First published in 1949, Felix is released weekly during term time and is distributed around Imperial's London campuses. All students, staff, and alumni are welcome to contribute to the paper.



Alum appeals to Imperial community after Gaza escape

Dr Nael Qtati's family, including 18 children, remain trapped in southern Gaza as Israel Defence Forces plan Rafah assault.

News Writer MOHAMMAD MAJLISI

Nael Qtati, the Palestinian Imperial alumnus who was forced to evacuate to southern Gaza in October, fled to Egypt in December last year with his heavily pregnant wife, and is now appealing for help to evacuate the remainder of his family, which includes 18

'There is absolutely no formula in Gaza that you can follow and be safe,' he said, outlining his escape in a series of WhatsApp messages during his journey



Nael Qtati's extended family cooking food in November 2023. Nael Qtati

across the Egyptian-Gazan border, and during an interview conducted over Zoom earlier this week.

'You have a choice to either definitely die if you stay or probably die during or after evacuation.'

Qtati, a medical doctor, returned to Gaza to serve his community after completing a master's degree in Health Data Analytics & Machine Learning at Imperial.

He and over a million other Palestinians were displaced during the first few months of the Israel-Hamas war, as the Israel Defence Forces (IDF) pressed into northern Gaza, and moved progressively further south in → READ MORE ON 8

Students demand referendum, calls to scrap new logo gain traction



New banners appeared have on Dalby Court over

NEWS

'Imperial is a teenage maths tutor', declares new College brand guidance



Yes, the website really says that.

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SCIENCE

Reflections on Casgevy



The world's first CRISPR-based gene therapy drug. → READ MORE ON 12

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Felix guide to London bookshops

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Why the world doesn't revolve around you



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Join our weekly newsletter by scanning the QR code below:



felix_imperial felix@ic.ac.uk







DECLARATION

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 I, the Felix Editor, on behalf of the team promise that:

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

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

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

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

Signed by: **JAMIE JOHN** Editor-in-Chief

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EDITORIAL

Help evacuate Nael **Qtati's family**

his week, our front-page story covers the plight of Dr Nael Qtati, an Imperial alumnus who was forced to flee the tragedy unfolding in his homeland of Gaza, so that his wife could give birth to their daughter.

We first covered Qtati's story last year. Upon graduating from Imperial in 2020, he moved back to northern Gaza. He was living with his family there until the 7th October attacks on Israel last year.

Israel's subsequent retaliatory attacks forced Qtati to evacuate his home, and move south. His words painted a picture of the appalling circumstances that he, his family and other Gazans faced - a struggle to find food, water, and electricity in the day was replaced with the sound of bombs in the night.

In a second article, Qtati described the runaway inflation in Gaza caused by supply shortages, and the squalid conditions people were forced to live in, with 50 to 60 people to a single

To this point, we had relied on

Qtati's messages to the Friends of Palestine group chat - our initial attempts to contact him were in vain, because of the volatility of telecommunications in the Gaza

In December, however, we were able to reach him, beginning an exchange that would culminate in a 20-minute interview, and this week's cover story.

Qtati's desperation was apparent in the early WhatsApp messages he sent to us. He described his difficulty in finding fuel for the journey to Egypt: "During the pause, I had to sleep (with other hundreds of people) in front of the fuel station for four days to get some fuel for my car. I couldn't get any fuel and now I have my car parked and running errands on foot or a donkey and a cart if I'm lucky."

Qtati, his wife, and newborn child are now safely in Egypt. But his family remains scattered across southern Gaza - in Rafah, Khan Yunis, Deir al-Balah and elsewhere - as the IDF plans its assault on Rafah, part of an attempt to eliminate Hamas after its

terrorist attacks on Israel last year.

Qtati has started a GoFundMe page to help evacuate his family, consisting of 18 children and seven adults.

'The situation in Gaza deteriorated rapidly,' he writes in a harrowing message on the page. 'My family, who were assured safety upon their evacuation to Rafah in the South, now find themselves in the midst of relentless bombings. The promise of safety has been shattered, and the fear of a ground invasion looms over them.'

This war has caused so much suffering over the past few months in Israel, Gaza, and across the world. At its heart are families like Qtati's, caught in the crossfire, struggling to make it from one day to the next.

If you would like to support Qtati in his attempts to extricate his young family, you can scan the QR code on this page. Before you donate, please ensure you read GoFundMe's terms of service, at https://www.gofundme. com/c/terms.



Link to the GoFundMe page in Otati's name



Link to GoFundMe's terms of service

NEWS

Students demand referendum as calls to scrap new logo gain momentum

Imperial has also deleted an Instagram post unveiling the logo after fierce criticism.

Editor-in-Chief JAMIE JOHN

mperial struggled to contain the fallout from its decision to change the university logo, as students demanded a referendum and overwhelmed the College's social media pages with a barrage of criticism.

The university deleted its first Instagram post unveiling the new logo just a day after uploading it. A comment under the post reading 'use me as the dislike button' had racked up over 700 dislikes in the hours before deletion. The post itself had gained around 1,400 likes.

Students, staff, and alumni have rallied against the change, and a petition opposing it has now gained over 4,700 signatures. Imperial's own survey on the new brand received 350 responses.

Last Friday, Elephes Sung, a postgraduate student, wrote to President Hugh Brady calling for 'a voting process regarding the new logo,' saying this 'would ensure all voices are heard, and that the decision reflects our collective sentiment.'

247 of the 289 respondents to a poll on *Felix's* Instagram page – over 85% – said they were in favour of the proposal, and Sung's comments were supported by Anaya Jaffer, the second-year Mechanical Engineering student whose petition on the logo has now received over 4,700 signatures.

Felix understands that students have contacted the Union to discuss tabling a motion opposing the logo for the next session of Union Council, on 19th March.

Times Higher Education published a piece on the new logo last Friday, featuring comments from Imperial UCU, the trade union branch representing academic staff at the College. A spokesperson from the group said its members

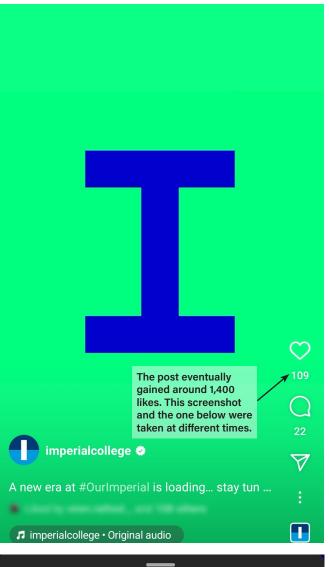
were upset at the removal of the words 'College London' from the logo, which contains only the word 'Imperial'.

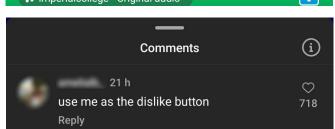
"Several members are concerned with the pejorative historical connotations associated with this word, and do not believe it represents the global, forward-thinking image they believe the institution should be promoting," the spokesperson explained.

The brand project team said last week that it would 'take any opportunity to hear what people think, to listen, and to answer questions.'

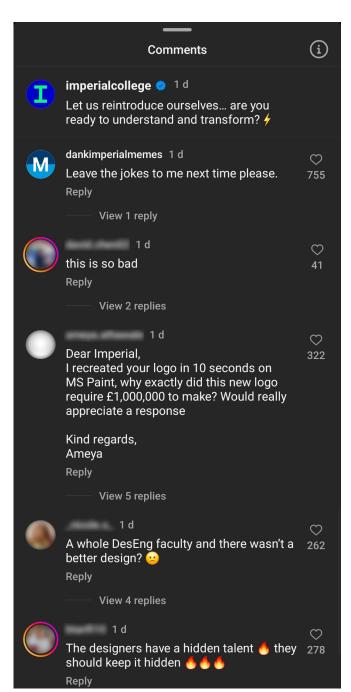
Imperial provided project updates in a video, on its website, and through a series of emails. But students and staff say they were not aware of the new logo until this week, because none of the emails explicitly mentioned the logo or contained images of the changes.

A brand project spokesperson said that the new brand "articulate[s] Imperial's purpose and vision, our strengths and impact, while seeking to differentiate us in a crowded and competitive landscape."





Imperial uploaded the post above on Monday, but it became a focal point for criticism, and was taken down a day later. A comment under the post reading 'use me as the dislike button' gained 718 likes.



Comments under Imperial's second post on its brand project, which at the time of writing, remains up on the College Instagram account.

'Imperial is a teenage maths tutor', declares new College brand guidance

Yes, the website really says that.

Editor-in-Chief JAMIE JOHN

mperial has issued guidance on how its new brand should be used, featuring descriptions of its 'language persona' ('The Science Storyteller'), 'brand archetypes' ('Sage', 'Explorer', and 'Artist'), and advice on creating promotional material.

'Imperial is a nursery school, a teenage maths tutor, and an executive education programme,' says a section outlining the university's 'narrative'.

The website originally suggested that use of Imperial's crest in full colour was forbidden but appears to have been hastily updated following an email from Felix on Wednesday.

Until then, the guidelines said that

ARTIST

degree certificates, sports kit, merchandise, and all other branding using the coat of arms 'must be used in Imperial Blue, white or black'. The written guidance was accompanied by an example of a two-coloured crest.

In 2020, Imperial stopped displaying its motto ('Scientific knowledge, the crowning glory and the safeguard of the empire') on the crest, amid increased scrutiny of its links to British Empire.

