported these claims; the College and Union resolved to further research students' experiences of sexism in sport at Imperial. The 1752 Group – an organisation dedicated to ending staff sexual misconduct in higher education - felt the investigation "points to an ingrained nature of sexism and misogyny," as, allegedly, the team were also subject to sexist comments from both Imperial students and Sport Imperial staff.

The club has experienced change since then, telling *Felix* "we've got a really good relationship with Harlington grounds management." Just this week they christened the club house pitch with its first rugby game.

When they do have observers, they are not always welcome. Martha tells Felix "this season we've had men on sidelines catcalling women in games, running onto the pitch, throwing things onto the pitch, and making offensive and inappropriate sexualised comments." The latter is not just from students, but by referees and coaches as well, she says.

She knows that rugby culture is at fault here, saying that articles such as that in the Daily Express show where the "negativity and disrespect" the team experience today stems from. She partially blames the amount of drinking within the rugby community, which was also identified as a factor in the 2015 investigation. She knows the abuse is not reflective of the women's rugby team or their performance at all. However, it mars their experience.

SPOR

Whilst she notes that this was never from Imperial men, she feels that there is still a "shirking of responsibility" within the community and would appreciate the men's club "starting the conversation," suggesting "a clear statement on supporters' behaviour would be good, and a no tolerance policy."

Nevertheless, the club is looking forward to TCV. It would seem Imperial's rivalry with UCL has been replaced by a new rivalry with LSE, and TCV will see both the women's and men's teams play in front of a crowd of 1000.

For ICUWRFC, TCV is "the highlight of the year," as Martha tells Felix "We get the most amount of spectators." Having been, I know personally that there is still a large difference in the number of spectators for the men's and the women's games, but Martha acknowledges that this is symptomatic of a wider issue in women's rugby, saying "I've been to double headers with the, you know, Barbarians and the discrepancy in crowd sizes is ridiculous for that as well. So it's not like it's an us issue. It's a women's rugby issue."

She enjoys working with the men's club and appreciates the support her club receives from them, as the men's club do the majority of the event organisation. In future, she hopes to work more across the clubs, saying "I'd rather have unity."

Despite the still prevalent issues, ICURWFC has a positive outlook. Martha tells me "Grassroots women's rugby is really on the rise – the increase in numbers has lines."

# The continuing saga of the famous

### ladies rugby team



Line out concentration

been amazing. We've got the World Cup on the way and we're feeling really positive."

She knows that with this momentum gain there will be new problems ahead, saying "there's only so far you can go and I'm just anticipating the glass ceiling. Hence she hopes that she can foster future collaboration between the men's and women's clubs, hoping ICURFC will "go above the norm to say 'we support our women's club, and we demand respect for them from the side-

Last Friday the Imperial College Ladies Rugby team were featured on the London and S.E. section of NATIONWIDE. The film featured the IC vs UC match at Harlington which ended in a 0-0 draw. The cameras focused on all aspects of the game including the boat race in the bar afterwards. The film was spliced with interviews with both captains and Eddie. Everyone in the team who saw it said that they enjoyed it. It was a pity that the BBC couldn't let us know the screening date! The team have also hit the press (again!) notably the Evening News' centre pages. The article was rather tongue in cheek and featured a picture of a scrum. The continuing interest in Ladies Rugby has also been noted by the BBC World Service.



Eddie under attack

Excerpt from *Felix*, 1980.

She doesn't want to dwell on the Daily Express article, but Martha has one final protest: "We do sing rugby songs."

# **CUWRFC** remains one to beat

▶ Imperial Women's Rugby team fight off Hertfordshire to hold on to their undefeated status.

Credit: Felix

#### **Camille Boutrolle ICUWRFC**

ith its blue skies, sunshine, and gentle breeze, Wednesday made for a beautiful day to be the first rugby team to christen a club house pitch - something which put both Imperial Women's Rugby and their opponents, the Herts Women's Rubgy, in high spirits.

Set to play 11 a side, we were feeling confident with

strong players on the bench, in contrast to our opposition who were playing with no substitutes. We started strong, with full back Scarlett Yeadon scoring a try in the first ten minutes.

