



Felix

The Student Newspaper of Imperial College London

COMMENT



No sympathy for Theresa May

PAGE 4

MUSIC



Five reasons to visit Strawberries & Creem Festival

PAGE 14

POSTGRADUATE



Silwood: Imperial's Green Cupboard

PAGE 18

SPORTS



Battle of Battersea

PAGE 24



Will a reduction in tuition fees help or hinder students? // Flickr

Tuition cuts a “shallow gesture” claims Labour minister

A recent report recommends cutting tuition fees but a shadow education minister says this will not resolve problems within higher education.

NEWS

Joanna Wormald
Deputy Editor

Tuition fees should be slashed and repaid with less interest over a

longer period of time before being written off, according to an independent report published last week. The report also recommends the reintroduction of maintenance grants.

The Augar report, commissioned in February 2018 as part of

a wide-ranging review of higher education, recommended tuitions fees for domestic students should be capped at £7,500. Universities can currently charge up to £9,250 per year. In addition to this, the independent panel led by Philip Augar advised graduates should repay

student loans over 40 years and be charged less interest. At present, student debts accrue interest of up to 6.3% and are written off after 30 years.

The government should also reintroduce means-tested maintenance grants of at least £3,000

per year – a proposal that has been championed by outgoing Prime Minister, Theresa May. The Treasury has warned that this could cost £6 billion per year. The national budget may also be hit by the report’s recommendation that the government

Cont. pg 3

EDITORIAL

CONTENTS

- EDITORIAL 2
- NEWS 3
- COMMENT 4-5
- SCIENCE 6
- GAMES 7-9
- FOOD 10
- MUSIC 14-15
- SUSTAINABILITY 16
- C&S 17
- POSTGRADUATE 18-19
- HANGMAN 22
- PUZZLES 23
- SPORTS 24

We've finally done it!



Andy Djaba – Felix Editor

After ten months and 27 issues of *Felix*, we've finally done it! This is officially the earliest I've ever written my Editorial and we are 100% on track to hit the print deadline. Not the imaginary print deadline which I have been bending to my will every week, but the actual print deadline! This means I might actually step foot outside the basement whilst there's still daylight on a Thursday evening...

Once again, I'm drawing a blank when it comes to writing this Editorial. I think I need the pressure of needing to submit in five minutes to get the creative juices flowing. I watched *Love Island* for the first time yesterday so I'm tempted to turn this whole Editorial into one big *Love Island* meme but, if I'm honest, I couldn't really see what the hype is about. One thing I will mention, though, is Sheriff. To arrive on the island with no trim is one thing. To

then be surprised that nobody stepped forward to couple up (is that what it's called?), is a whole separate matter. If, by some miracle, a copy of this issue of *Felix* makes its way to the island, read carefully Sheriff: Believe in your Barber! Failing that, invest in a bucket hat please.

In keeping with the rest of this term so far, this week's issue of *Felix* is a slim one. '*Felix-lite*' if you will. However,

its size belies an issue packed with the finest hard-hitting journalism. No thanks to me, I might add. Deputy Editor, Joanna, has conducted a thorough analysis of last week's Augar report, which recommended a reduction in tuition fees. The issue of tuition fees is far more nuanced than it might seem at first glance and time will tell if a reduction in fees will ultimately benefit prospective students or if it will

simply "reverse progress in widening access".

This week's issue also sees the final Postgraduate feature of this academic year. I'm glad that we've been able to get this section of the ground this year and my only hope is that it continues to grow next year after I've handed over. As Ute's article addresses, there is still a long way to go before postgraduate students feel adequately represented and supported by the Union.

Be sure to pick up a copy of next week's issue of *Felix* for a roundup of the political uprising in Sudan (an issue that has been disappointingly under-reported by mainstream media outlets).

Section of the week goes to the Music section. Head to page 14 for a double page spread, written by yours truly, on a festival I'm heading to next weekend on official *Felix* press business!



The Felix Team

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

Felix Office
Beit Quad, Prince Consort
Road
London, SW7 2BB
Tel: 020 79548072
Email: felix@ic.ac.uk
felixonline.co.uk
@feliximperial
Printed by Mortons Media
Group, Boston Road,
Horncastle, Lincolnshire
Registered Newspaper
ISSN 1040-0711
Copyright (c) *Felix* 2017

Imperial's magazine, formerly known as PHOENIX,

returns...with a twist!

If you are interested in Grime & Black British music, we want to hear from you!

What does Grime mean to you?

If you're interested, please email Felix@imperial.ac.uk



NEWS

news.felix@imperial.ac.uk

Tuition cuts a "shallow gesture" claims Labour minister

NEWS

(cont.)

should increase its financial contributions to make up for the loss of universities' incomes as a result of lower tuition fees. These increased contributions should, according to the report, be focused on the courses which are most expensive to provide – such as STEM subjects – and those that offer "better value".

However, former Universities Minister, Jo Johnson, has expressed doubts over the Treasury's willingness to increase higher education funding, saying the Augar report's recommendations will "destabilise university finances, imperil many courses and reverse progress in widening access". Education Secretary, Damian Hinds, has dismissed claims

that the Augar report's recommendations will put universities into financial hardship as "scaremongering".

"Hinds has dismissed claims that the Augar report's recommendations will put universities into financial hardship as 'scaremongering'"

Shadow Education Minister, Gordon

Marsden, has described the proposed cut to tuition fees as "a shallow gesture" that "will not resolve the issues that affect prospective students or our institutions".

"Will not resolve the issues that affect our institutions"

Addressing the House of Commons earlier this week, Hinds said: "Whatever decisions we make about how best to take forward recommendations in this report, it's vital that we support these institutions to continue to offer world-leading higher education to students in future."

Analysis

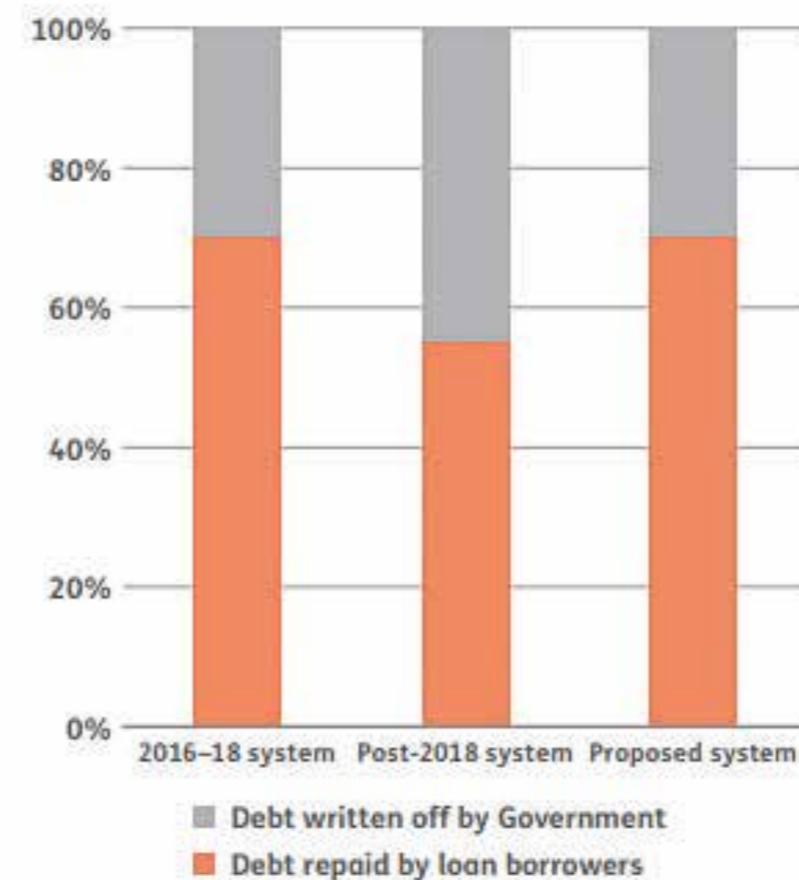
Last year, Imperial College submitted three priorities to the Augar report's review panel. The College said any changes to financing must be sustainable and bridge the gap [estimated at £90 million for Russell Group universities alone] between existing funding for and the actual cost of providing "a world-leading STEM education", and should ensure higher education is accessible regardless of a student's financial circumstances. How far do the Augar report's recommendations meet these priorities?

Analysis by auditing firm KPMG revealed that UK universities spend 42% of their income on teaching – considerably less than higher education institutes in other countries. Managing estates, student services, and corporate and administrative costs account for 47%. The remaining 10% is used as a "margin for sustainability and investment" (i.e. money used to protect against future risk and to ensure services and standards can be maintained or improved). This MSI equates to an average of £1,000 per student – a figure the Augar report describes as "substantial". The report also notes that the higher education sector is "in a reasonably solid financial position".

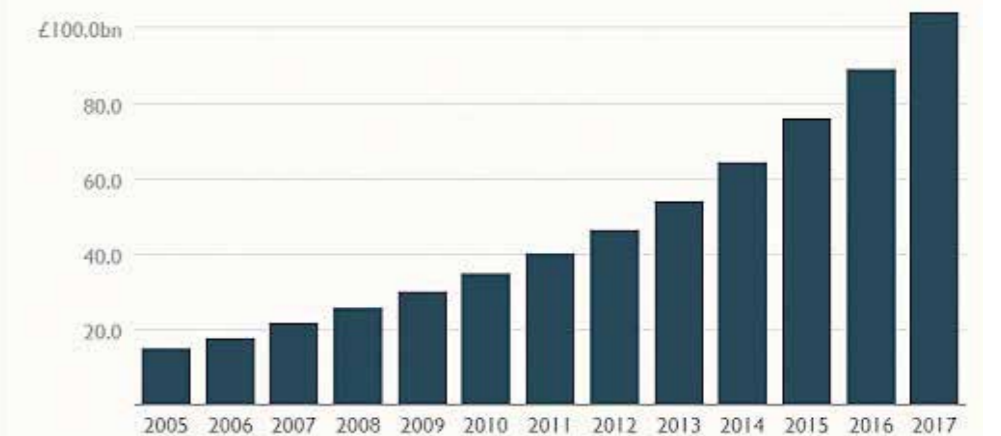
The specialised equipment required for many STEM subjects means these courses are more costly to provide than many arts- or humanities-based degrees. As a STEM-focused university, Imperial has less opportunity to subsidise more expensive courses with surplus from courses that cost less than £9,250 per student per year, as many other universities do. However, Imperial may be able to benefit disproportionately if the government decides to implement the recommendation that funding should be focused on "high-cost and high-value subjects" as part of the government's Industrial Strategy, which includes a pledge to increase spending on research and development from 1.7% to 2.4%. The Augar report states: "Our proposals ... are intended to encourage [STEM education] and are likely to result in more funding going to institutions with a strong research base."

The reintroduction of maintenance grants, which do not have to be paid back, will help those less able to cover their living costs but the benefits of the report's other suggestions – cutting tuition fees and interest rates while spreading repayments over a longer period – are less certain.