Elsewhere on the brand guidance

website, a section expounding Imperial's 'desire to truth', pursue 'What's that mould in my petri dish?'. The question is one of four that Imperial's website claims reveal 'the challenges, and even the triumph of our entire species'.

Another section presents the College's two colour moods, with suggested pairings. 'Mood 1' is 'Calm, Scientific, Trustworthy', and 'Mood 2' is 'Bold, Forward looking'.

A spokesperson for Imperial's brand project said: "Building Imperial's brand will help us attract the best talent, funding and partnerships and strengthen our global reputation and ranking. Ultimately, it will help us compete on a sustainable basis in the very top tier internationally.

"We have developed a modern, confident, and expressive visual and verbal identity, rooted in our science heritage. Both elements articulate Imperial's purpose and vision, our strengths and impact, while seeking to differentiate us in a crowded and competitive landscape.

"We are grateful to all the staff, students and alumni who contributed to the development of this brand work. The level of engagement was testament to our community's ambition, creativity, diversity and commitment to Imperial's future." Scan the QR code to read the guidelines in full.



Pick your fighter (screenshotted from College brand guidelines).







https://brand.imperial.ac.uk/document/25#/verbal-identity/our-narrative



The challenges, and even the triumph, of our entire species can be found in a few simple questions:

- How did we get here?
- How do we make a vaccine?
- What do we do to avoid climate breakdown?
- What's that mould in my Petri dish?

If we turn a question like that on ourselves - who, or what, is Imperial College London? - we might make any hypotheses based on the evidence before us.

One answer is that Imperial is a research university.

We know this because there are students and academics. There's a Provost, a President and Vice-Presidents books and desks, labs and measuring equipment. It's a place of higher education that conducts research and degrees in Engineering, Medicine, Natural Sciences and Business.

But it is more than that. Just look...

Imperial is a nursery school, a teenage maths tutor and an executive education programme.

We're not just teaching the 'leaders of tomorrow'. We're nurturing the leaders of right now, and a few decade

The College's branding guidance includes this image, a wheel of psychoanalyst Carl Jung's 12 'brand archetypes'. Tag yourself, Imperial is 'Sage', 'Explorer', and 'Artist' Imperial College Union

INNOCENT

HEBO

'Imperial is a nursery school, a teenage maths tutor, and an executive education programme,' says a section outlining the

Your thoughts on the new logo

This week we thought we'd share some of the reasons people gave for signing the 'Stop the new Imperial logo' Change.org petition.



New logo looks fucking horrific

♡ 23 · Report



The new logo is meant to better represent imperial - and it removes all mention that it's a university? All that's left is the empire

Alex Cunningha

terrible. Please make it stop.

MSc Exploration Geophysics (1988). The new logo is

rob white

 \bigcirc 2



I have eyes

Yizhuo Zhang

fees

If the union president wants to make an impact.



Dropping 'London' and 'College' strikes me as desperate to be different for the sake of it. I don't see the need for change, as the previous logo was only about 20 years old.

goofy as hell

♥ 11 · Report

Particle ✓ 1 week ago



It makes my eyes hurt, and not just because it is ugly. The colour choices make accessibility hard for those with visual impairments





Member of staff. Embarrassing, 90s style design, yet focusing on Empire connotations of the College. Waste of money when they're fighting cost of living increases in pay. Comes after much of the new signage for White City is done.





Yitang Chen

Jeremy Ghinn · 1 week ago

I wouldn't doubt it if you told me it's a symbol for Palpatine's regime.

ridiculous that the only announcement they

♡ 2

Imperial has negative connotations that should not be the sole focus of College's identity. I feel London is an important part of the College identity, and Science and Engineering focus is the College's USP (almost unique in the UK) and its inclusion would be a much better goal of the refocusing of College identity.





Kennedy Nakar-Müller

21 hours ago

Unnecessary, unsolicited and dull logo. Almost as baffling as allocating funds towards erecting the statue!

Please reconsider



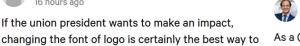


Florian Guitton

made was a brief clause (not even a full sentence!) in the provost's new year newsletter, that barely anyone would read. so so so misleading - "Top among these will be the launch of our new institutional strategy, supported by our new brand." imperial really does have a terrible track record at asking the imperial community for feedback before making terrible "artistic" changes (e.g. the Mother Earth mural, ALERT statue, and now this)

I know everybody simply says "I work at Imperial" or "I studied at Imperial" ... but it doesn't, by any mean. provide a license to strip the identity of this institution from its core feature: It is a College before all! You wanna drop a word? ... drop "London" ... Literally nobody says it! I wish people also reflected on the laziness of this "rebranding" and its execution, the assets of which could be copied and pasted from any randomly chosen "Select your pre-designed template" website.

 \bigcirc 5



As a (former) member of the academic staff, I see this achieve this, also making use of our increasing tuition as a downgrade because of 1) spending great resources and time to end up with something trivial, and 2) focusing on Imperialism, dropping the other words, which is bad.

> market, I don't think my future employer who might be a bit less familiar with Imperial likes the new logo when

D Chang

21 hours ago

they see it on my LinkedIn profile.



Ben Shin 21 hours ago

How much money went to this subpar rebranding, and how much is being put into resolving issues on campus like rats, broken heating resulting in 12C temp in SEC, and tackling the cost of living crisis?

As an Imperial alumnus who is currently on the job

 \bigcirc 5



Hollie F 24 hours ago

Didn't realise Darth Vader was working as a graphic designer these days, but good for him- with a logo this ugly, the empire is certainly striking back! Ridiculous to remove the 'College London' part, out of context, this genuinely looks like it belongs to a tech company that specialises in creating gear for the Death Star. Uni of Southampton went through a similar debacle about 8 years ago, so IMPERIAL can't be considered to be trailblazing in that regard, either.

♡ 2

NEWS | **7**

1 MARCH 2024

How 'Al' (all in) are you on Al?

Dr Julie King on AI and how Imperial's Centre for Academic English can support you.

Director of the Centre for Academic English JULIE KING

ill generative AI transform academic communication? Almost certainly. But what will this transformation look like? Now, that's far harder to predict. There is nothing inevitable about how AI will be used within universities, who will determine its legitimate use, and who will benefit. We cannot be sure that generative AI will make the world easier or fairer. However, we can be sure that the need for effective communication will remain. And as George Bernard Shaw so beautifully expressed it:

The single biggest problem in communication is the illusion that it has taken place.

Communication depends so very much on people at the end of the day, and whilst it certainly depends on the words we use, it also depends on how we connect with each other as humans. Communication includes how we understand the world, how we find our place within the world, how we create and express our identity in different contexts, and how we bring about change. If we stop valuing communication, it's hard to see how our lives will be easier.

Effective communication is crucial to academic success and is not achieved by generating a grammatically correct text alone. A grammatically correct sentence does not guarantee clear, effective communication. The example sentence below follows grammatical rules, but do we know for certain which item the writer is identifying as toxic and environmentally unsafe?

Substrate B can be isolated with good yield from crude extract or the acid precipitate from the synthesis of raziline, which is somewhat toxic and is environmentally unsafe.

(http://bio-text.com/ThatWhichb.html, accessed 29/01/24)

I'll let you consider the implications of such types of ambiguity, and other fears that exist around AI creating scientific texts that cannot be trusted.

While everyday tasks at Imperial may become

increasingly moderated through generative AI technologies, you, the writer, still need to know what you want to communicate, and be sure that you've communicated it in the way that you wanted to communicate it in the first place. Communication is far more than a set of skills that can be left to an algorithm.

And yes, I would say that, wouldn't I? After all, I'm a specialist in academic communication whose career could be in jeopardy if some of the more extreme takes on generative AI were to be realised – such as the notion that writing and communication skills will become redundant if they can be automated. I am, however, far from convinced this will happen.

I feel a productive step is to ask what effective communication actually means. There are technical aspects: it's hard to imagine that the ability to explain information clearly and concisely, in a way that speaks to the expectations and values of the audience, will ever not be a good thing. But there's more. Think about your time at Imperial: what types of communication matter, and when? What skills did you not realise you had, or realised too late were expected as obvious features of being a good student and researcher?

The Centre for Academic English (CfAE) team are a trusted source who support you throughout your degree. We are here to help you in your endeavours to improve your academic communication to get the grades you deserve and to set you on a path towards a successful career. And we really mean it – as only humans can.

I personally find supporting students and researchers to become effective communicators a challenge, but an exciting one. I've been teaching and researching academic communication for around thirty years. I still feel there is so much more to learn, including how AI can support a person's academic communicative competence but not undermine their unique academic voice, their individual academic identity, or their personal agency.

We have online self-study learning blocks which help you build your own personalised learning pathway, live sessions where you can practise your communication skills and receive targeted feedback, a weekly 'CfAE Lab' where you can come for some quiet space to write and be supported by CfAE tutors via informal 1-1s, as well as bookable online 1-1s with our tutors for advice and guidance on any aspect of academic communication.

Anyone can be an effective communicator, but this requires time, patience and commitment. My team have been working on an entire review of our provision to make it more helpful for each of you as individuals and



Dr Julie King is the Director of the Centre for Academic English. which provides College members with support reading, writing, and listening, so that they can improve their academic

to provide you with the support you need when you need it. This is a work in progress developed in collaboration with student partners through StudentShapers projects and by incorporating the suggestions and feedback we receive. Our work is driven by who you communicate with and what you need to say. Your voice will always matter and we are here to help you shape what you want

Finally, I'd like to leave you with something the late Jim Rohn said about communication and human

If you just communicate, you can get by. But if you communicate skilfully you can work miracles.