Our next play was a classic: solid ball carrying from the forwards for a few phases, followed by some exquisite passing from the backs and a break on the wing by Ruby Haddad. Orla Dusgupta side-steps Herts and secures a beautiful prop try, which is then slotted

> through the posts for a conversion by Prudence Lee.

Solid defence from Herts forces us to kick the ball out, but Imperial regain possession after pressure from our lineout forces an over-throw from Herts. Our backs do all the work from then out to carry the ball from the halfway line, but it's worth it as it leads to a second try scored by Scarlett. Helene Biragnet kicks us through the posts to bring the score to 19-0.



Herts score their first try on the back of a scrum with a great break through our line of defence from their scrum-half, who also converts the try. After a tiring string of line-outs and scrums where Herts ultimately overpowered us, their scrum-half finished with an incredible break on the wing and scored a well-deserved converted try. At half-time the score was 19-14.

With the margin of or lead dramatically narrowed, we were under heightened pressure.

Our defence was stronger coming into the second half, but ball possession was still quite contested. Alice Woodcock jackals the ball in their 22 and Scarlett Yeadon scores once again. Converted by Prudence Lee and her reliable kick - the score was now 26-14. But Herts were not letting up and they seized the opportunity to score a try on the right wing to bring the score to 26-19. Try for try continues as IC's Noor Limmer steals the ball which enables Alice Woodcook to score a clean try. 31-19.

The next try came from great support play. Scarlett Yeadon steps Herts and Noor Limmer is there for the offload. Players are there to ruck over when Limmer is tackled and Alice scores again with another fabulous forwards try. This brings our lead up to 36-19. Herts' attack was phenomenal until the end, and IC could not keep up, leading to two further converted tries scored. Final score 36-33. IC remain undefeated.



### STOTOLE ULES

# Japanese tea and a teapot from a Turkish grandma

▶ Meet the Tea Society: learn about their love for tea, the different teas they serve, and the tea they spill....

#### **Charlotte Probstel** Societies Writer

Cecrets come out, someone remarked **J**at Tea Society after it was casually mentioned that secretaries always seem to disappear - but don't worry, the current secretary is somewhere in Canada. The group of 35 members meets every Monday and Thursday from 6-8 pm to converse, discuss, laugh, eat dinner, work on problems, or just watch a movie while enjoying caffeinated and decaffeinated teas.

Set on the table were 56 different tea flavours, none basic or classic, and the room was filled with a sweet, inviting aroma. In search of something new, I chai-ed three different fruity flavours. Rather than using paper cups in years past, mugs were set out along with a large 7L kettle. Teapigs, TWG, Whittard, Drury, and Tea-Traders were all part of the collection along many more individual bags. Among the warm-colored teas was a surprisingly blue tea. "You don't drink blue tea, you don't eat yellow snow," one member pointed out. While the blue buttery pea flower tea was aesthetically pleasing, its smell of spinach and taste was rather the opposite. However, blue tea can change colour when mixed with an acid such as citrus juice – it is an indicator.

Two outstanding members, Osman and C, were able to recognize teas instantly. "That has a citric note," Osman pointed out. "That is definitely a white tea," I heard from the corner of the room. "It is a mix of rooibos and vanil-



### WE TRIED TO MIX **BRITISH AND FAR EASTERN TEA CULTURE**

la," the people in front of me reported. What was unknown is that Osman used to be a "tea-nerd in high school" - a

real connoisseur, a master of a beautiful art. Among the tea enthusiasts was Mathew, the treasurer. As an English boy, he grew up with milky tea as the standard. One day he spotted other Twinings blends and his mission became to try different teas – English Breakfast, Assam, Ceylon, Darjeeling, Lapsang

Credit: Rolando Charles (*Felix* Photograph

Souchong, and at Tea Society he was introduced to loose-leaf tea. The rest is history. Now he drinks Pu-erh from his Chinese tea set.