As *Felix* has previously reported, cutting tuition fees primarily benefits the highest-earning graduates. Two in five graduates earn less than £25,000 five years after graduating, meaning they fall below the threshold at which they have to start repaying their student debts, which, on average, amount to over £50,000. Even factoring in the additional ten years before the debts are written off, low-earning graduates are unlikely to see any significant change in the amount they pay back. Higher earners, who are already more likely to be able to pay off their debts in full, will pay back a lower total amount. An analysis by *The Times* estimates that the top 5% of earners would pay back £37,323 under the Augar report's recommendations, compared to £55,452 under the current system. Meanwhile, middle-earners on salaries of £30,000-£40,000 – who currently repay an average of £14,844 – would end up repaying £26,667.



The proportion of debt repaid by borrowers and the proportion written off by government, under recent loan systems and the proposed system // Augar report



Loan debt outstanding at financial year end for England // House of Commons Library

COMMENT

comment.felix@imperial.ac.uk



No sympathy for Theresa May

While the media was full of coverage of a tearful moment in the Prime Minister's resignation speech, it's her victims who we should really be focusing on

COMMENT

Ansh Bhatnagar

Imperial College Labour Society President

Let me start by stating very clearly: it is a privilege, not a right, to hold the most powerful job in the United Kingdom. This shouldn't be a controversial statement, yet when Theresa May briefly broke down her veneer of stone-cold emotionlessness, the press immediately jumped onto it, making it headline news in the newspapers and spending hours upon end holding debates and discussing whether or not we should feel sorry for her.

This is symptomatic of media that treats politics like a pantomime, played on the grand stage of Westminster and detached from the real world. It is symptomatic of media that doesn't truly hold our politicians accountable and doesn't understand the human cost of the policies implemented by them. Before we even begin to wonder if we should feel sorry for a Prime Minister who was pushed around by a bunch of opportunist disaster capitalists from her backbenches, let's examine her record first.

Before stepping into Downing Street, May was the Home Secretary under David Cameron. As Home Secretary, she oversaw the 'hostile environment' policies that put migrants at risk, culminating in the deportation and denial of healthcare of lawful



Maybot_Do_Emotion//Guardian

citizens of the Windrush generation. For this, the new Home Secretary Amber Rudd got sacked, while May continued her premiership in Downing Street. This was without a doubt an example of systemic racism: policies that disproportionately impact people of a certain ethnicity negatively; in this case, lawfully settled black Britons.

She also pushed forward the Snoopers' Charter, a large expansion of investigatory powers that, had it passed, would allow the state to further violate individual privacy. This was *after* the mass NSA/GCHQ surveillance revealed by Edward Snowden.

While in government,

and as head of it, she oversaw a rise in homelessness and in children living in temporary accommodation, with a UN special rapporteur denouncing the government for the scale of poverty in the UK. She oversaw the gradual privatisation of the NHS by contracting services out to private companies, creating a decline in healthcare standards as well as an increase in waiting times. She oversaw the cuts to disability benefits that subsequently led the Equality and Human Rights Commission to state that one in five disabled people have their human rights violated. Most shamefully of all, the hard-right austerity

agenda enacted by her government has been linked to 120,000 preventable deaths in a landmark UCL study.

This is without mentioning her government's inaction on climate change, which included going back on a promise to her Maidenhead constituents by passing a third Heathrow runway bill. It is without mentioning the continuation of immoral British foreign policy by arming Saudi Arabia, which is waging war in Yemen, and Israel, which is committing grave human rights violations in Palestine. It is without mentioning the sheer incompetence displayed by her and her chosen Brexit Ministers (David

Davis and Dominic Raab) in the negotiations with the EU and with her own party, and the disenfranchisement of the millions of EU citizens living in

“Can we feel sorry for Theresa May? I'll let her record speak for itself”

the UK.

So, I ask: where was this emotion during the government's disgraceful response to the Grenfell

disaster? Why did she feel more upset about being forced to resign from the most powerful job in the country, than she did about the human consequences of her policies? Theresa May will no doubt live a comfortable and indulgent life until the very end, but the same cannot be said for her victims, who are either dead or still suffering. Theresa May wasn't an especially evil or immoral person compared to those leaders who preceded her and those who will come after, but, like any other individual, she has always had a choice.

To sum up: can we feel sorry for Theresa May? I'll let her record speak for itself.

COMMENT

comment.felix@imperial.ac.uk



The UK's hidden opioid crisis

Comment writer **Calum Drysdale**, discusses potential solutions to the UK's terrible and invisible opioid crisis

COMMENT

Calum Drysdale

Comment Writer

The phrase 'opioid crisis' has in the past had a Teflon-like quality about it, like 'civil war' or 'theocracy'. These are terms used to describe distant news items. Fentanyl and oxycodone were intangible problems. However, studies by the Organisation for Economic Co-operation and Development (OECD) show that while UK opioid use is still below that of the US, in

daily doses per million of population, between 2013 and 2016 Britons increased their opioid consumption more than the citizens of any other country surveyed, excepting those from Israel or Slovakia. The effect of this has been around 2000 fatalities attributed to opioid painkillers every year, an increase of 41% over the last decade.

These lethal pills are not bought through the black market, at least not initially. Instead they are prescribed, usually by GPs, to non-surgical patients who turn to other means to acquire the drugs that they depend on once their prescription

runs out. A look across the Atlantic reveals the potential consequences of our current behaviour. In the US more than 130 people die every day from opioid overdoses, largely the consequence of over-zealous prescription in the 1990s.

There is no quick-fix solution. Addicts are maligned as junkies looking to secure their next hit of temporary bliss. The reality is that painkiller addicts trying to live normal lives must turn to dealers for the pills they depend on for transient relief. Tragically, overuse of prescription opioids can cause a condition called hyperal-

gesia, a form of chronic pain. Long-term opioid users can find themselves locked in a cycle of agony from which the only relief is ever larger doses. In trying to provide relief doctors have only exacerbated the problem.

Any response to this growing crisis must be motivated first and foremost by compassion. Neither a tough response that promises to punish people for what has befallen them nor the hand-wringing displayed by Dave Thompson, Chief Constable of West Midlands Police, who refuses to follow the law on cannabis farms for fear of harming people's "life

chances", will help these victims.

Instead the UK should take a two-pronged approach. Firstly, GP appointments must be lengthened to enable GPs to address the root causes of patients' pain rather than resorting to prescribing opioids as a catch-all. Pharmacists should also only sell the exact number of pills required by the prescription, to avoid dependency or pills being sold.

Secondly, the Home Office should support Glasgow and other cities, with their plan to open 'shooting galleries' to help those whose lives have been destroyed by

opioids, by passing the necessary legal amendments. Shooting galleries would provide safe places for drug users to inject or ingest their own drugs, in regulated dosages, with medical staff in attendance. In Portugal these measures have successfully curbed fatal overdoses, the spread of HIV and hepatitis C. The government should be brave enough to break with the previous morally bankrupt policy and embrace data driven methods to avert an epidemic of addiction and broken lives..

STudent?

Stand out with The Times

Activate your free subscription at [thetimes.co.uk/imperialstudent](https://www.thetimes.co.uk/imperialstudent)

If you are having any issues, please contact:
thetimespartnership@imperial.ac.uk

THE  TIMES
THE SUNDAY TIMES
Know your times

SCIENCE

science.felix@imperial.ac.uk

Xenon could be used to reduce traumatic brain damage, Imperial study finds

SCIENCE

Sânziana Foia

Science Editor

Traumatic Brain Injury (TBI) is the leading cause of death and disability for people aged under 45 in developed countries. The first ever life-long study in mice has found that head injury effects can be halted by xenon gas. Following TBI, xenon prevented the mice from early deaths, improved their long-term cognition, and protected their brain tissue.

In TBI, a primary injury is first caused by the initial force from a fall or car accident, for example, and is followed by a secondary injury which develops in the minutes, hours and days afterwards. It is the secondary injury that is largely responsible for the mental and physical disabilities associated

with TBI - but there are currently no specific drug treatments that can be given after the trauma to stop TBI from developing. The only treatment available is supportive and rehabilitative. TBI patients who survive the injury have a reduced life expectancy and an in-

“TBI patients who survive the injury have a reduced life expectancy and an increased risk of developing Alzheimer’s”

creased risk of developing Alzheimer’s disease or other dementias later in life.

Now, researchers from

Imperial College London and Johannes Gutenberg University Mainz have found that the anaesthetic drug xenon, given shortly after a TBI, prevents early death and long-term cognitive impairment and even protects the brain tissue itself in mice. The xenon-treated mice had similar life expectancy, cognitive function, and brain tissue integrity to mice that had never sustained a TBI.

Previously, the same team led by Dr Robert Dickinson and colleagues at Imperial’s Department of Surgery and Cancer, showed that xenon limited early brain damage and improved long-term motor function in mice with TBI, but longer term effects were not yet investigated. Now for the first time, the effects of xenon over the whole lifespan of mice has been observed, in this study that was published in the *British Journal of Anaesthesia*.

Animals were

randomly allocated to one of three groups: TBI xenon, TBI control, and healthy control. Under general anaesthesia and long-acting pain relief, a controlled mechanical force was applied to the brains of the TBI control and TBI xenon groups. The healthy control group was given anaesthesia, but did not receive a TBI. The researchers gave xenon gas to one of these groups (TBI xenon group), while the other two received control gas for the same

“Key brain areas involved in cognitive functioning were damaged in the control TBI group. Xenon treatment prevented or significantly reduced this damage.”

amount of time.

All three groups then underwent learning and memory tests at two weeks and 20 months after the injury. Time of death was recorded and the mice brain tissues were examined.

The researchers found that the TBI xenon group had the same life expectancy as the healthy control group which had not suffered a TBI. However, the TBI control group developed late-onset cognitive

damage. Xenon treatment shortly after TBI appeared to prevent this. The TBI control group were also observed to have damage in key brain areas involved in cognitive functioning. Xenon-treatment prevented or significantly reduced this damage.

Xenon prevented the loss of brain cells in the hippocampus (an area of the brain associated with learning and memory), and prevented degeneration of nerve fibres in the corpus callosum (which connects the two brain hemispheres). Xenon was also shown to reduce long-term brain inflammation that is believed to be involved in cognitive impairment in Alzheimer’s Disease and other dementias.

According to the group, these findings are important as they could offer insight into new treatments for TBI patients, who currently do not have any specific drug treatments available.

Lead author of the study, Dr Rita Campos-Pires, from the Department of Surgery & Cancer, said, “There is currently a huge gap in what treatment we can offer to patients who’ve suffered TBI - an injury which can impact all areas of their lives. Although xenon has not yet been tested for TBI in humans, our findings add to the growing body of evidence that suggests it could be used after head injuries to prevent secondary injury developing.

“Xenon appears to act in a variety of ways, but one of the most likely mechanisms to explain its protective effects on brain tissue is by inhibiting receptors in the brain known as NMDA receptors, that

become over-activated following a brain injury.”