And whilst that sentence might have made some of you cringe, you know that he created it, he meant it, and you understood his intention and responded.



Scan to learn more about the **Centre for Academic English**

its attempt to rescue hostages and destroy Hamas.

Over 29,000 people have been killed in the IDF's attacks on the Gaza Strip. They came in response to the 7th October terrorist attacks on Israel, in which more than 1,000 people were killed by Hamas.

Qtati says he has lost two cousins, and 'my dear friend and fellow Chevening Scholar who studied at King's College London, Dr Maissara Alrayyes.'

'As I champion the values of global health and peace that were instilled in me during my studies, I now call upon the global com unity to help us in our hour of need.

'We are seeking £30,000 to cover the costs associated with crossing the border into Egypt where safety awaits us. Every penny donated will directly fund the travel and legal expenses required for our safe passage.

'Your donation can change our lives.' His plea comes as Israel plans a ground offensive to eliminate Hamas from Rafah, the small southern city in Gaza where 1.5 million Palestinians are sheltering. The US, a key ally of Israel, has said that a military operation in Rafah would be "a disaster" without proper planning that "puts civilians first".

Qtati says he realised had to leave Gaza in December. "My wife was about to give birth and there were no hospitals in any city [able to take care of her]."

With no official means of evacuation, he relied on a friend in Egypt to book an evacuation service with Ya Hala, one of several companies helping Gazans escape. In the early hours of 18th December, he received a call telling him that he had to be at the border for 7am.

He struggled to communicate with his pregnant wife, who was staying elsewhere at the time, but was eventually able to reach her.

They collected what remained of their belongings ("we took very little to Cairo,

only what I had evacuated from my home safe. in [northern] Gaza") and using a small portion of fuel that had been saved, were driven to the border by Qtati's brother.

Qtati and his wife are now safe in Egypt, and his wife has given birth to a healthy girl. But his extended family – including 18 children, six of his adult siblings, and his mother - remain trapped across the southern Gazan cities of Rafah, Khan Yunis, and Deir al Balah.

He says he struggles to contact them, because "the telephone is down most of the time. On a daily basis I maybe try to call 30 to 40 times just to secure one call. 30 times every day, different numbers... if I'm lucky I get to hear their voices."

A few days ago, Qtati says a bombing occurred near to his family's shelter, and he feared the worst. "You don't assume that the telecom is down like usual, you assume that they could be the target."

Nearly a full day later, he was able to speak to them and learnt that they were

"There are no services, no ambulances, it is actually possible that you can be under the rubble for days, that you can die, and no one can do anything about it."

Adding to the problem are soaring food prices: "If my family want to cook a traditional dish, it used to cost 10 to 15 dollars, now it costs 80, 90, or even 100

"The most insane part of this is the bombing of hospitals and healthcare institutions. The place which is supposed to be a safe haven for people is being

Qtati says the Gaza Strip has become unrecognisable, characterised by death

"I see the streets I used to walk in and drive through every day, and I can no longer identify them. Gaza has been

£2,559 raised of £30,000 target

Anonymous

Anonymous

See all

£10 · Recent donation

£200 · Top donation

£50 · First donation

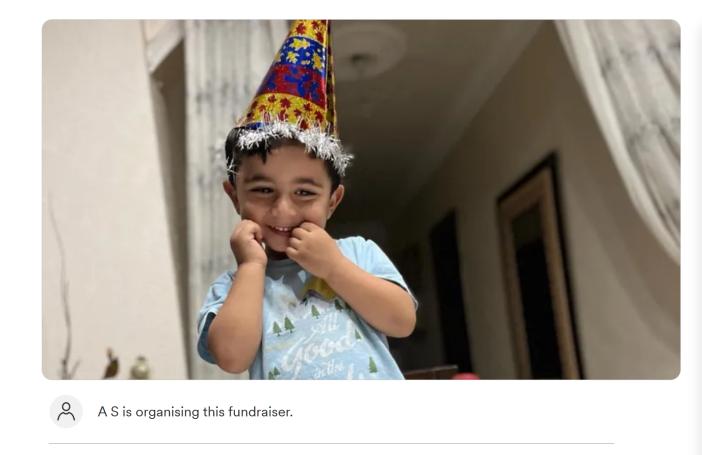
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96 donations

Сору

Qtati Family Evacuation from Gaza

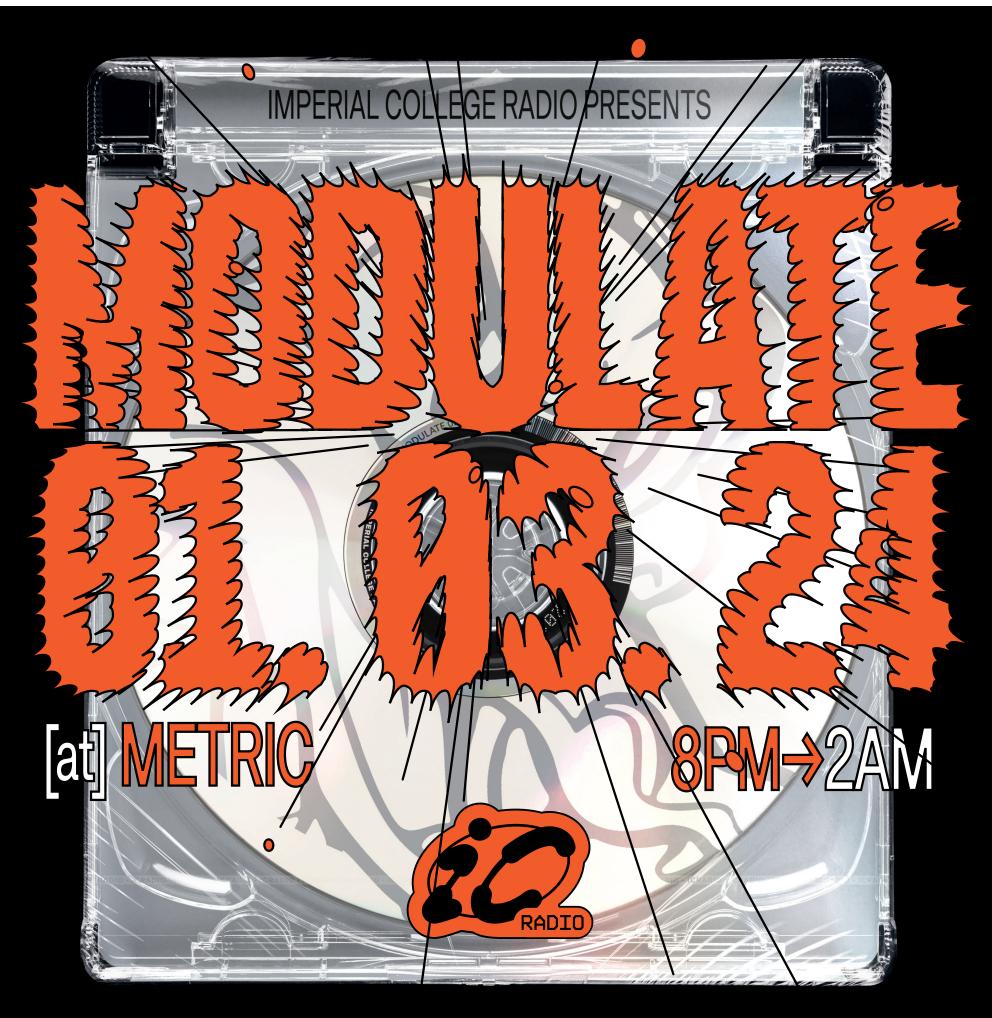


Created 7 d ago · 🥠 Emergencies

Support Dr. Nael Qtati's Family Evacuation from Gaza

Hello, my name is Dr. Nael Qtati. I'm reaching out to the global community in a plea for A screenshot from the GoFundMe page in Qtati's name. GoFundMe, accessed 29/02/2024











VOLUNTEERS WITH ASTHMA NEEDED

To compensate you, up to a maximum of

£1,800

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Volunteers with ASTHMA needed

We are looking for volunteers aged 18 years and above with asthma who use only 'as required' short-acting inhalers to participate in a medical research study at Imperial College London.

The study has been reviewed by an independent Research Ethics Committee and the Medicines and Healthcare products Regulatory Agency (MHRA).

To compensate you for your time and travel expenses, up to a maximum of £1,800 will be offered for completing all stages of the study.

If you are interested, please contact our research team for more information.

Telephone: 07938737992, 02033125750 E-mail address: imperial.maelaba@nhs.net

SCIENCE

Casgevy: the world's first CRISPR-based gene therapy drug

Genetic engineering opens new avenues for blood disease treatment, but is it viable? Felix explores the intricacies of this treatment.

Science Writer TEJAS GUPTA

ver since its inception in May 2012, the CRISPR-Cas9 technology of gene editing has gained great traction. While many lauded it as the most capable method of treating severe genetic diseases affecting millions worldwide, scepticism on the ethics and safety of the technology rose in tandem, and the use of the technology was never permitted except in experimental cases.

In November 2023, the UK Medicines and Health products Regulatory Agency (MHRA) became the first regulatory body in the world to grant approval to the drug Casgevy, a CRISPR-Cas9 based therapy for the treatment of the deadly genetic diseases β -thalassaemia and sickle cell anaemia. Developed by the pharmaceutical company Vertex Pharmaceuticals, based in Boston, and the biotechnology company CRISPR Therapeutics, based in Zug, Switzerland, the therapy aims to provide relief from the debilitating pain and constant need for blood transfusions caused by these diseases.