"We tried to mix British and far-eastern tea culture, but ended with eastern tea and British biscuits," Mathew chuckled. The society has a wonderful collection of teacups - some stored in silkfitted boxes, some painted with the finest cherry blossoms, some made of gorgeous sea-blue ceramic. That's not all - a small Japanese teapot from Osman's Turkish grandma also joined the set and was instantly filled with Genmaicha, a Japanese popped-rice tea. Did you know, that Turkey is the most tea-drinking country? They drink about 3.16 kg of dry tea per person per year, which is significantly more than in the UK (1.94kg). On the evening of the interview, the group was stress-relieving

from a long week with an Irish kung-fu movie from 1998, called "Fatal Deviation". With a budget of £12,000, it was so bad it ended up being horribly good. Cookies were passed around, while Mathew was brewing different infusion teas - apple and ginger or peach. The comments came rolling in – "This makes me feel like I am back at my grandparents' house." "They could not afford fitting clothes or ripe strawberries with £12,000." "It looks like they are shooting cotton balls, not bullets," and "Smooth Jazz Gun-fight" – all followed by a round of laughs. It was difficult for everyone to kettle down. Later that night, they celebrated C's master's offer at a pub.

The socie-tea is much more than drinking tea. "It is a group of friends hanging out, instead of getting together to drink tea. I come here to socialise," Osman said. "My best friends are

Credit: Rolando Charles (Felix Photographer)





A beautiful collection of teas in various containers.

Credit: Rolando Charles (Felix Photographer)



Union President Hayley (left) visiting Tea Society.

### SOCIENE

Credit: Rolando Charles (Felix Photographer)



in this society". The vibe felt harmonious and everyone got oolong very well. don. In December, they visited Twin-

this year to various tea shops in Lon-The members went on two cultural trips ings, Whittard, TWG, Chinatown, and

## " **MY BEST FRIENDS ARE IN THIS** SOCIETY

Mariage Frères. In February, they went to the East India Tea Company, Postcard Teas (which has very cute packaging), and Carnaby Street's 'My Cup of Tea' had pots of tea that were of better quality than the classic high tea. At the Algerian Coffee store, they could buy bricks of tea - a method reducing the tea-diousness of loose-leaf transport

- which became a currency in the 9<sup>th</sup> century in Russia, Turkmenistan, Tibet, Siberia and Mongolia.

If coffee is not your cup of tea, but green tea may be, then join Tea Society. The membership costs you £5 and will allow you to try 60+ different teas while enjoying golden gossip. I enjoyed hearing how Osman "missed both Bill Gates and Rishi Sunak by 5 minutes" and I was curious to learn Imperial had a gossip page, confession page, and a secrets page.

Now, that's the tea...

# "A musical written by scriptwriters"

► The Singaporean Society's Major Event was an evening of roaring laughter and cheering to support the talented cast and band.

**Charlotte Probstel** Societies Writer

omedic. Interactive. Original. On Sunday the 19<sup>th</sup> at the Britten Theatre, the Singaporean Society, or SingSoc, checked off every single criterion of a truly special play within a play. The Singaporean Society celebrated the 40<sup>th</sup> Anniversary of its Major Event (ME); a musical portraying the issues

Credit: Singaporean Society

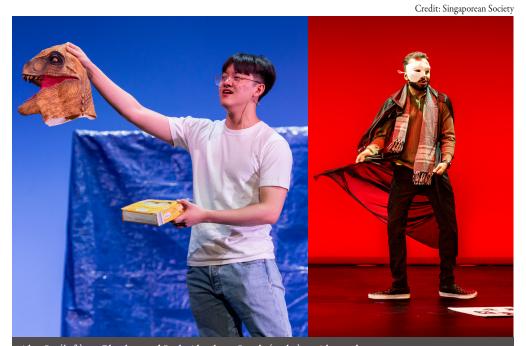


Charlie keeping secrets from Juliet.

Singaporeans experience daily, by telling the story of how they struggled with organizing the ME in 2022. Accompanied by original music and lyrics written by Joshua Yong, its cast, band, prop artists, lights producers, and director confirmed that Imperial is more than just a research and STEM university; it is filled with art and musical talent.

The story follows Elaine, the ME Organisor (MEO) played by Vanathi Pugalendhi, who struggles with choosing one of two scripts; a well-written serious play by Alexander (Josh Abraham Jacob) and one comedic play written by Charlie (Alex Li); a rookie. Her compromise of merging the two scripts leads to continuous fights between the two writers whose leadership exhausts the crew, leading to a dictatorial leadership, a coup, a mass walk-out, and finally no true progress. The play ends with the two writers finding greatness in each other's scripts and learning to move past their stubbornness to achieve their common goal; an incredible ME show. The story also follows Juliet (Sunnie Ow), who joined the ME, searching for friendships and fun.