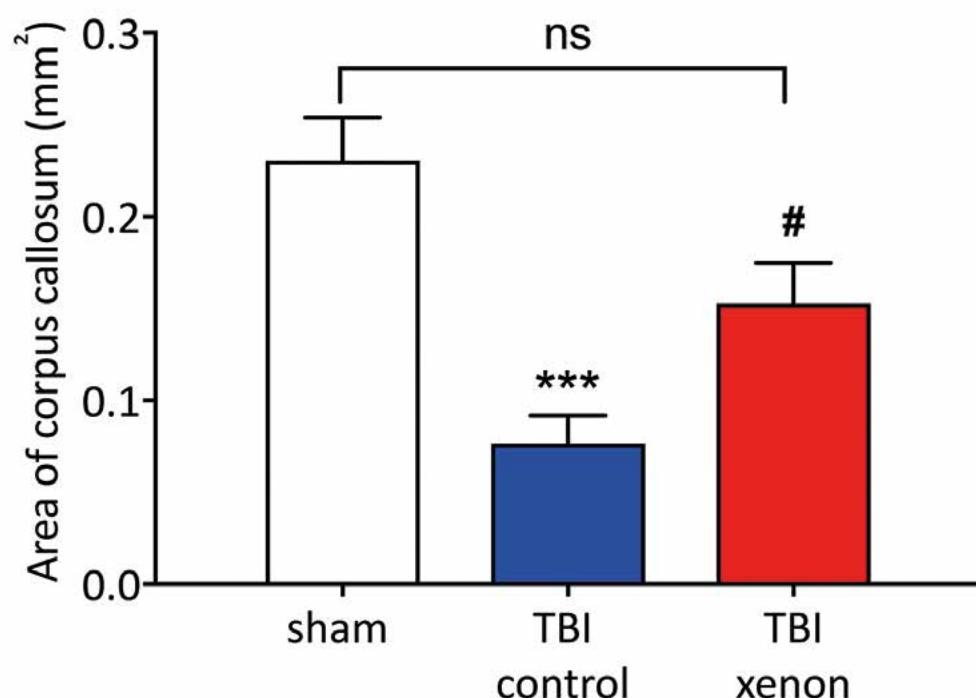
Dr Dickinson added: “We have looked at very long-term outcomes, up to 20 months after TBI in mice. This is very rarely done in animal studies and is equivalent to following up human TBI patients until their 80s. The finding that only a short treatment with xenon can have beneficial effects on cognition, survival, and brain damage almost two years later suggests that xenon might in future prevent cognitive decline and improve survival in human TBI patients.”

Xenon is already used as a human general anaesthetic, is known to have few side effects and could be easily given via inhalation or to mechanically ventilated TBI patients in the intensive care unit.

Given xenon’s safety

“There is currently a huge gap in what treatment we can offer to patients who suffered TBI”

profile - and today’s findings - the researchers hope in the future to evaluate the effectiveness of xenon in human TBI patients.



The area of corpus callosum was significantly reduced in the TBI control group, but the xenon-treated group was not significantly different to the uninjured healthy control group // Robert Dickinson

**NEW CHALLENGER
APPROACHING**



**IMPERIAL COLLEGE SMASH BROS
TOURNAMENT**

Sign Up Here:



**Saturday 15th June
1-6pm**

RSM G.01, South Kensington Campus

The Road to E3 2019: Everything we know so far and

The Electronic Entertainment Expo (E3) has always been one of the massive events in the video game industry for the announcement of new video game releases and consoles. E3 2019 takes place from 11th to 14th June in the Los Angeles Convention Center.

GAMES

Anthony Onwuli
Games Editor

Officially, the expo runs for three days. However, the E3 phenomena is more than just the LA convention. It encompasses all the announcements for new computer and video game releases, as well as the teasing of new video game hardware. From publishers announcing the next set of DLC as a means of breathing life into their existing franchises, revealing new IPs, and giving fuel to the fans

for their console wars, one could say E3 2019 lasts weeks, with many announcements for major series having already been made this week and more to be released next week.

EA

Conference Date: Saturday 8th June.

Time: 5:15 PM BST.

Viewing Platforms: YouTube and Twitch

For the EA Play livestream, EA has sent a breakdown of their broadcast to TechRadar:

9:15am: Countdown to EA PLAY

9:30am: Star Wars Jedi: Fallen Order (Hosted by Greg Miller and Andrea Rene)

10:00am: Apex Legends (Hosted by Alex "Goldenboy" Mendez)

10:30am: Battlefield™ V (Hosted by Julia Hardy and Adam Freeman (EA))

11:00am: FIFA 20 (Hosted by Alex "Goldenboy" Mendez)

11:30am: Madden NFL 20 (Hosted by Adam Rank)

12:00pm: The Sims 4 (Hosted by Andrea Rene)



Microsoft

Conference Date: Sunday 9th June.

Time: 9:00 PM BST.

Viewing Platforms: Xbox One, Mixer.com, YouTube, Twitch

With the absence of Sony at E3, but the internet rife with rumours of the PlayStation 5, the Xbox E3 Briefing would be the best opportunity for Microsoft to make waves this month with the announcement of the next generation of the Xbox, currently codenamed Project Scarlett. Industry insiders have suggested that if Microsoft does do an official announcement for their next gen console, then there will be successors to both the Xbox One X and the Xbox One S.

Most likely though, it will be the Project xCloud which will be the hardware focus of this conference, as an answer to Playstation Now and the recently announced Google Stadia.

In terms of video game titles, we can expect more information and official announcements for *Halo Infinite*, *Gears 5* and a new *Forza* title.

"With the absence of Sony, and the internet rife with rumours of the Playstation 5"

Bethesda

Conference Date: Monday 10th June.

Time: 1.30 AM BST

Viewing Platforms: Twitch, YouTube, Twitter, Mixer and Facebook

A recent statement from Todd Howard has indicated that we will not be seeing Bethesda's new sci-fi IP, *Starfield*, nor *Elder Scrolls VI* at E3 this year. Not the biggest disappointment from Bethesda (that would be *Fallout 76*), but this does leave us to speculate on what Bethesda will be showing this year.

The most obvious options would be content updates to the *Elder Scrolls Online* and *Fallout 76*. Additionally,

we should expect more information about *Doom Eternal*.

Sadly, it's unlikely that we will get a new edition of *Skyrim* at this E3.

Devolver Digital

Conference Date: Monday 10th June.

Time: 3.00 AM BST
Viewing Platforms: Twitch

Amongst the big name publishers, we have Devolver Digital giving room to indie developers. In case you don't know about this publisher, then some of the games that they have published in the past include: *Hotline Miami*, *Duke Nukem 3D: Megaton Edition*, *Always Sometimes Monsters*, *The Talos Principle* and *Hatoful Boyfriend*.

With some sequels being developed currently including *The Talos Principle 2*, *Sometimes Always Monsters* as well as some games releasing later on in 2019, *Metal Wolf Chaos XD*, *My Friend Pedro*, *Serious Sam 4: Planet Badass*, we're in for a conference filled with unexpected shenanigans and wacky games.

PC Gaming Show

what we expect to see revealed

Conference Date: Monday 10th June.

Time: 6.00 PM BST

Viewing Platforms: Twitch, Facebook and YouTube

Developers and hardware makers for PC are invited to participate in the PC Gaming Show. PC Gamer has revealed that they are expecting a lot of titles to showcase during the two hour livestream.

If you're excited by stepping into the shoes of a supervillain for a second time, then the world's first reveal of *Evil Genius 2* will be right up your alley. Developer Rebellion will also be revealing an unannounced title. New footage of *Last Oasis* as well as the projects that developer Tripwire Interactive has been working on will be featured.

Gearbox will take the stage and discuss the upcoming *Borderlands 3* in depth. To coincide with the upcoming release of *Borderlands 3*, *Borderlands 2* will be receiving a free DLC update to set the stage for the sequel.

Expect more information from Paradox Interactive about *Vampire: The Masquerade - Bloodlines 2* and *Age of Wonders: Planetfall*.

Samsung is also

"Borderlands 2 will be receiving a free DLC update to set the stage for the sequel!"

expected to reveal more



E3 will be host to many exciting announcements including the next chapter of Halo // Xbox

information about their gaming monitors.

The PCGaming Show is expected to have many more titles both announced and unannounced so far.

Ubisoft

Conference Date: Monday 10th June.

Time: 9.00 PM BST

Viewing Platforms: Twitch and YouTube

Ubisoft has recently teased what people should expect for their E3 conference and this includes updates to existing games and a celebrity showdown.

Current titles expected to make an appearance at E3 include *For Honor*, *Rainbow Six Siege* and Tom Clancy's *The Division 2*.

A tweet from the official Watch Dogs twitter account has confirmed that the third game in this franchise, titled *Watch*

Dogs Legion, will be appearing at E3. This game will be set in London. Rumours have it that you will be able to play as any of the NPCs in the new setting of London.

The focal point of this conference is likely to be *Ghost Recon Breakpoint* which has an October 2019 release, meaning that this game will likely get extensive attention during the Ubisoft briefing.

Ubisoft has announced that they are working on three brand new AAA titles, so it is possible that these three games could also be teased during their broadcast.

Square Enix

Conference Date: Tuesday 11th June.

Time: 2.00 AM BST

Viewing Platforms: Twitch and YouTube

With Sony's State of Play broadcast last

month teasing fans with a short reveal for the *Final Fantasy VII* Remake, and after Square has been notably silent on the project for years, speculation has been fueled on whether this game will be making an appearance at E3. Who knows, maybe, we might get a release date.

The Avengers Project, which is currently being worked on by Crystal Dynamics and Eidos-Montreal alongside direct involvement from Square Enix and Marvel Entertainment, will have an official announcement at E3 2019, which so far has only had a small teaser in 2017.

Square Enix has been quite silent this year, with the release of *Kingdom Hearts 3* in January, followed by a critical mode content update in April. With the DLC, *Kingdom Hearts 3: Re:MIND*, slated for a 2019 release, E3 would be the best time for Square

Enix to do a reveal for the new scenario.

Dragon Quest XI is also releasing for the Switch later this year, so it might also be a part of the conference this year. Additionally, we may get more info about *Dragon Quest Builders 2* for the Nintendo Switch.

Nintendo

Conference Date: Tuesday 11th June.

Time: 5.00 PM BST

Viewing Platforms: Twitch and YouTube

The June 5th Nintendo Direct gave us a few details about the upcoming *Pokemon Sword and Shield* for the Nintendo Switch. We can expect a full depth announcement of several details pertaining to the first ever home console mainline *Pokemon* games during the Nintendo E3 Direct.

Other games which could make an appearance include *Luigi's Mansion 3* and *Fire Emblem Three Houses*.

From Nintendo's big franchise, *The Legend of Zelda* and *Mario*, it is very unlikely that we will see anything about their next big mainline games. However, what we can expect is information about the *Link's Awakening* remake and *Mario Maker 2*.