 β -thalassaemia and sickle cell anaemia are both diseases caused by underlying problems in haemoglobin, the body's oxygen-carrying molecule. In sickle cell anaemia, the production of abnormal haemoglobin leads to misshapen and sticky red blood cells. These can form clumps that clog blood vessels and reduce oxygen supply to tissues, leading to severe episodes of pain (pain

crises). On the other hand, β -thalassaemia causes low levels of haemoglobin in the blood which can trigger fatigue, shortness of breath, and more serious complications such as an irregular heartbeat.

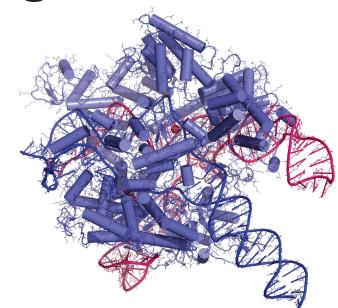
Casgevy's premise is to harness the power of gene editing using CRISPR-Cas9, and alleviate the suffering and pain that these diseases cause. It does so by making use of an enzyme called Cas9, which has the ability to cut DNA at certain sites. A snippet of RNA (guide RNA, or gRNA for short) is used to guide Cas9 to a specific site within the genome where it is required to make a change. The changes can either be made by deleting specific DNA that is unwanted or associated with causing disease, or by rewriting entire sections of DNA by introducing an artificial template strand.

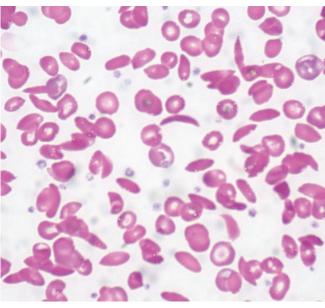
11

Casgevy's premise is to harness the power of gene editing using CRISPR-Cas9 and alleviate the suffering and pain that these diseases cause.

In the case of Casgevy, the treatment removes stem cells from the bone marrow of afflicted individuals. These are cells that are undifferentiated, and from which all other specialised cells of the body form. CRISPR-Cas9 is used to edit the genes coding for haemoglobin in these cells; in particular, the BC11A gene – which prevents the formation of foetal haemoglobin – is targeted. The DNA coding for this gene is cut using CRISPR-Cas9, which disrupts gene function and unleashes the production of foetal haemoglobin. This is haemoglobin that does not contain the same abnormalities as that of sufferers of β -thalassaemia and sickle cell anaemia and can help treat them and restore normal haemoglobin function.

The approval of the therapy came only after the MHRA declared that 'promising' results from clinical trials were obtained. For sickle cell anaemia, 29 out of 45 trial participants were followed for long enough to draw results. Of those 29, 28 were completely relieved of





Top: three-dimensional structure of Cas9 Bottom: peripheral blood smear with sickle cells. Elena I Leonova (CC BY 4.0), Ed Uthman (CC BY 2.0)

pain and other symptoms one year after the therapy was administered. In the case of β -thalassaemia, on the other hand, 42 out of 54 trial participants were followed for long enough to draw results. Of those 42, 39 had no need to undergo blood transfusion a year after treatment. The other three participants saw their frequency of requiring transfusion reduce by 70%.

While the side effects of the therapy are minor – ranging from nausea to fatigue – several scientists, including Dr. David Rueda from Imperial, warn that the usage of CRISPR-Cas9 in therapies such as this often causes unintended genetic modifications, which can have severe consequences. For now, though, cautious optimism seems to be the prevailing mood on the issue.

igratory species are defined as populations of species that move cyclically and predictably between geographical regions, according to the Convention on Conservation of Migratory Species (CMS). The CMS, or Bonn Convention, was established in 1983, and documents endangered terrestrial, avian, and aquatic migratory species.

The organisation recently released a report on the global state of migratory species, which emphasised the ecological and cultural significance of these species, as well as the impact that climate change is having on their migratory patterns. The report states that, of all CMS-listed migratory species, 20% are under threat of extinction and the populations of 44% of them are in decline. Although these numbers fall roughly in line with the estimated figures for extinction risk and population decline in all species, the high ecological and symbolic of migratory species makes their endangerment a matter of particular concern. Migration enables more widely spread pollination and seed dispersal, the seasonal arrival and departure of these species often holds cultural significance, and they are key in maintaining the integrity of multiple

Changes to local climate patterns have been identified as a driver of population decline and increased extinction risk

food chains along their migratory routes.

in migratory species. One example is the direct effect of temperature on sex determination in sea turtles: one study found in its sample population that 87% of adult turtles were female. Habitat loss due to climate change indirectly

migration, with an example being the decline in dugongs owing to a reduced frequency of seagrass meadows, one of their primary food sources.

Climate change also induced migration in some non-migratory species, its inextricable link to decreasing biodiversity. This is compounded by the disruption caused to migratory corridors due to rapid urbanisation and population declines from hunting in the past. Local climate warming effects such as 'urban

heat islands' keep birds comfortable in their summer locations for longer - delaying their migratory cycles and in turn disrupting their breeding patterns while overfishing and incidental catches additional pose threats to the num-



bridge-development projects. Some

cases have even shown birds to prefer

flying over these bridges rather than over

Ecoducts can be highly effective at supporting the preservation of migratory species, especially in places where migratory routes are well known, such

> as for reindeer in Sweden, or bobcats and cougars in the US. However, this is only one aspect of a complex issue, and the problem remains that increasing pressure

from local climate-change effects could quickly become critical for the migratory patterns for some species. The CMS report outlines priority actions under five key areas: habitat preservation, tackling overexploitation, environment pollution reduction, climate change mitigation, and legal protection for endangered species. Most of the recommendations revolve around the monitoring and recording of migratory species and their movements, as well as enforcing conservation practices and lessening the impacts on animals from human activities.

For anyone interested in ecology, conservation, or climate change, the CMS 'State of the World's Migratory Species' report is a fascinating read and covers a wide range of case studies from all over the globe.



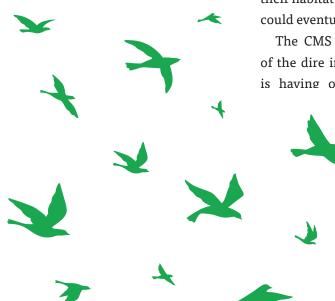
WITH ZANNA BUCKLAND

Moving with the heat

with local warming driving movement to higher altitudes and more northern latitudes. Mountain-dwelling pikas in North America and Asia are sensitive to warm temperatures and are expected to relocate to higher, cooler grounds over time. However, if this migration occurs at a slower rate than global warming, their habitat range could shrink and they could eventually die out.

The CMS report is a fresh reminder of the dire impacts that climate change is having on the natural world. and bers of migratory aquatic species such as whitetip sharks.

Wildlife crossings, which have been gaining traction in recent years, are one viable solution to the fragmentation of wild areas by roads and railways. These bridges provide a safe pathway for animals (and humans) to avoid cars and trains. Wildlife crossings have been majorly successful, particularly in Europe and North America, with one of the longest being Natuurbrug Zanderij Crailoo in the Netherlands. which opened





COMMENT

The role of psychiatrists in reducing stigma

Rethinking our approach to LGBTQ+ patients seeking professional help

Comment Writer GAYATHRI THIVYAA GANGATHARAN

o be Othered - stigmatised, exiled or discriminated against - is fundamentally an experience of rejection. From an evolutionary standpoint, being rejected from a social group is a threat to one's survival. Unsurprisingly, stigma, an insidious form of rejection, creates severe physiological distress, which manifests in poor mental health. For LGBTQ+ individuals who experience queerphobia, the devastating impacts of dehumanisation can be seen through disproportionately poor health outcomes; queer people are nearly twice as likely to experience poor mental health, self-harm and suicide compared to cis-heterosexual individuals, as stated in the 2016 Youth Chances report. Tackling this mental health crisis in queer populations requires a comprehensive understanding of the sources and effects of queerphobic stigma - both interpersonal and institutional. First, we can ask: how does anti-queer stigma lead to poor mental health?

Tracing Stigma, Facing Stigma

While it is easy to see the causative link between queerphobic hate crimes and their potentially traumatic impacts on violated individuals, the poor mental health outcomes we see in queer populations are not exclusively based on single episodes of physical violence. Instead, the causative factors are chronic and often covert across the queer person's lifetime. To explain the insidious nature of this stigma, let's briefly

examine Europe's history of queerphobia.

A genocidal drive to systematically 'cleanse' queer people from society was present throughout Western history. Countries have done this via ecclesiastical laws, the criminalisation of homosexuality, and even the weaponisation of psychiatry - through pathologising queerness as a mental disorder. Since the redaction of Section 28 and declassification of homosexuality from the DSM, the governance of sexuality has stopped being a matter of state. Heteronormativity and queerphobia have further served to reinforce mainstream institutional queerphobia as seen in the media and education (including medical education). Furthermore, the threat of legal imprisonment, psychiatric isolation, and social exile have served to violently deter

Stigma creates a lifetime of negative impact on the queer individual

Consequently, queer self-expression becomes threatening to one's survival amidst a cis-gendered heterosexual society. The threat of exile, physical violence and an unaccepting world become constant stressors. Queer people are thus forced to sacrifice their authenticity for connection, and constantly be on survival mode while hiding their queerness – not only from others, but sometimes even from themselves. This not only creates a severe sense of isolation, but denies connection with other queer people. Moreover, the 'mismatch' between one's inner self and the external, heteronormative world, worsens internal distress.