Many themes appeared in the play; the struggle of leadership, trade-offs within compromise, accepting faults, stepping out of your comfort zone, the weight of compassion, and modernism vs traditionalism. Written for an audience that experiences difficult moments



Alex Li (left) as Charlie, and Josh Abraham Jacob (right) as Alexander.

of group work, the script highlighted Obi-Wan Kenobi-like advice while takissues we all, as college students, experience daily. Great leadership arises when a voice is given to its people and a group doesn't exist without its people; a theme emphasized by the absence of the crew as without the crew, there cannot be a show. Moreover, a few scenes were dedicated to depicting the downfall of a dictatorship, when Alexander loses the crew's respect after over-working them and prioritizing work over fun; an important aspect of societies.

While Mulan had Mushu and Aladdin had the genie, SingSoc had not one, but three comedic reliefs: the music director who communicated only via the sound of his violin; the photographer giving

ing poorly-timed pictures, and finally Charlie; the whimsical script-writer with unrealistic artistic visions and a massive cast for one showcase. Otherwise, a single "quack" or "Oh s\*\*\*, it's not my scene yet" released a roar of laughter from the packed audience. A banana used as a gun, a dinosaur replaced with a tree, a floss dance, a flirtatious moment between a boy and girl, a radioactive script, kicking a door of air, characters socializing with swans, references to Spider-man, Star Wars, the Phantom of the Opera and many more tension-breaking moments made me laugh tears.

Furthermore, the props and lighting/ sound directors James Tay and Rachel

#### **KEEP THE CAT FREE**

Credits: Singaporean Society

George must be given compliments for conveying many emotions and locations with a brilliant minimalistic feeling. A single tree and bench: Hyde Park. A couch, table, and potted plant hanging its leaves off a shelf: a student office. A black leveled stage: the studio. A podium: the final stage. The background was a simple white sheet, with varying lights shown onto the background to express anger, greed, regret and despair, ambition, and success. The excellent use of a minimal background to shift focus onto the characters allowed the cast to shine.

Additionally, the songs and lyrics were relatable and fitting to the storyline. I particularly liked the emphasis on each word in the quote; "Can he fix it? Yes. which was used exquisitely to include the audience; such as when Juliet pointed out that the upset Charlie had not "spoken a single word since this intermission," or when Charlie asked the audience "where is the nonsense?" in Alexander's supposedly "boring" play.

Cleverly written for its audience, the references to the Imperial Horizons modules and the Sherfield Building allowed the student audience to feel special and included. The audience applauded as often as they could, especially during transitions. They clapped for the energised and rhythmic choreography and cheered when the lyrics became so real, it made my mouth drop. If any viewers may have also noticed, the two



Vanath Pugalendhi playing Elaine, accompanied by the dance team.

Credit: Singaporean Society



He. Can". Ballads reflected struggles, while rap communicated the anger between the two main characters. Musical director Yoshua revealed post-play that score development began in June 2022 and that the entire melodic band consisted of volunteering members who presented their individual talents; piano, drums, violin, flute, cello, electric and acoustic guitar and bass. Ten songs were written, each as unique as the play itself. Consequently, the script allowed for characters to break the fourth wall,



Jian Rong Lee leading a band of 12 musicians.



Credit: Singaporean Society



Ensemble gathered for a picture. What a large group!



Sunnie Ow playing Juliet.

opposite scripts, one with a blue (Charlie's) cover and the other in red (Alexander's), were merged to produce a purple script; a thoughtful detail to promote the beauty of merging ideas.

Director Zethus Chow commented that the play was "as good as [he] can hope for", while production worker Rachel Soh expressed that she very much appreciated the soundtrack.

Within three months, the members casted characters, rehearsed, booked venues, raised funds, and organised themselves to deliver a memorable show.

It is truly a shame that the budget was only sufficient for one show, as, besides one microphone-related technical failure, which was professionally recovered twice by Josh Abraham Jacob, the show was unforgettable. I would recommend watching out for next year's ME, as you may feel inspired to join the cast or the society; everyone is invited to join. I hope to see you there next year, supporting your peers.

Until next time, Charlotte

Credits: Singaporean Society



Director Zethus Chow thanking the audience.

SOICHEITES