There's some speculation on whether we will see another beloved franchise, *Animal Crossing*, during this year's E3 Direct, as the game does have a 2019 launch window.

Super Smash Bros Ultimate had its most recent content update in April, where the first DLC Fighter, Joker from *Persona 5*, was added to the game. There are still four DLC fighters to be announced. Could we get a teaser of the second DLC fighter at E3? Possibly.

Other games which could make an appearance include *Luigi's Mansion 3* and *Fire Emblem Three Houses*.



The Avengers Project is set to be delved into at E3 2019 // Square Enix

FOOD

food.felix@imperial.ac.uk

“Shaken, not stirred” - Cocktails 101: A Guide for Dummies

Know your margaritas from your daiquiris? Want to save yourself the embarrassment of not understanding your date's order? Or perhaps just curious about the complexities of C₂H₅OH? We've got you covered...

FOOD

Julia Dabrowska

Food Editor

Exams are over... at least for the majority of us, and what better way to celebrate (or grieve if you've still got some coming) than with some tasty ethanol-containing beverages? Thankfully, summer means a chance to venture out of your comfort zone and try something more unique than your typical Union IPA or Jägerbomb, and it's not only for basic white girls – the cocktail. Here's a handy summary of a selection of the classics.

“Thankfully summer means a chance to venture out of your comfort zone and try something more unique than your typical Union IPA or Jägerbomb”

Dry Martini

The titular reference has to come first – I mean, who doesn't want to be James Bond? Preferably made with gin, but can

use vodka too. 4 parts Gin/Vodka, 1 part dry Vermouth (although ratios are debatable), and don't forget the olive!

Bloody Mary

Commonly consumed at brunch, this is a bit of a strange one (who mixes alcohol and tomatoes?). 3 parts Vodka, 6 parts tomato juice, and 1 part lemon juice, with a dash of Worcestershire sauce, Tabasco, and a pinch of salt & pepper. Nutritious?

Margarita

Ideal for summer due to its many fruity variations – strawberry, raspberry, or maybe mango or passion fruit? Mmmm. 2 parts Tequila, 1 each of Cointreau/Triple Sec and Sour Mix or lime juice, and don't forget to salt/sugar the rim of the glass.

Cuba Libre

A simple mixer with a name, this is low effort and high satisfaction if you want to greet your guests with something other than a beer can. 2 parts Cola, 1 part White Rum, and a dash of fresh lime juice and you're set.

Old Fashioned

Partially reserved for the posh, partially for those who enjoy whiskey (but who says that the two are mutually exclusive?). 2 parts Whiskey, 3 dashes of bitters, and a sugar cube, topped off with soda or water and garnished with orange.

Mojito

Probably the first cocktail you've ever ordered when aged 15, but

still a good staple. 4 parts White Rum, 3 parts lime juice, topped up with club soda, and a teaspoon of sugar and some mint for good measure.

“Partially reserved for the posh, partially for those who enjoy whiskey (but who says that the two are mutually exclusive?!)”

Daiquiri

A citrusy classic and Hemingway's supposed favourite drink – channel your inner author by sipping on this on a sunlit balcony (preferably in Cuba). 9 parts White Rum, 5 parts lime juice, and 3 parts syrup or half a teaspoon of sugar.

Gin & Tonic

Honestly, there isn't much to say about the G&T. Eponymous contents of this drink, mixed in your desired proportions, topped off with a lime and you're good to go.

Long Island Iced Tea

Easily one of the strongest cocktails which typically doesn't taste of alcohol (and you know what that means...). Equal parts of Vodka, Rum, Gin, Triple Sec and Tequila,

plus 2 parts lemon juice, and topped off with Cola. Add a lemon for good measure.

Piña Colada

The definition of summer in a glass (complete with pineapple, cocktail umbrellas and colourful stirrers). 3 parts pineapple juice, and 1 part each of cream of coconut and White Rum. Blend with ice for a frozen twist!

Sex on the Beach

Yes, this is in fact a cocktail, and a very good one at that, combining a lot of exoticness in one. 2 parts each of Vodka, orange juice and cranberry juice, and 1 part Peach Schnapps. And, you guessed it – an orange slice.

Negroni

Originating in Florence, this drink is one of Italy's many aperitifs striking that sweet/bitter balance. Equal parts Sweet Vermouth, Gin, and Campari. Add an orange for the summery vibe.

Whiskey Sour

Not going to lie, probably not one of the more confusingly named cocktails nor one of the better tasting ones. 3 parts Whiskey, 2 parts fresh lemon juice, with a part of syrup or a teaspoon of sugar.

Moscow Mule

Although Russia is a hot topic, this cocktail is anything but, adding a refreshing twist to a vodka cocktail. 1 part Vodka, 2-3 parts ginger beer, and a dash of lime juice.



Insta-worthy piña colada in Dubai // Emma Landry

Aperol Spritz

The epitome of summer and the perfect drink, in terms of aesthetics, flavour and the fact it is acceptable at any time of day (and a personal favourite if you couldn't tell). 3 parts Prosecco, 2 parts Aperol and 1 part soda. An orange is a must.

Bellini

Now we're getting into celebration territory; although the field is vast, this is arguably the best kind of bubbly cocktail (brunch anyone?). The most common peach version has 2 parts Prosecco and 1 part peach purée.

Cosmopolitan

Not only for Carrie Bradshaw, this is a sweet (but not too sweet) vodka

sour for those who love their vodka cranberries. 4 parts Vodka, 3 parts cranberry juice, and 1 part each of lime juice and Triple Sec.

Mai Tai

Tastes nothing like alcohol, yet guaranteed to look Insta-worthy; a decent deal for those basic white girls out there. 4 parts Rum (mix of white & dark in a 2:1 ratio), 1 each of Orange Curacao, lime juice and syrup. Commonly served with pineapple.

POSTGRADUATE BLACK TIE BALL



Music Baskerville Willy
Meal Bowl Food Buffet
& Welcome Drinks + Photographer

**SATURDAY
08TH JUNE 2019
20:00 - Midnight**

**MILLENNIUM
GLOUCESTER
HOTEL**

Admissions Early-Bird £25 Imperial Students £30 Partners & Plus ones £40



Scan for
tickets

✉ gsu@imperial.ac.uk

📍 ImperialGSU

🌐 icu.com/GSU

📌 [iclgsu](https://www.linkedin.com/company/iclgsu)



GSU
IMPERIAL GRADUATE
STUDENTS' UNION

Imperial College Symphony Orchestra



Milhaud, Ravel, & Gershwin
7:30 pm, Saturday 15th June
Great Hall, Sherfield Building

MUSIC

music.felix@imperial.ac.uk

Five reasons to visit Strawberries & Creem Festival

With the fifth year of Cambridge's Strawberries & Creem Festival right around the corner, Felix caught up with

MUSIC

Andy Djaba
Editor-in-Chief

Strawberries & Creem, the up-and-coming independent festival returns to Cambridge's Haggis Farm on Saturday 15th June with its signature line-up of house, hip-hop and R&B, and Noughties throwbacks. Speaking to *Felix*, Cambridge University graduate Chris Jammer - the festival co-founder (who the eagle-eyed amongst you may recognise as a winner from E4's series *Shipwrecked*) - said the festival promises "the experience of a day out... not too far from London and it's just all about positivity and good vibes and throwback fun really, while remaining credible and current with the music we're putting on". *Felix* investigates the reasons why Strawberries & Creem has become a firm fixture in the summer festival calendar.

Independent

Curated by a small team of just seven young creatives, the one day event stays true to its ethos: "celebrate heritage,



Strawberries & Creem co-founder, Chris Jammer // Instagram: @ChrisJammer

champion future". The team consists of a mix of Cambridge University graduates, Cambridge locals and Anglia Ruskin University graduates. Chris told *Felix*: "We're a bunch of 25 year olds really just having fun and putting something on that we'd want to go to, rather than a big corporation trying to impose what they feel is needed. We're just doing this for everyone else like us." As such, the festival is a real celebration of good vibes and the hottest names in house, rap and R&B, and garage. Although having such a small team may initially seem like it would pose a challenge, Chris explained to *Felix* why this has been a strength in running Strawberries & Creem: "In the festival industry, most festivals are owned by the same sort of people, whereas we are independent so we're coming in trying to prove our brand value and our trustworthiness. When we're working with brands and new people, just getting across the vision of what you're doing and actually if you're capable of delivering that sort of stuff." Strawberries & Creem always shows true support for UK music and this enthusiasm has been reciprocated by the industry.

The festival continues to go from strength to strength

Originally created five years ago as an end of year garden party celebration for the students of Cambridge, Strawberries & Creem now successfully provides the city with an exciting musical identity that continues to expand annually. Detailing the festival's journey from



Strawberries & Creem Festival returns to Cambridge's Haggis Farm on Saturday 15th June // Strawberries & Creem

just 1000 guests in its first year to becoming one of the UK's fastest growing events, Chris explained:

"In Cambridge University, they have something called May Week. When everyone finishes exams, every College and association has their own party. The May Balls, especially, are quite privileged - they cost a lot of money to go to, got to dress in black-tie, that sort of thing; so we wanted to put an alternative in that space, delivering the music we wanted to listen to. Just challenge the make up of Cambridge University's May Week a little bit. That started as a garden party but we called it a music festival and it was just really a stage with a few toilets and a burger van. From there, we've gone from strength to strength. Last year we did 10,000, this year we're going to do 12,500." Chris also added "This year, we've established ourselves enough

that brands are coming to us; that's a good sign of growth."

"We grow every year"

Diverse Lineup

With the 2019 edition set to be topped by MOBO winner Stefflon Don - whose meteoric rise has seen her gain international success with French Montana, Tory Lanez, Jeremih, Sean Paul and Ne-Yo collaborations - this year's Strawberries & Creem promises a musically diverse line-up. The rapper will be joined by UK pioneer Ms Dynamite, who was honoured with an MBE last year for her services to music, which count breakthrough hit 'Ms Dy-Na-Mi-Tee' and the 2002 Mercury Prize. Chris' excitement was palpable as he told *Felix*: "I'm really looking



The shift in line-up has led to an "interesting" shift in demographic // Strawberries & Creem

MUSIC

music.felix@imperial.ac.uk

model and festival co-founder, Chris Jammer, for an exclusive interview.

forward to, first of all, having a female-led line-up, which was something that the festival industry has been criticised for before. Steff and Ms Dynamite were two acts that we've wanted to book for a very long time and it's been timely for us that Ms. Dynamite started performing again and Steff's still within budget, just about."