This 'mismatch' and confusion can start at an early age. Societal and familial erasure of queerness means

that the queer person often grows up without adequate language to describe their own feelings. Suppression and 'correction' of these feelings by primary caregivers can further this sense of internalised dissociation.

This, coupled with internalised homophobia, can cause self-hatred and distress. Effectively, the developmental absorption of societal norms means that the queer person cannot escape their constant proximity to rejection from society.

Collectively, the cumulative microaggressions the constant vigilance of rejection, the self-directed queerphobia, the perceived and received external queerphobia, and isolation - foster poor mental health in the queer person. Thus, we see that stigma creates a lifetime of negative impact on the queer individual, their relationships with themselves, others, and even other health professionals. This leads to catastrophic impacts observed through severe health inequalities. How, then, can the psychiatrist start to attempt to tackle this expanse of stigma?

Silence is Violence

Let us start with the first interaction with the patient: in the consultation room. To create a stigma-free clinic room, we must recognise and tackle the bidirectional barriers that both the queer patient and the psychiatrist bring, as a direct result of stigma.

For the patient, previous experiences of discrimination, both within and outside of healthcare, may predispose them to expect queerphobia. Safety-driven scepticism about the doctor's trustworthiness may lead to them foreclosing key health information, especially given psychiatry's historically violent approach to 'managing' queer patients, such as with conversion therapy.

The psychiatrist is not immune to the impact of anti-queer stigma either. As member of a queerphobic medical society, the psychiatrist must contend with their own internalised queerphobia. Alongside this, the psychiatrist may also face the challenge of feeling underprepared to support queer patients, given the medical curriculum's stigma-driven systemic neglect in

addressing queer patients' needs.

To break down these bidirectional barriers created by queerphobia, it is vital that the psychiatrist's tackling of stigma starts within - through critical self-reflection and self education. This will enable the psychiatrist to create a non-judgemental space and help support the patient in trusting it. Moreover, mirroring the patient's self-descriptive language can help the patient feel that their hidden identity is being seen. It is not the patient's responsibility to educate us; however, it is appropriate to be sensitively curious and actively ask about it while acknowledging the unique struggles of being queer, particularly amidst the patient's unique intersections - such as migratory history, class, caste, ethnic group. 'Tackling' stigma in the clinic requires actively compensating for the historic anti-queer violence associated within these same psychiatric walls. Thus, starting with the creation of a safe space is paramount. Once this safe rapport has been built, and the psychiatric history taken, then, what can the psychiatrist do next?

Previous experiences of discrimination, both within and outside of healthcare, may predispose them to expect queerphobia

Following the creation of a stigma-free clinic space, the psychiatrist must critically challenge how psychiatry approaches queer patients today. If poor mental health in queer populations is fuelled by societal stigma, then 'healing' must address this stigma. Yet, existing management guidelines do not. Instead, psychiatry today fails to consider queer patients' unique challenges and individualises their problems through signposting to one-to-one therapy. Collectively, this depoliticises queer people's political expression of distress and detracts from the struggles of power relations that violate their

For a queer person struggling with estrangement after coming out to their family, can six weeks of Cognitive Behavioural Therapy skills help negate the lifetime of stigma which perpetuates this emotional violence? Or for the queer individual struggling with heightened anxiety around hate crimes, can a beta blocker make hate crimes more tolerable? In diagnosing these patients simply with 'generalised anxiety disorder' or 'major depression', are we failing our patients by being apolitical? The onus falls on today's psychiatrist to investigate the potential needs for social justice driven therapy

Social Justice Oriented Therapy

Whilst the benefits of therapies, such as affirmation therapy, are undeniable, a purely apolitical approach is destined to fail, as they do not acknowledge the intersectional lived experiences of patients. Current approaches are Eurocentric, hyperindividualistic and reductively biomedical, silencing the political struggles at play. Given that queerphobic stigma is a systemic issue of social injustice, it is worth asking whether social justice driven therapy may be appropriate for queer individuals whose poor mental health is driven by

For example, digital documentary workshops have the stigma of queerness as 'disorder' is not further been used by refugee mental health patients as a way of documenting their struggles, whilst simultaneously changing societal attitudes by sharing poignant stories. Though the real-world impacts on society may seem tiny, it is the accumulation of such collective, creative approaches which can create seismic shifts in society.

Alternatively, another approach to social justicedriven therapy may be tackling the isolating nature of anti-queer stigma, by signposting patients to community groups as one part of their 'treatment'. Here, connection may form a key therapeutic process.

Whilst these are some top-down suggestions, ultimately, we must take a decolonial, patient-centred approach and ask patients themselves what they need. Currently, the silencing of their voices in our medical and psychiatric curriculum is a direct product of queerphobic neglect. The AIDS pandemic is a devastating example of medicine's discrimination of queer people leading to the neglect of queer people's suffering. Such discrimination within medicine must be tackled.

Tackling Queerphobia in Medicine

Before we think about psychiatric research, it is worth acknowledging that the impact of stigma is not just

psychological. To understand the full extent of the impact, psychiatrists must conduct and encourage research on queer patients' health outcomes not only within psychiatry, but also in other specialties. Given our current evidence-based approach to medicine, very little can change in the system without clear evidence to

With this evidence, another key area that requires stigma busting is within medical education. Psychiatrists must come together to redesign the curriculum, so that it centres queer patients' voices in a non-stereotypical manner (e.g. not only in relation to sexual health) so perpetuated. This new curriculum must challenge and dismantle students' internalised queerphobia. This is crucial if we are to prevent future generations of queer patients from being violated by queerphobic healthcare professionals, leading to the perpetuation of fear, avoidance of healthcare and thus worsening health

Looking Beyond

By valuing the subjective experience of the patient, psychiatrists are uniquely placed to centre, support and advocate alongside queer patients. Whilst worldwide queerphobia cannot be tackled overnight, there are several therapeutic and social justice-driven changes which can be orchestrated, but only if the psychiatrist recognises their own onus and agency in social change. Queer communities have suffered discriminatory neglect by public health for centuries. It is now time to lead a decolonial, intersectional shift within medicine's approach to disease, by championing sociopolitical activism as preventative medicine for queer patients



bernardbodo



The Felix Guide to London

felixonline.co.uk | felix@imperial.ac.uk | @felix_imperial

Bookshops

phe best part about living in a city like London is that it is a city of book lovers. Whether you stroll across Southbank past The Globe - a recreation of the exact theatre Shakespeare performed in - or wander around Bloomsbury, where every other blue plaque is dedicated to the artists and authors associated with the Woolf's, or simply walk past houses

and flats, you will be seeing free books ready to be welcomed into a new, loving home.

So, the team at Felix Books and the wonderful Charlie (Food & Travel, Societies Editor) have come together to discuss their favourite (mostly) independent and second-hand bookshops to discuss what makes these bookshops worth a visit or two.



Skoob The Brunswick off, Marchmont St. WC1N 1AE

Books Writer TOM SAVAGE

ISSUE #1844

nkoob is a second-hand bookshop that has been operating since 1979 in various locations throughout London, before moving to the Grade II listed Brunswick Centre in Bloomsbury in 2007. Skoob has generous opening hours from 10:30am to 7:30pm (apart from Sundays) and is open 7 days a week.

Outside, the shop maintains an unremarkable glass and concrete look. It is engulfed by a modernist concrete development and flanked by a big Waitrose. Walking downstairs from

the discrete entrance, however, you are greeted by a rich burgundy floor surrounding a bespoke Skoob logo mosaic. Looking up, there are books everywhere. Where there is a flat wall, there is a bookshelf. Often, books are stacked horizontally in what normally would serve as free space between rows, with those on lower shelves spilling out onto the floor. The utilitarian shelves seem to bear the weight of the Brunswick Centre above and the aisles of Waitrose seem a world away.

The shop is laid out like a large old key. Turning left, the central spine branches off into

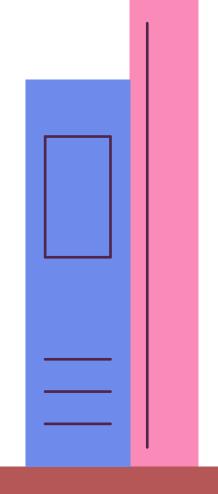
a series of small nooks - some with a single chair, some without. The only sound is a light hum emitted from the foil insulated air conditioning pipe that runs along the low ceiling and through the top shelves, forcing books to make way horizontally for the fixture. Operationally, this ensures that Skoob is at a completely unnoticeable temperature and volume. Alongside the complete lack of natural light, time stands still. Turning right, the circular bow of the key contains a small staff area and till with shelves that loop around, encircling the custodians. Categories of books in Skoob are broad

and largely academic. A suc-

cessful trip would be to come

with a given period, place, or politics in mind.

Skoob forces you to bend and stretch to find worthwhile books (a lot of which are not). The small spaces and fulllength shelves, no two of which are the same, make it a physical challenge akin to a marathon as opposed to a sprint, but with the task all the more rewarding. Upon purchasing (all books are reasonably priced at approximately half of stated RRP) and travelling back upstairs, you are thrust back into a more organised, less interesting world. Whilst Skoob could reasonably be described as chaotic and quite hard work, it is the perfect environment to discover something completely new.