"It was a hobby and then, when I left university, I thought, 'why not try and make this work full time'"

Representing the festival's signature throwback element and bringing carnival vibes to Cambridge, 'Beautiful Girls' hitmaker Sean Kingston

will also headline, alongside special guest Kevin Lyttle, whose debut single 'Turn Me On' went on to become a club classic and one of Dancehall's best loved anthems. Fresh talent is represented in BBC Sound of 2019 nominee Mahalia, '079ME' artist B Young plus West London group WSTRN. Dancehall collective, The Heatwave, will bring their formidable Hot Wuk party, while a strong UK garage contingent sees Artful Dodger, Heartless Crew, Shola Ama and Sweet Female Attitude confirmed. With a performance from viral sensation Jimothy Lacoste scheduled, the festival's energy levels will remain high with sets from bass artist Flava D, as well as Heidi, Eli & Fur and wAFF, who head up Strawberries & Creem's house and techno selectors.

A proven track record

Strawberries & Creem has become renowned for its authentic and feel-good line-ups that have seen a

wealth of respected acts perform in recent years, including Wiley. Chris told *Felix*: "We've got it right probably the last four out of five years; we've got Skepta just before he dropped 'Shutdown', J Hus just before he dropped *Common Sense*, Kano just before he dropped *Made in the Manor*, so they've always come to this festival with new material that was already popping." This year is no exception, with festival headliner Stefflon Don arriving with a plethora of songs in the charts at the moment.

You never know who might show up

Finally, Strawberries & Creem has become renowned for attracting a slew of surprise guests, with 2018 counting over 20 unannounced artists who performed on the day -including EO, AJ x Deno, Ambush and MC Versatile. Chris confirmed this, revealing to *Felix*: "There are a hell of a lot of special guests coming to Strawberries & Creem



Skepta headlined Strawberries & Creem in 2015 // Strawberries & Creem

Strawberries & Creem 2019 full line-up // Strawberries & Creem

that aren't on our line-up. Historically, we've been quite good at getting people to come out on sets. Last year, we had the likes of Abra Cadabra, NSG, BBK - Shorty and Frisco came out. There's a lot to look forward to that isn't actually on the line-up. Just look at people who are featured with some of our headliners. I won't say any more than that."

To be a part of a festival with a very bright future ahead, visit the Strawberries & Creem website

- tickets start at just £45 and are available to buy now!

"Strawberries & Creem was shortlisted for 2018 Festicket & UK Festival Awards"



Abra Cadabra was amongst last year's surprise guests // Strawberries & Creem

SUSTAINABILITY

Now available online
<http://felixonline.co.uk/categories/sustainability/>
 artur.donaldson15@imperial.ac.uk

Flying regularly not crucial for success in academia

New study finds increased travel does not increase impact of research

SUSTAINABILITY

Artur Donaldson
 Sustainability Editor

Science is quite rightly celebrated for being an international enterprise, and academics often feel required or obliged to fly frequently and over long-distances in order to conduct their work or maintain professional relationships. But how important is long-distance travel to a scientific career, and how much do scientists contribute to climate change through their travels?

30% of academics who surveyed by the Tyndall Centre felt an expectation to fly from their university. A new study at the University of British Columbia (UBC) suggests this pressure may not be rationally founded. Although academics who change affiliation are found to have 40% more citations, academics who fly more frequently do not have a greater number of citations, nor do they have a greater number of co-authors per paper.

Attending conferences, undertaking fieldwork and teaching all contribute to the demand for travel by air, with 60% of demand coming from travel for conferences. In a sample of 705 academics at UBC, claims for air travel were made for 2.9 trips per person each year on average. Of these, 10% of trips were same-day returns, long-distance flights with only one overnight stay, or short-distance flights for which ground-based transport could be taken. Such trips have a high carbon footprint within a

short timeframe.

The scientific consensus on climate change is clear, and so are the impacts of flying. Aviation is the most environmentally damaging form of long-distance transportation. A single passenger travelling 100 km by plane is responsible for the production of over 20 kg CO₂e in emissions, double that by road (10 kg) and seven times that of a passenger travelling by rail (3 kg) (see *To the planet every journey matters* below). This is despite the high seating efficiency of airlines thanks pre-booking systems, less rigorously imposed in rail and bus travel, and decades of optimization of aircraft design and operation. Emissions from aircraft also affect human health directly. For instance, emissions from aircraft increase near-surface ozone levels and atmospheric sulphate concentrations. While Ozone in the upper atmosphere blocks harmful UV frequencies, at the surface it results in respiratory diseases. Sulphate aerosols, though slightly reducing the greenhouse effect, have the potential to cause drought according to a briefing paper produced by the Grantham Institute at Imperial College.

Using, for the first time, written records (travel expenses) as opposed to self-reported statistics, which can suffer from limitations, researchers found no correlation in the sample between the h-index of academics and the distance flown, even when accounting for age of the academic and number of co-authors on each paper. Nor was there a correlation between number of citations per

author per paper and distance.

Perhaps flying helps to produce larger collaborations? This too also does not appear to be the case, the average number of co-authors per paper was no higher for academics who flew further. A significant correlation found was between emissions and salary. A possible explanation is that higher-earning senior researchers are frequently invited to give talks and more likely to afford to fly in higher class.

Acting to reduce air travel can come with economic and social co-benefits, including better perception of the scientific community.

Although academics are aware and often sympathetic to environmental issues, they are

sometimes criticised for the knowledge-action gap on flight. A ten-year study of newspapers in four different countries, including the UK, found that a third of criticisms levelled at academics mentioned their flying behaviour.

Changes need not be costly. The lowest hanging fruit is to travel modestly. Economy class passengers cause almost three times lower emissions than business class, and four times lower than first class passengers. Encoding commitments to use the lowest carbon means of transportation into grants could be an effective and easy strategy and set an example. Restrictions on class of seating is already included in some grants.

Given that reducing flying is desirable both for the environment and for



60% of flights were to attend conferences // Wikimedia

academics, the results of the research are welcome, especially since Green academics were found to be no less likely to fly than non-Green.

Air travel may not be totally eliminated. Some long-distance travel will be needed for instance for fieldwork. One should be cautious to limit opportunities for less secure researchers who already travel less. Academics who did not claim any air travel expenses were found to receive fewer citations. A limited amount

of air travel, used effectively, may be beneficial. Above a certain threshold it is a case of diminishing returns.

A cultural shift is needed, but the changes required already have a precedent. Awarding grants which encourage low carbon travel, video-conferencing and limit use of high class air travel are strategies which could be employed to help researchers give flight to their research without liberating greenhouse gases.

To the planet every journey matters

More fulfilling than jetting off in search of Love Island ...

Student holiday travel options compared



Photos: Aircraft landing Maho beach - Davidjellis - Youtube, Pool It: U.S. National Archives, Bus: FlixBus - FlixBus.com, ICE to Frankfurt - Darkroom Daze - Flickr // Data: European Environment Agency, 2014. "Energy Efficiency and Specific CO₂ Emissions."

CLUBS & SOCIETIES

felix.clubsandsocieties@imperial.ac.uk

Tribal Fusion Belly Dance - Gorgeous Vintage Combos

CLUBS & SOCIETIES

Sarah Lowe

Imperial College Belly
Dancing Society Publicity
Officer

As featured in previous editions of *Felix* this term, the Belly Dancing Society is currently hosting a series of summer workshops in a variety of belly dance fusion styles. The last workshop of term is now approaching, where we'll be exploring Tribal Fusion Belly Dance. Tribal Fusion is a western belly dance style originating in the '60s in San Francisco, USA, which fuses middle eastern belly dance with elements of flamenco, hip-hop, Kathak, Odissi, and a variety of folkloric dance styles from around

the world. The combination of all these different dances makes for a very intricate and diverse dance style!

We've invited Catherine Taylor to give her workshop on "Gorgeous Vintage Combos" wherein we'll learn combos utilising Burlesque, Belly Dance and Tribal Fusion movements to channel our inner pinup - get your sass on in this fun and feisty workshop! As with all of our previous workshops, we welcome people of all levels (even if you've never danced before) to try out our classes - they're always lots of fun!

Catherine is a London-based performer and

teacher of Tribal Fusion, ITS and - under the pseudonym Vul Varine - Burlesque. She is known for her strong stage presence and innovative choreographies, as well as her engaging and approachable teaching style. She is a founding member of the Tribal Fusion troupe Curious Verses, director of the ITS troupe Sigma, and is co-organiser of highly popular cabaret show The Honeysuckle Revue. She was also an original member of the London Algerian Ballet, and has trained in Polynesian dance, Silvestre Technique and Orixa dance movement. Unfortunately that's it

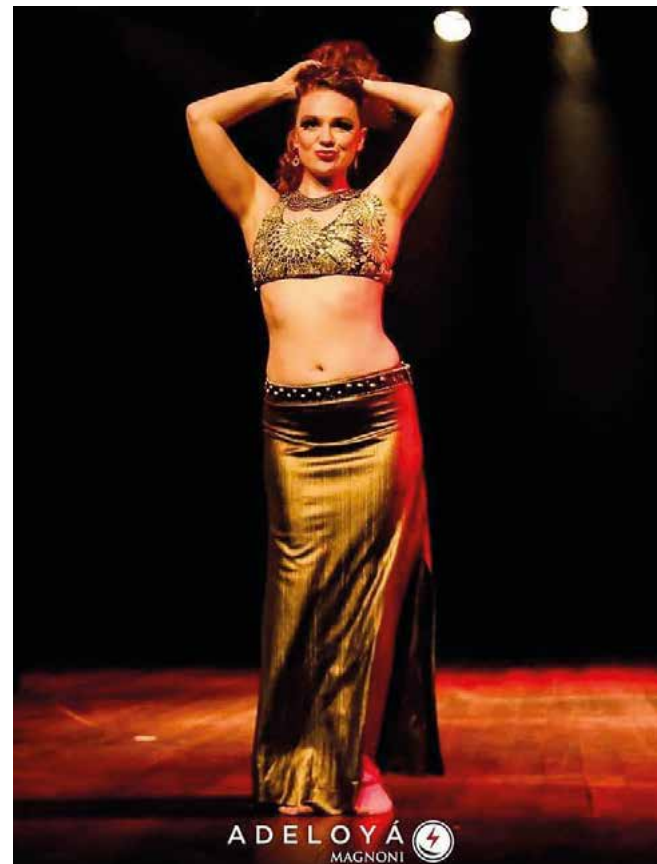
now for the belly dance society's classes this term. We'll be starting up again with a full timetable of Beginners, Advanced and Tribal Fusion classes in the Autumn term, so keep your eye on our activities come October - you can contact us in a variety of ways detailed below. We hope you all have lovely summers!

You can follow us on social media to keep up with us and our classes. We have Instagram: *icu belly dance*, Twitter: *@ICUBelly*, a Facebook page: *ICbellydance* and a YouTube channel: *ICBellydance*. We also have a lot of info on our website: *so do check it out!*

When: 18:00-20:00, Tuesday 18th June

Where: Activity Space 1, Floor 1, Union Building

Tickets: £10 for members, £12 for non members - on the door or on the Union website



"Catherine is known for her strong stage presence and innovative choreographies" // Adelaya Magnoni

"Graduating in October 2019?"