Librarie La Paige: Proving Comic Books are Literature

Food & Travel Editor CHARLOTTE PROBSTEL

y roommate adores that bookshop!" said my friend in excitement after I told her about my new plan to pick up my French. "She used to go there every other week," my friend would continue, adding to my excitement. That was already good news. Just 29 more customer reviews and I could assess if this bookshop was truly worthwhile.

On a whim, I strolled past this bookshop next to South Kensington station one afternoon. An unfamiliar cover of Asterix et Obelix caught my eye. But the thing was, it wasn't Asterix and Obelix but instead it was an "et" in place of the "and". In French! Oh my, I thought. Could this be it? The store I have been seeking. I have been meaning to

buy a French book. Despite Amazon's roots as a bookstore, supporting local bookstores outweighs the allure of endless books within next-day delivery. And so, I waltzed in. The owner, a lovely woman conversed on the telephone a language as melodious as literature makes it to be. Books were neatly stacked left and right with a single lane of walking space, enough for me to squeeze through with my backpack. The sections were clearly delineated for various age groups - from babies to grandparents, and, of course, the universally appealing genre: Les Bandes Dessinées (Comic Books).

"Madame, pourriez-vous me montrer où se trouvent les Astérix et Obélix, s'il vous plait?" (Madame, could you please show me where the Asterix and Obelix are?). She gestured straight ahead of myself. Internally, I slapped myself on the forehead. "Mer-

7 Harrington Rd, South Kensington, SW7 3ES

ci beaucoup Madame." (Thank you very much Madame). I responded gratefully and retrieved the newest issue from the collec-

With the newest Asterix et Obelix snug in my arms, clutching it tight as if it was my beloved teddy bear, I slid across the bookshelves, eyes laser focused on every title, hoping for something familiar. In the proper novel sections, my luck was slim. Considering I only learned French from my mother while living in a different country, adult literature may be a stretch from my skills. Advancing to the teenager's section, I discovered a wonderful book about teenage crime. As content as one feels when discovering new books, I skipped slowly to the checkout counter to pay, before succumbing to any more irresistible books.

"Ceux-ci s'il vous plait monsieur." (These

here, please.) I said as I gleamed with pride. The man behind the counter understood I wanted to pay, despite his angled brows. "Cash or card?" Oh, I thought. Not a Frenchman. "Card", I replied, slightly embarrassed.

Exiting the store, I turned around to admire "Librairie La Page" written in gold onto the red frame. How could I have walked past here numerous times and never seen it? Saddened by the worldwide closure of bookstores due to the surge of audiobooks, digital books on Kindle and online shopping, I hope that this bookstore will endure. While international cuisine in London gives foreigners a sense of home, foreign bookstores are gems that offer more than a fleeting experience; they foster growth and exploration. Eager to return soon, I aim to explore the lower ground floor and, in doing so, delve into my overlooked culture.





You Spend a Day at Foyles 107 Charing Cross Rd, WC2H 0DT

Books Writer KATIA ZYKOVA

elcome book lover, you are among friends," you read. Immediately, you ignore the internal guilt, thinking of the three books that sit stacked, unloved, and unopened on your bedside table.

And you look up. There you can see the never-ending stacks of books that pile up four floors, with quotes jumping out from the signs on the tables: "Nobody ever regretted buying a book," you read, and smile.

What are you looking for?

You pick up your first book. A natural flick of the wrist (a habit formed from book browsing) to a comfortable state of enquiry: you are met with the blurb, and its price tag. This paperback is priced at £9.99. There's a slight quickening of the pulse. But then you're tempted by the snippet of the story that awaits if you were to open that first page. Book in hand, there's more for you to look

1 MARCH 2023

You notice the layout: stairs spiralling up, and on the climb, books and more titles whispering hints of the stories they hide. You are entering as a young century Wonderland, except this time you are climbing up, not falling down. A glance below - and there, looking back at you, a sun made of books.

The first floor is dedicated to fiction. You exhale in wonder. It winds around and around, with book after book. "Surely not one book must be missing," you think. A wall of classics. A cascade of hardbacks. You cannot help it. You pick up an edition of a book you treasure, fingers trembling; an edition you've never seen before. Big, small, pocketbook, pretty, ugly - no book is neglected.

Feet moving without will, there's the next floor. It's the history section; you hear the cry of mediaeval soldiers, and turning your head you cross the bridge from the Americas to Asia in a matter of steps.

ISSUE #1844

Leaving the language section, you download Duolingo.

Finally, the fifth floor is reached. Eyes hungrily eating the delicious cakes on display, you order at the café you discovered at the top of this hive. Reasonably priced coffee in hand, you take a seat. You let the hustle of workers and friends drown into a general pleasant cacophony of human sound. The readers settle into their stories, with the numbing sound of conversation adding colour to their stories. No singular conversation can be picked out. You find there is nothing like blending into a crowd of like-minded people.

It's not often that a shop musters a 4.7-star review when a revolution-starting number of 10,933 reviews are attached to it. With five floors, it spans all kinds of genres including a whole floor dedicated to music and another to foreign languages. It can be safe to say that Foyles in Charing Cross is a book lover's haven, as its trademark statement suggests.

Not far from Leicester Square crossed by the Northern and Piccadilly lines, and also close to Covent Garden and Tottenham Court Road, it is frankly, too easy to find and come for a browse. Also hosting literary events in its auditorium on the sixth floor, it truly feels as if Foyles is the headquarters for all book lovers in London.

'If Foyles don't have it, no-one does.'

While others probably do, it is true that Foyles harbours a much broader range of books than other similar big names such as Waterstones. They are current and follow the whims of booklovers, but it is evident that they harbour a strong love for literature of all kinds. This makes Foyles a brilliant addition to your list of book haunts.



South Kensington Books 22 Thurloe St, South Kensington, SW7 2LT

Books Editor ZANNA BUCKLAND

ny bookworm who's walked to Imperial from South Kensington station will have noticed the mint green storefront reading 'South Kensington Books' tucked in between Polish restaurant Daquise and Honest Burgers. This independent bookstore is a not-so-hidden gem – an oasis of literature in a desert of chain cafes. The intimate space is home to a relatively large collection of books for its size, ranging from your regular bestsellers and classics to more curated choices.

The charm of independent bookstores is in their personal touches. These are the books that are clearly picked out by the owner or staff members and will expose you to specific categories that are off the beaten track. South Kensington Books boasts a

wide range of non-fiction titles in the fields of science, music, and history. I recently purchased from the shop a book titled Elementary: The Periodic Table Explained to add to my collection of books on the elements and their applications.

South Kensington Books' prices are more reasonable than you might expect, given the store's location and size, with some of their offerings being an absolute bargain at under £5. The store also has a permanent sale bookcase outside their door, where one could potentially find an unexpected treas-

The store is perfect for a quick dose of retail therapy, or to while away a little time browsing in between lectures or while waiting to meet a friend. I would definitely recommend dropping by if you ever need a brief escape from the rush of life.



Word on the Water Regent's Canal Towpath, N1C 4LW

Books Editor MOHAMMAD MAJLISI

ituated on Regent's Canal very close to Caledonian Road lies one of London's most unique bookshops, Word on the Water. Based on a 1920s Dutch Barge, the bookshop is the work of two friends Paddy Screech and Jonathan Privett and has amassed a large following due to its novelty and the selection of books on offer.

It's no surprise that Word on the Water is one of London's most famous bookshops, something akin to Shakespeare and Company in Paris with its novel charm, largerthan-life owners - and did I mention the fantastic selection of books? I've patronised the quaint barge a few times when I could afford to splurge: the book prices aren't necessarily cheap, with many selling for their RRP or greater. Many of the books are

second hand and curated by the Screech and Privett themselves - I told them on my last visit how they had such a good collection and was told that the books available are based on what they themselves would like to read. I was also complimented on my selection of Hells Angels by Hunter S.

Beyond its Bohemian exterior, the main draw is the chance to find really good steals for those who are avid book collectors. I've managed to score an uncorrected proof copy of Mieko Kawakami's Heaven, and my copy of Women, Race, and Class (see Felix 1831), but with any second-hand bookshop it takes time and, most importantly, luck to find good books.

I would definitely recommend a visit, even if it just to browse and have a chat with the owners. But be careful or you may end up spending a lot of money if you're not!

PHOTOGRAPHY

Sonder

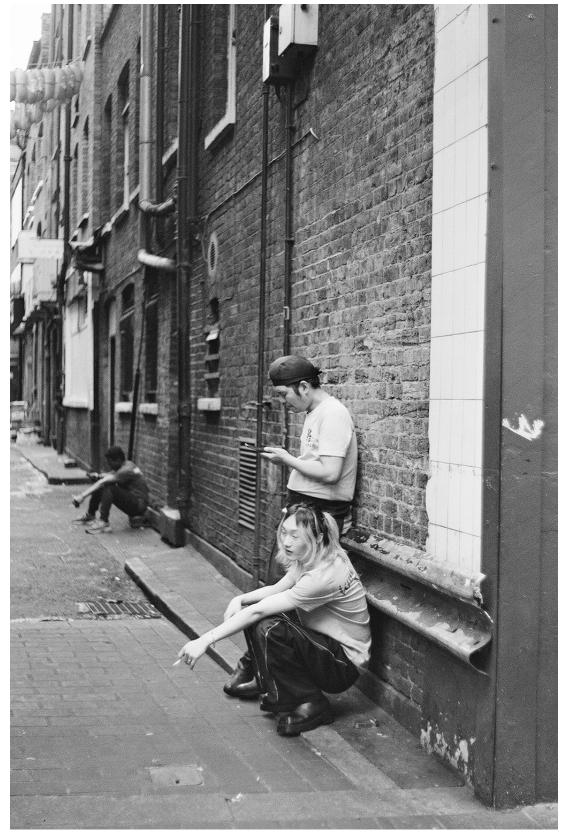
Why the world doesn't revolve around you

Head Photographer
ROLANDO CHARLES

ogito ergo sum - I think, therefore I am - is a principle that many people live by. However, it is a much harder task to prove that everyone who is not oneself also thinks, and therefore is. I should consider the possibility that it is only me who can think; everyone around me is merely a simulation, a poor copy of myself. But something doesn't sit quite right with me: if I am the only one who is, how can others be better at maths, art, or sports? How am I not the be-all and endall of human consciousness? Then it hits you: the realisation that everyone else lives a rich and complex life, just as you do – or simply put, the feeling of sonder.