All graduates from College will be contacted as part of the national Graduate Outcomes Survey. The responses to this Graduate Outcomes survey will be crucial in allowing current and future students to make informed choices and in helping us to evaluate and promote our courses.

Graduates will be contacted in September 2020. To support the survey, we are required to hold accurate contact details for you, including:

- A personal email address
- At least one telephone number
- A postal address (this can be a parental/guardian address)

We would be very grateful if you could now review and update the details we currently hold about you via:

<http://www.imperial.ac.uk/studenteservice>

Wishing you every success in the future

The Careers Service

www.imperial.ac.uk/careers

POSTGRADUATE

gsu.president@imperial.ac.uk

Silwood: Imperial's Green Cupboard

POSTGRADUATE

Jessica-Lee Cole
Silwood Park Union Welfare
Representative

Did you know that Imperial College has postgraduate campus (read: farm) way out in the countryside? It's a whopping 20 miles from South Kensington. It is easily the most remote campus, but also the most beautiful (suck it SK). I like to call it Imperial's green cupboard. This is because, for me, it really does seem like Silwood is the Harry Potter under the stairs in the Imperial household – most of you don't know or care that we're here. We're not bitter in the slightest, honest!

There are only a couple of downsides to living out here in the wilderness – like the fact that South Ken controls our heating, or that very few of the services provided for the London campuses make it all the way out here. However, despite the very few downsides, life is pretty great in the forest. Below are some of what I consider to be highlights of our idyllic lifestyle.



We have chickens! // Wangqing Tai

And ducks! The ducks are my personal faves, I could watch them waddle around all-damn-day. Our feathered friends provide us with all the animal interaction and fresh free-range eggs a person could need. When you're feeling down, the chickens are

always happy to see you (esp. if you have food).

Your problems are less troubling in the forest.

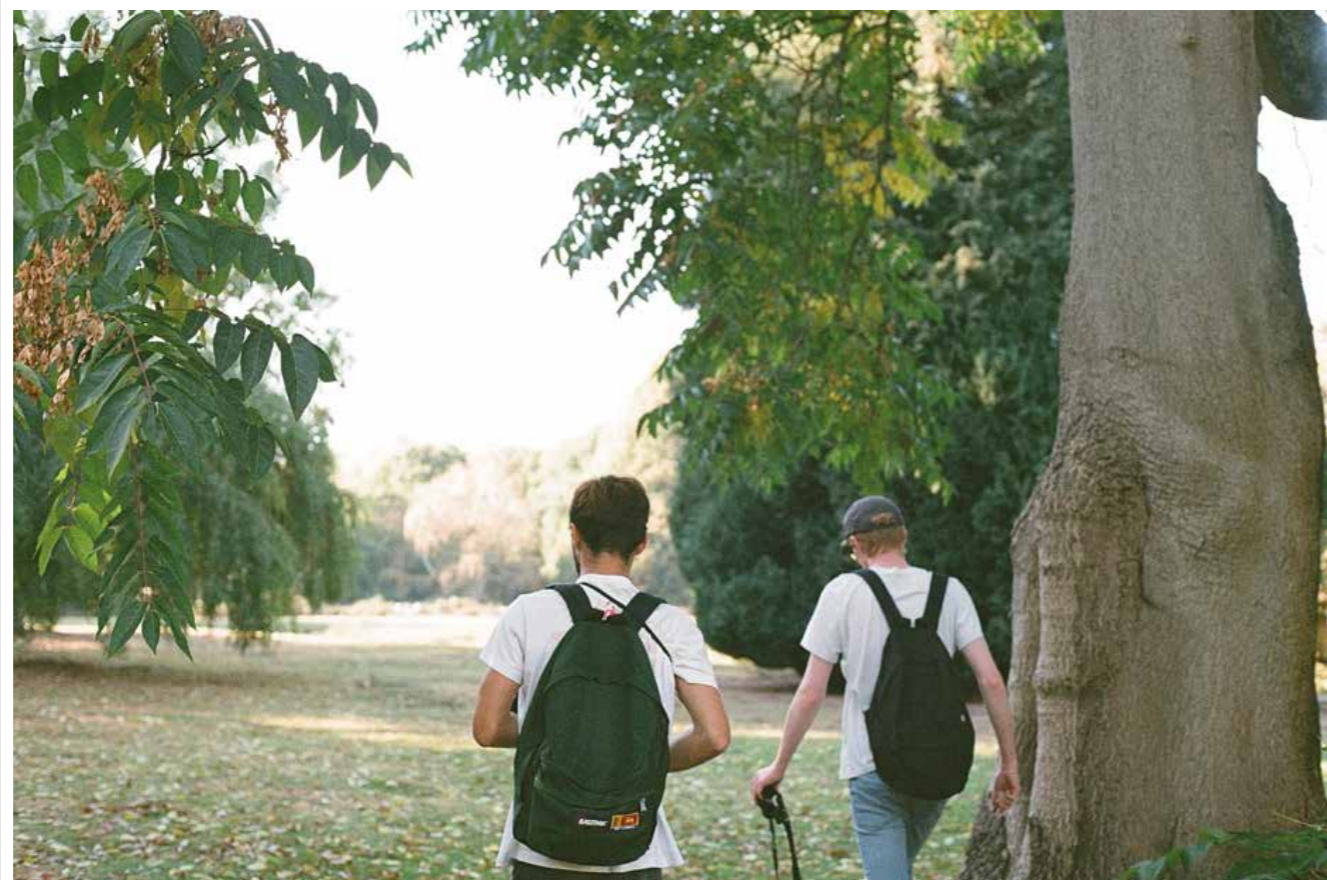
I'm a drama queen. It's not my fault, just my natural reaction is one of overreaction. You can find me having a lie down after anything remotely distressing happens. Like a rich woman in the 1700s. But go outside and see some nature? I snap out of it pretty quick. The world isn't ending because your R code won't work. The trees said so. I am writing this article that I have been procrastinating for weeks, at my desk, in the sun, and a deer just ran out of the forest past my window. Life is good.

"There are cats!"

There is a gorgeous little ginger one who is all sunshine and light, his name is Mr Tinkles. There is also a black cat with cross-eyes; she is not so nice and incredibly demanding but loved nonetheless. Her name varies depending on who you ask – usually either Seitan, Salem, or Nigel. These two are really in charge of the campus, and we're all okay with that.



We grow our own food! // Paddy Vasey



"The size of the campus means, not only is the student community close-knit, but we are on very good terms with many of the academics on campus" // Alice Lawrence

Life on the commune is sweet. We are really trying to distance ourselves from the distinctly un-green reputation that Imperial holds, and take solace in the simple pleasures in life. We are proud to have allotments on campus. This year a communal garden project was started, where everyone chips in a little, so we can all reap the fresh veggie goodness. It's spring time now so the veggies are just being seeded! If you find yourself on campus

and are itching to get your hands dirty, help is always appreciated!

"A sense of community"

When everyone is here, there are roughly 200 people on campus. Now, that's not a whole lot of people. It's a massively different pace of life to London but here I know everyone's name. If you live in London, this might be a bit of an alien concept to you. Honestly, even at my old uni, I knew the names of about 10% of my class. Maybe that says more about me, though, than anything else. The few students here are studying a wide variety of courses, ranging from computational, coding-based courses to courses that go to the rainforest for most of the year. I feel confident that when I inevitably get lost in my code or whatever, I can

ask someone for help and they will be nice enough to give it to me!

Silwood park is pretty notorious in the ecological community, and as such we have guest speakers on a regular basis to enrich our university experience. Once a month the postdocs and PhDs host a social seminar, where they present their research over pizza and drinks. The size of the campus means that, not only is the student community close-knit, but we are on very good terms with many of the academics on campus, which promotes a really relaxed but driven learning environment. Most universities, I find, have a clear divide between the students and the academics. Here, the lines are less definite – we are all here to learn.

"We are all here to learn"

I feel very privileged to live here. There are very few places where you could get such a wholesome and fulfilling university experience. The pace of life is very different to London but that's honestly a good thing in my opinion, there's time to focus on what's important. **If you want to come check out the campus for yourself, we are hosting a fully-fledged festival on the 3rd of August! You can find details here: bit.ly/Silfest19.**

Please don't forget about us xx

"There are very few places where you could get such a wholesome university experience"

POSTGRADUATE

gsu.president@imperial.ac.uk

The Union's promises towards PG are good. Sticking to these promises would be better.

POSTGRADUATE

Ute Thiermann
GSU President

Hannah Jones
GSU Events Officer

In the beginning of my period as GSU President, I had frequent meetings with the Union's Managing Director, Jarlath O'Hara, and some of the Officer Trustees, particularly Rob Tomkies [Union President] and Alejandro Luy [Deputy President (Education)]. Damn, we had really good plans! For the first time, we would try to work together and orchestrate our efforts to work towards the needs of PG students. Maybe for the first time in many years, Union representatives have not only admitted that PG students are largely neglected by the Union, they went even further and promised that they would support us (the GSU) in our activities and strategies. The goal was that the Union should work with the GSU as their executive arm to address PG needs. Direct key contacts were identified for every GSU officer, as well as sub-committees set up to work together more effectively. We agreed on a timeline of actions and events, and the PG Black Tie Ball would be our highlight project to trial and optimise our cooperation. While the first few months were quite successful, with a full review of our GSU governance structure, the

Union's efforts to hold their promises have drastically declined over the last 6 months. On paper, our sub-committees looked great, but words need to be put into action to turn into reality.

The most disappointing experience was the Union management's attitude regarding the PG Black Tie Ball. During the one (and only) meeting in 2019 concerning the ball, the officers and the Head of Student Voice & Communication reaffirmed their promises to turn the Black-Tie ball into a flagship event for PG students. Help with the marketing campaign and the organisation of the event and financial administration were all pledged. For the GSU, this was the first Ball; for the Union, one of many.

Counting on the Union's support, we aimed big and put plans in place to make the event happen. Unfortunately, we were left feeling overwhelmed by the support we were given. The promises that were made, for support with organisation and advertising, were left unfulfilled, with nobody from the Union even being involved. The Communications team declined to help with advertising until all the tickets for the Summer Ball, scheduled to happen three weeks after the Postgraduate event and mainly aimed at attracting Undergraduates, were sold. This, combined with poor advice from elected Officers, has meant the flagship postgraduate event, which had such

promise, almost failed to happen. Despite this seeming abandonment from the Union, our GSU committee has managed to pull together as a team to provide what looks to be a fantastic event. Most tickets have now been sold and we can be proud that, for the first time, we are bringing PG students from every campus and faculty together as one Imperial Postgraduate community.

The people at the Union did have good intentions, and there has been help along the way that has been welcomed. What may have been underestimated is that for a change in long-lasting traditions, we need to fundamentally change the way we work. We need extra care, effort and allocation of resources to engage a community that has different needs to the Undergraduate population. We hope that, in the next academic year, the freshly elected Union officers will turn those promises into actions. Luckily, we have our PG representative Ashley Brooks starting as Deputy President (Education), so our hopes are up!



Get inspired by some of the nominations for the Student Academic Choice Award Winner for Best Supervision: Professor Dominik Weiss [Earth Science and Engineering]

POSTGRADUATE

Ute Thiermann
GSU President

I would like to nominate Professor Dominik Weiss from the Earth Science and Engineering department for the best supervision award. He is just a great guy and I am lucky to have him as my supervisor! I am coming towards the end of my PhD and I couldn't have done it without him.

Dominik has always been there to support me throughout my PhD. He provides just the right amount of advice to push me in the right direction without taking over or preventing me from learning new things. He is extremely open to collaborating with different people from all over the world, by both suggesting people to collaborate with, and by allowing us to find our own collaborators. For example, he has helped me to collaborate with Gaussian, a company which develops the software I use for my computational chemistry calculations. My research was supposed to focus on experimental methods, but because I was interested in computational chemistry, he actively encouraged me to develop my skills in this area. He

"Congratulations from all the PG community!"

went outside his comfort zone to learn this discipline with me, and how to apply it to environmental problems. This is a trait of all great researchers and supervisors. He has now incorporated the discipline into other PhD student projects.

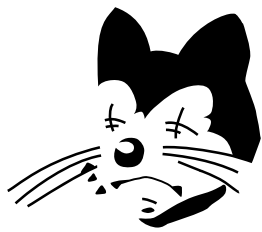
He encourages all his students to explore areas outside of academia. He regularly tells us about internships he comes across which he thinks we will find interesting. I ended up doing a 6 month internship at the Department for Business, Energy and Industrial Strategy which provided useful insights to life outside of academia. He supported me when it looked like there would be funding issues, and did everything in his power to make sure I could do it.

The most important thing though is that he always puts us first before the research. He always wants us to have a good work-life balance. This can often be forgotten by PhD students like me who get absorbed in their research! His door is open regardless of whether you want to discuss research or a personal issue.

Ultimately, he is no longer a supervisor, but a lifelong friend."

"As a supervisor, Dominik is so generous with his time. He always finds a way to fit in a meeting to discuss a problem you may be having with research or to write a letter of recommendation for a grant you might have applied for. Equally, if he needs to set aside a whole day/week to come down to the lab and help you, he will. He is always prompt at marking reports and giving feedback on drafts of papers. Even when he is out of the country on a visit to another institution or on a well-earned break, he will still be contactable. He also recognises where a problem is beyond his field of expertise and will introduce us to another academic at the college or beyond who is better suited to help (I am currently on a 9-week research trip at the University of Valencia, learning a new electrochemical technique).

Beyond purely academic supervision, Dominik is a genuinely kind person who always looks to see the best in the situation - for example, even when our lab flooded, he was able to see the brighter side and joked about the opportunity it presented to give it a good clean. He takes an interest in the lives of his doctoral students outside of the college and is a pleasure to share a coffee with (and he always buys the coffees)."



Hangman

Ravenous vegans devour grass on Queen's Tower Lawn

HANGMAN

NegaFelix
Editor-in-Chief

The Queen's Tower Lawn has been left in a state of dismay after a group of hungry vegans swarmed onto the field, devouring the majority of the grass.

The incident, which occurred last Monday, was said to have been a targeted strike by the Vegetarian & Vegan

Society (VegSoc), acting both in protest of poor vegan options, and out of sheer hunger. Eyewitnesses describe the event as being "like a horde of locusts, just like in the Ten Commandments, or whatever that movie was called."

Lois Riupérez, Chair of VegSoc, was defiant in his statement. "Yeah, we ate the grass," he proclaimed, "because there's nothing else for us to fucking eat out here! We had the salad bar and they took that from us, so now we're gonna eat all the goddamn

grass here!"

The mass action was sparked following the demolition of the salad bar to make room for a new Business School cocktail bar, and the scrapping of the Meat-Free Mondays scheme proposed by Tania Auditoro, Deputy President (Pine Nuts & Lettuces). "This is none of my business," she said, trying to escape a Council meeting. "I tried my best but all these damn carnivores shut it down."

NegaFelix has been inundated with multiple complaints from students

following the event, drawing attention to the quality of the lawn. "It looks like a visual representation of my knowledge," said Sajid Johnson, final year Mechanical Engineering student, "patchy and lacking any kind of substance."

"All I wanted," wailed Samantha Ng, first year Mathematics, "was to sit on the grass with my diverse friendship group, just like in the prospectus! How am I meant to do that now? Imperial has sold me false dreams!"

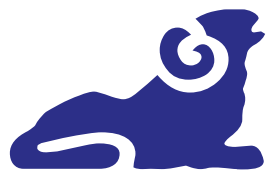
Bureaucrat Supreme of



Oh look, the cows are out to graze // Wikimedia

the College, Candice Last, was said to be pleased with the outcome, claiming it to be firmly in line with the College's New Green Policy. "It's all about the

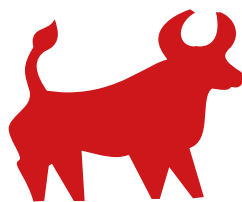
Benjamins, baby," she declared. "Those pesky vegans get their new food options, and I get my grass cut for free! It's a win-win for me-me!"



ARIES

This week you're a company and it's LGBT Pride month.

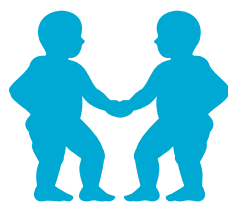
Better unveil that rainbow logo



TAURUS

This week you're Katie Hopkins.

You side with protestors against teaching homosexuality in schools. Your Islamophobia comes second only to your homophobia.



GEMINI

This week you talk about the exam after the exam outside the exam hall

You're a cunt



CANCER

This week you need to stop trying to make "Bev" happen, it's not going to happen!

It is what it is...



LEO

This week you go to the anti-Trump protest.

You throw a milkshake at him and are shot by his security detail.



VIRGO

This week you discover the ultimate limit of human endurance.

Turns out it's listening to someone from DesEng claiming their course is hard. Please put your crayons back in nose.



LIBRA

This week you're DPCS

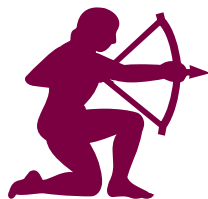
Felix is short on content, but at least they're not desperate enough to beg for your article.



SCORPIO

This week you watch Love Island.

You are the reason the West is in decline



SAGITTARIUS

This week you charge \$999 for a monitor stand

Fortunately, you're Apple and people lap that shit up anyway



CAPRICORN

This week you have your last ever Imperial exam.

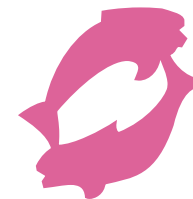
Joke's on you, retakes are in August



AQUARIUS

Tonight is the Union awards.

All these weeks of hangman for nought



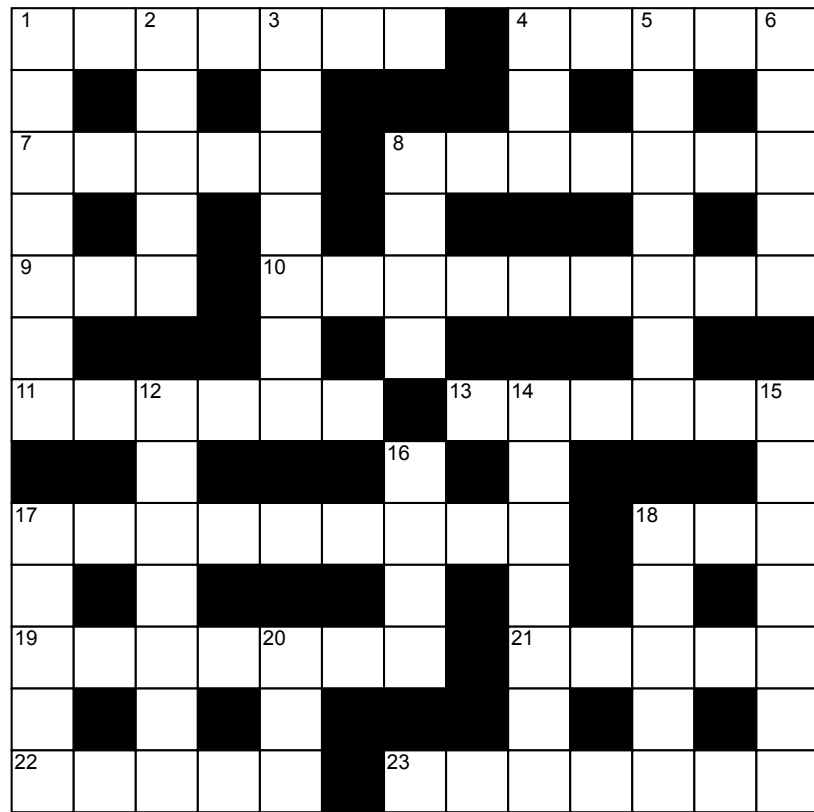
PISCES

This week you hand in your thesis.

Although your degree is complete, you will carry your PTSD with you for the rest of your life.

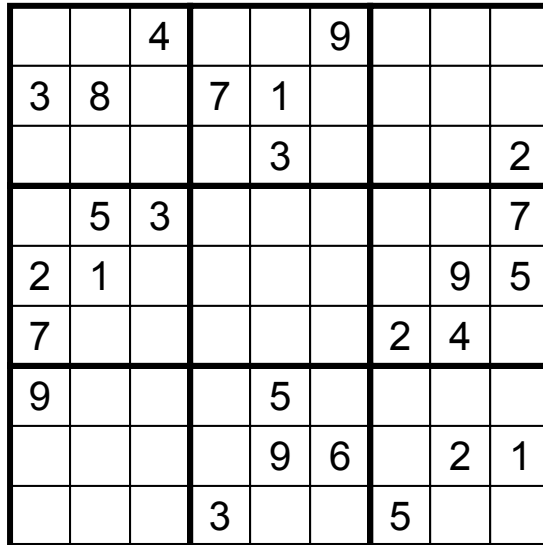
PUZZLES

fsudoku@imperial.ac.uk



SUDOKU

Fill all the boxes with a number between 1 and 9. A number can only appear once in a row/column, and only once in each sub-box.



FUCWIT

1	Trollheim	222
2	DQ	218
3	Yeet Infection	214
4	Maxiane	206
5	O1G	188
6	Wooloomooloo	148
7	Big H's Boys	126
8	Rock, Flag & Eagle	108
9	Computer Magic	107
10	S. B. S.	95
11	Quizlamic extremists	87
12	Luncheon Pals	85

Send your solutions to fsudoku@imperial.ac.uk before Wednesday midday to take part in the leaderboard!