I believe this feeling is born in the moment when the gap between you and someone else is bridged in an act of sharing. Say, for example, you are speaking to your coursemate who is from another country, and they share a personal experience that resonates closely with you. In that moment, the distance between you and them is closed, and that forced closeness makes you think about who they are and how similar your lives must indeed be. Because everyone else is also someone.

Ana mentions this moment of closeness in her own comment with her photo: 'Being a smoker myself, often going for breaks at the library, I sensed a connection in our lives. In this ordinary act of seeking rest, a deeper connection emerged – a silent understanding that



Interlude Ana Villarrubia Palacín

transcended our completely different lives.'

I think many photos inherently represent sonder, as they are the artist's way of interacting with the people around them by showing their different points of view. In many cases, that is what street photography is all about: daily moments shared with people, that show us how very human everyone can be. 'It is usually brief encounters like this one that offer the best glimpses into the profound stories unfolding around us,' Ana further writes.

This week's comment is brief and to the point, and I will end it by letting the reader notice that Ana's artistic and photographic understanding far surpasses that of the regular Joe. She has taken a meaningful picture and conveyed a precise message that touches the viewer, me, and brings them closer to the artist, her. As photographers, we may not always be able to embed in our photos this level of depth and mastery, but we can aspire to do so more frequently and continually improve our craft.

Scan the QR code to submit for the next theme 'The End of a Cycle':



The Sophia Prize for Environmental Writing is awarding £400 to one outstanding, inspiring and accessible article that helps tackle climate defeatism and covers an economic, cultural or scientific innovation that helps fight global warming.





We want you!

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Take the stage in front of 2500 partygoers at the Imperial's biggest annual event!

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Show us what you've got and sign up to audition today.

All student artists will also receive heavily discounted tickets to the event.



SCAN ME





Nominations open:

Monday 12 February, 12:00

Nominations close:

Friday 1 March, 12:00

Candidates revealed:

Wednesday 6 March, 14:00

Voting open:

Monday 11 March, 09:00

Voting close:

Thursday 14 March, 14:00

Results announced:

Friday 15 March, 18:00



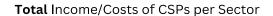


SOCIETIES

Imperial's Societies are budgeting in the thousands - why, where, and how?

Societies Editor CHARLOTTE PROBSTEL

lubs, Societies & Projects (CSP) initial budgets, submitted earlier this month on 9th February, are in their final stages and have been made available on eActivities, revealing the expenditures, incomes, grant requests, and final balance of each society. If the society is eligible for it, the grant requested is provided by the Union to subsidise any underfunded activi-



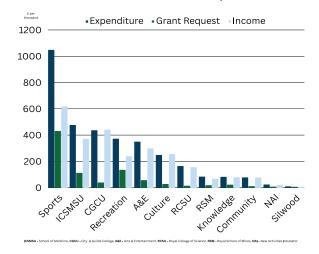


Figure 1. Source: eActivities Charlotte Probstel

ties, to promote the well-being of all students. A short study of the overview reveals the distribution of grants requested, the most expensive sectors, the best funded societies, and the ways by which these societies fund themselves.

Average balance of CSPs per sector

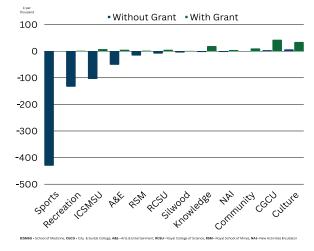
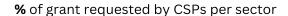


Figure 2. Source: eActivities Charlotte Probstel



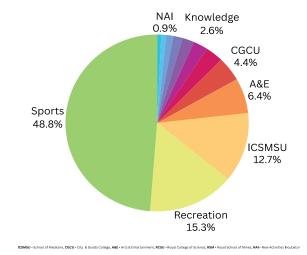


Figure 3. Source: eActivities Charlotte Probstel

According to Deputy President (Clubs & Societies) Christian Cooper, the total grant budget is £425,000, a significant sum; however, the public records show CSPs requesting more than twice the amount of the budget at £884,000 [Fig. 1]. How the Union will manage is unknown, but it never hurts for CSPs to rely on self-generated income (SGI) if their budgets are cut.

Income per CGCU Department

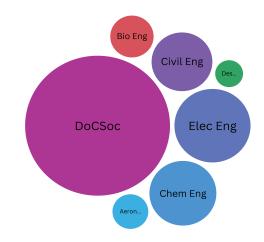


Figure 4. Source: eActivities Charlotte Probstel

Data shows us that 38% of all CSPs do not request a grant – a strange move, considering how the grant has been shown to aid two of the three most expensive sectors, namely Sports and ICSMSU, reduce their deficits from around £430,000 and £100,000 respectively, to almost zero [Fig. 2]. Unsurprisingly, the Sports and Recreation sectors require the most grant [Fig. 3]: purchasing equipment, transport, halls or fields, and competition trips is cheap for neither large nor small societies. Those that sponsor multiple teams, such as ICHockey, require excellent budgeting

skills for optimal performance. Income for such societies can be difficult without sponsorships or ticket sales – hence their high membership fees.

The most successful CSP at generating income outside of its grant is the Department of Computing (DoCSoc) [Figs. 4 & 5], with an annual sponsorship of £183,000 making up 95% of DoCSoc's income. Similarly, Space Society's income of £33,000 is 85% generated by sponsors. One advantage of sponsorships is that they are an extremely energy efficient source of income, as opposed to ticket sales, the pri-

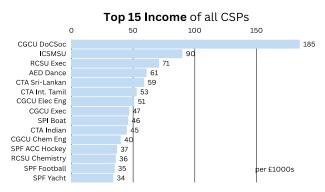


Figure 5. Source: eActivities Charlotte Probstel

mary source for 50% of ICSMSU's income.

The income for the top five cultural societies is primarily constituted of donations or ticket sales, especially at large events, which often host at least a thousand guests. Unusually, around 24 others did not submit any records, skewing the data slightly, while 61 other societies submitted strange entries with either null income or expenditure for unknown reasons.

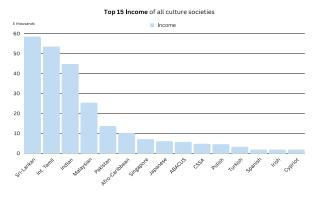


Figure 6. Source: eActivities Charlotte Probstel

Lastly, membership income may seem vital; in practice, it is insignificant to ticket income in the more successful CSPs, as low membership fees lure members in. They are useful for grant eligibility and growth in smaller societies, particularily those in New Activities Incubator sector, yet SGI is a better promoter of financial growth.





Single?
Dating show?
Become a contestant





Shoot your shot with a ball toss on

Sunday the 10th of March!

in South Kensington Campus

Send your interest to felix@ic.ac.uk

PUZZLES

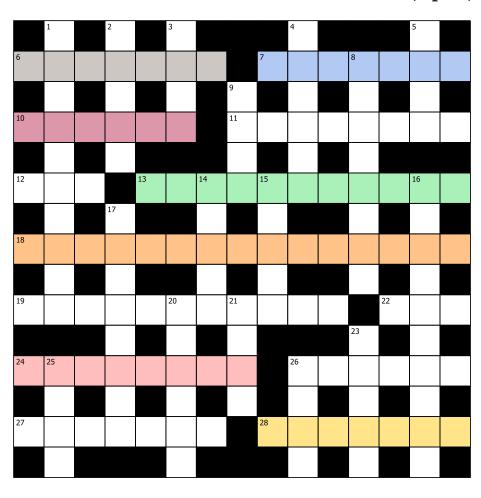
Puzzles Editor

STANLEY SCOTT

CROSSWORD

New Names

(3 pts.)