Points available

Crossword	5
Gogen	3
Sudoku	3
Shikaku	2
Nonogram	3
Total	16

Across

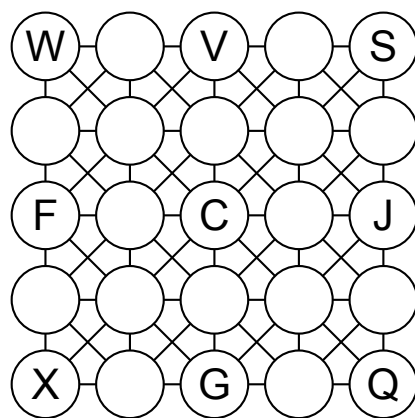
- I forgot what this clue is meant to be (7)
- Brings a stethoscope to class (5)
- Shift down a gear (5)
- Current-carrying loop (7)
- Came to an end in June (3)
- The Spanish one was pretty bad (9)
- Thankfully flows in pipes (6)
- Dippy eggs are cooked this way (6)
- Eurovision country in the Southern hemisphere (9)
- Inferior (3)
- Late afternoon (7)
- Chilly Arctic home (5)
- Contract muscles (5)
- Greek hero a.k.a. Nobody (7)

Down

- Makes an ass out of you and me (7)
- High-maintenance (5)
- Baby tree (7)
- Spoil (3)
- Frequency of waking up (7)
- Just add Panna (5)
- Rim of a sleeve (4)
- Home of Clint Eastwood (7)
- Bricks have this, glass does not (7)
- Questionable (7)
- Fulham Broadway premium night venue (4)
- Pretty good at something (5)
- Huge bucket for grain and missiles (5)
- Solid water (3)

GOGEN

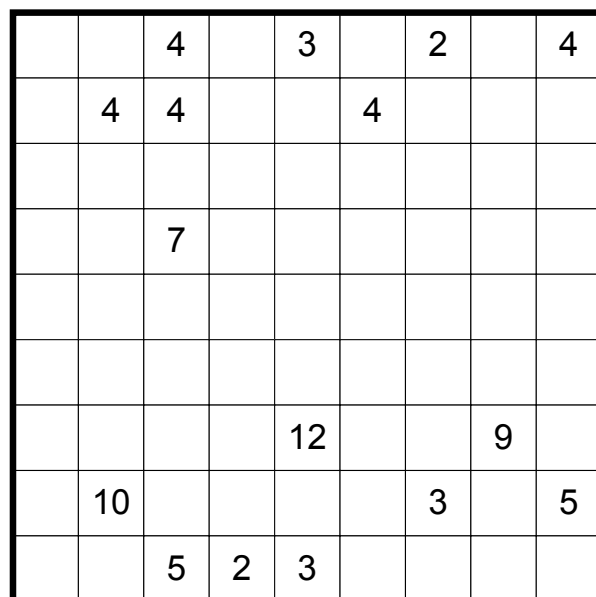
Write letters into each circle to form the listed words. Letters can be linked by moving between adjacent cells horizontally, vertically or diagonally in any direction. You may use each letter in the alphabet only once.



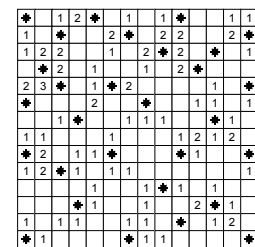
- | | | |
|-----------|--------|-------|
| BINGE | JUICE | STRAW |
| DUNE | QUIT | VARY |
| EXPORTING | SHRINK | |
| FOAM | SLIT | |

SHIKAKU

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



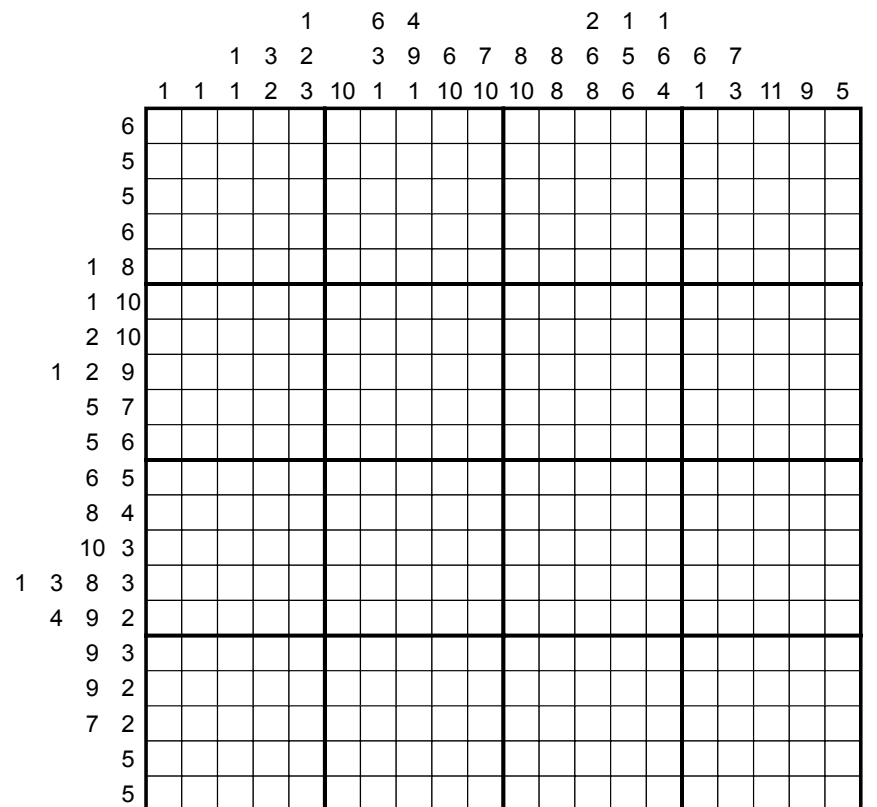
Last week's solutions



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

NONOGRAM

Colour in some of the squares to make a picture. Each number represents a block of consecutive black squares within that row/column. Each block needs to be separated by at least one white square.



SPORTS

sport.felix@imperial.ac.uk

Battle of Battersea

SPORTS

Mihai Vanea

Sports Writer

Saturday 25th May will be remembered as the day when the athletes of Imperial College came together one last time to compete in the LUCA Outdoors series, in the same fanatic spirit that has defined this club in the past few years and made it the LUCA Club of the Year

One of the first events was Shot Put, where Patricia Santos threw 6.01m, making me question whether I should start going to the gym. Our award winning Women's Captain, Charlotte Barratt, and the Athletics Captain, Jack Mitchell, also took part, throwing 6.38m and 6.72m, respectively. Jack went on to take part in the Long Jump, where he registered 4.74m. In the same event, James Weller came third, jumping an impressive 5.32m

Our brave warriors dominated Men's Javelin, as Arthur Jurgenson won the event, followed

closely by Greg Jones, who came second, making people wonder if Aeronautical Engineering students have an unfair advantage in this event. While Olivia Papaioannou came within a few inches from winning the event, she kept fighting throughout the day in three other track events.

One of the club's living legends, Raul Rincken, won the Discus, throwing an impressive 39.6m, while Nnaemeka Anyamele threw 30.15m to come fourth. Marta Van Ginkel and Maryna Voloshyna also took part, throwing 17.57m and 16.55m respectively.

Moving on to track, it has to be said, Imperial caused quite a lot of damage. In the 100m sprint, Will Fisher won his heat by running 12.03s. He also did the 200m in an impressive time of 24.70s. Alex Mundell absolutely crushed the 400m sprint, leaving her opponents four whole seconds behind and finishing the race in 61.41s. This race left a few people confused, as they thought she was running by herself. Alex also claimed third place in the 200m,

running an impressive 28.27s, reminding the other London universities that she's "tiny but mighty". The day saw Niki Faulkner take on the 400m race as well, running in heat 1 with mostly 100% fast-twitch muscle fibre boys that probably spend too much time in the gym. He did not disappoint, finishing the race in 53.38s, a time that makes any so-called "sprinter" pretty damn jealous.

One of the most exciting events was Men's 800m, which saw James Millett tactically win by a few inches. James let his UCL opponent dictate the pace throughout the race, only to bite in the last 20m, just like an oily snake. Millett took home the gold medal for the athletics championship and also won the 1500m gold medal, ranking him third in the LUCA Outdoors MVP standing. These two events made us realise James has got quite an extraordinary fan base among UCL students, as most of them were shouting "Go, Hugo! Go!"; very personal too, as they knew his middle name. Thomas Bayley



Fast start in the Men's 1500m // Geoff Lowe

and Fergus Johnson also took part in this race, clocking 4:14 and 4:42 respectively.

The 5000m saw a few Imperial athletes running twelve and a half laps in the scorching sun. Female Athlete of the Year, Georgia Curry, claimed gold after finishing the race in 17 minutes and 59 seconds; dabs were included. Alix Vermeulen came second with a time of 19:07 and Nina Rimsky finished in 23:44. The boys put up a good fight in the heath as well, with Joe Pomfret finishing fourth in 17 minutes and 22 seconds, followed closely by Mihaly Ormay, Matt Ryan, Jim Warren and Jack Teh. Yes, Matt, we know! You beat Jim.

"You guessed it, it's the steeplechase!"

Moving on to some water jump naughtiness... yaas. You guessed it, it's the steeplechase! Our orienteering pioneer, Mihaly Ormay, stormed the race, coming third with a time of 10:58. He was followed by Charlie McFadzean,

who finished the race in 11:02. The Club Captain, Fergus Johnson, also managed to clock an admirable time of 12:07, while veteran Lawrence Kar Tse finished the race in 14:37. The girls did not disappoint either. In the 2000m steeplechase, Chloe Baker came first, with an impressive time of 7 minutes and 43 seconds, placing her third in the league. She was followed by Alix Vermeulen, Olivia Papaioannou, Maryna Voloshyna and Marie Jones.

As the day came to an end, it was time for the race of all races, the one to decide all rivalries, the Medley Relay. Each university put up a team of three men and three women to run with a baton distances of 200m, 400m and 800m. This is the time to take out the big guns. As the race went on, students from every university were cheering and shouting their runners' names at all times, until one moment... The race was very close, UCL and King's were leading for most of the first four legs. James Millett managed to come par with them at the end of his leg, and then it happened. Alex Mundell got the baton and started

sprinting the first 200m just like in her previous race. Students from the other universities thought she wouldn't be able to keep it up, but they could have not been more wrong; not when you have an 800m specialist doing it. The UCL and King's crowds went silent as Alex kept increasing the gap between her and her opponent. Having put in this amazing performance, Imperial College retained their Medley Relay trophy for a second year in a row. Some people claimed that it was not fair, because the 800m legs were a lot more important than the shorter ones and it gave Imperial an unfair advantage. To those people, I have two statements: "Gold is gold!" and "Get better at running!"

That's all folks! This university athletics season saw Imperial College rank third overall, above King's, last year's champions. The Medley Relay trophy and the medals made our athletes pretty happy at the end of the day, some say too happy... and maybe that trophy should get cleaned before handing it over, probably with bleach.



Imperial jump well in the Women's 2km Steeplechase // Geoff Lowe