Across

- 6. Named for the historical status of the London Borough of Havering. [7]
- 7. Named in honour of a hospital for HIV/ AIDS patients. [7]
- 10. Named for the local area's textile trade. [6]
- 11. By surprise. [8]
- 12. A long time. [3]
- 13. Named to celebrate those involved in a historical women's rights movement.[11]
- 18. The answers to this puzzle's themed clues! [10 5]
- 19. Plays up, often to the media. [11]
- 22. Punching-bag character from *Family* Guy. [3]
- 24. Named to honour a generation of Caribbean immigrants to London. [8]
- 26. Irritable. [6]
- 27. They're found in a fireplace. [7]
- 28. Named to celebrate the achievements of the England women's football team. [7]

Down

- 1. Move in wrestling. [10]
- 2. To look gorgeous, in queer slang. [5]
- 3. Play a leading role. [4]
- 4. Insect known to emerge only once every several years. [6]
- 5. Sheet of glass. [4]
- 8. Suffering from blood-sugar related illness. [8]
- 9. Foul mood. [4]
- 14. Famous Nixon interviewer. [5]
- 15. Dispute, conflict. [3-2]
- 16. Shakespeare play with characters such as Prospero and Ariel. [37]
- 17. One of two islands making up a nation
- in the Caribbean. [8]
- 20. Wriggle. [6]
- 21. Word following belly-, head- or heart-.
- 23. How some like a boiled egg. [5]
- 25. Anatomical part named for the Ancient Greek for rainbow. [4]
- 26. Macabre, disgusting. [4]

Cryptic across

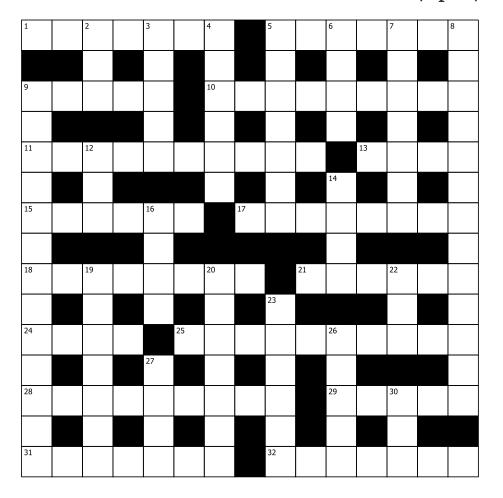
- 1. No varieties of this fruit. [7]
- 5. Crazy Putin tanks last satellite. [7]
- 9. With these axes, cut lemon to show its water-carrying vessel. [5]
- 10. Gutless Canadian president takes money from alcohol company. [9]
- 11. Is endlessly annoyed about left-back playing with directional preference. [10]
- 13. Criticism of Florida's guns. [4]
- 15. I hear it needs the works! [6]
- 17. Crack in damaged wrinkles around Vernon's head. [8]
- 18. Bird has wild desire to shriek. [5 3]
- 21. Southern Arctic people dotted around their original place. [6]
- 24. The most cited scientist? [2 2]
- 25. Irradiate centre of exposed abnormality in embryo. [10]
- 28. Some Schweppes in beer and a pizza. [9] 29. Use scalpel in the emergency room, but
- be more delicate! [5]
- 31. It's wearisome to sue, I'd rearrange. [7]
- 32. A terrible shame, Mr. Slaughters! [7]

Cryptic down

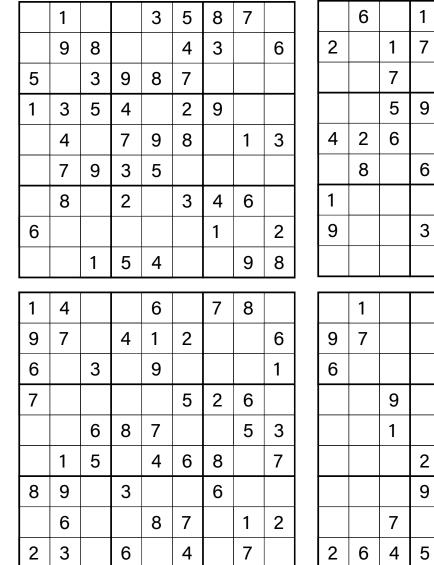
- 2. Suffer due to alcohol, I hear. [3]
- 3. Stir old boy's mug of soup. [5]
- 4. Frantically step back due to conflict of interest, to be safe. [6]
- 5. Receipt for each shoe. [7]
- 6. No good can follow this! [22]
- 7. The spikes are almost entirely unnecessary.
- 8. This joint has cleaner with an iron fist. [13]
- 9. It was written by the treasure hunter that
- madly hopes to get ten coins. [1 5 3 4]
 12. Dude I know on ecstasy. [3]
- 14. In the museum, buried Czar. [4]
- 16. Units of time around, say, 500? [4]
- 19. I heard you knocked on the door having concealed the present. [7]
- 20. Friends get low, dancing to hits. [7]
- 22. Take top in case you get cold. [3]
- 23. Prophet is left at Riyadh, even. [6]
- 26. A razor-sharp philosopher? [5]
- 27. Bronzer on middle section produces nothing. [4]
- 30. Some meet up and prepare to play. [3]

CRYPTIC CROSSWORD

(5 pts.)



SUDOKU



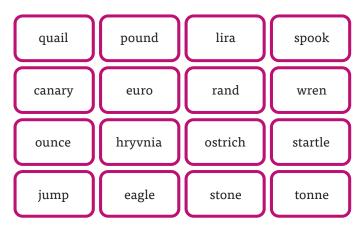
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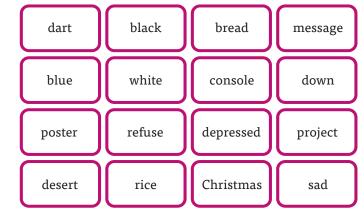
Extra hard (3 pts. each)

GROUPING GRIDS

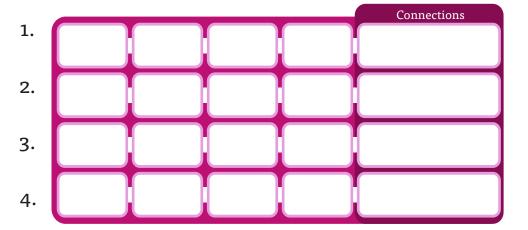


How-to:

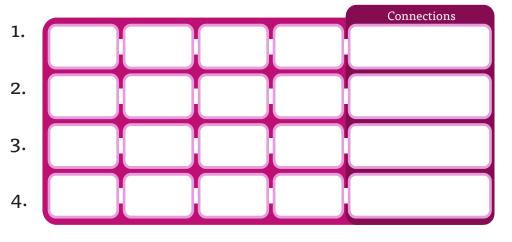
For fans of Only Connect! The sixteen clues in each of these puzzles can be placed into four groups of four, each with a connecting feature. To solve the puzzle, write these groups and their connections below! An example can be seen in last week's solutions.



Medium (3 pts.)



Hard (4 pts.)



CRYPTOGRAM

Clue: Mechanised time, that's next in line

How-to:

Submitted by Ivin Jose

A cryptogram is solved by cracking the cypher in which an encoded phrase is written. The first few letter correspondences are given to you, and your job is to use your linguistic and logical skills, as well as your quotes knowledge, to work out the secret message. Bonus point for giving where the quote comes from!

1	В	С	D	E	F	G	F	I 1	: J		K	L	M	N	0	P	Q	R	2 :	S 7	Γ	U	V	W	X	Y	Z
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Quote from: _____ (1 pt.)

MATHS PUZZLES





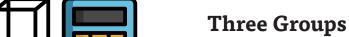




Submitted by Charlotte Probstel



(5 pts. each)



Junior Mathematics Olympiad 2016 B6

For which values of the positive integer *n* is it possible to divide the first 3*n* positive integers into three groups, each of which has the same sum?

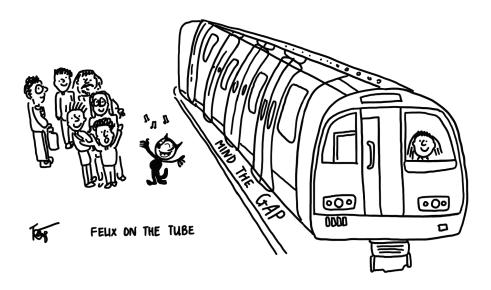
Increases of 75%

Junior Mathematics Olympiad 1999 B5

Find all the two-digit numbers and three-digit numbers that are increased by 75% when their digits are reversed.

COMIC

Felix's Adventures



Puzzle Editor's Note

Dearest puzzlers,

This week we have yet another kind of puzzle, namely the maths puzzles sent in by Charlie Probstel. Let's see if we get some leaderboard submissions from the Maths department this week...

Speaking of which, thank you to everybody who submitted their answers! We now have a rather exciting leaderboard coming along, where the points are rather close between fifth place and the runners-up. However, Louise Parchson is currently running away with an impressive 25 points in first place! Many congratulations to her.

Finally, we had some people stumped last week with the meaning of the cryptogram clue, 1-O-3. These numbers stood for the vertices on the elements of the Deathly Hallows symbol – a devilish clue indeed!

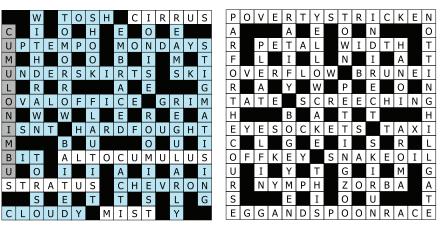
It seems that, as the number of submissions grows, so does the length of these notes. Nevertheless, I wish you all a fabulous week of crossing, connecting, completing, calculating, comic-consuming, and decrypting!

- Stanley

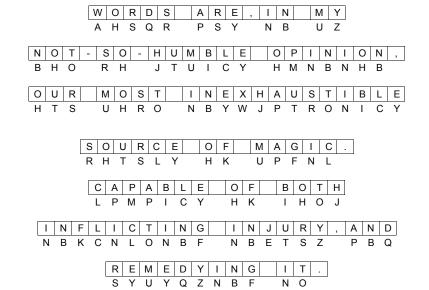
LEADERBOARD

		_
Pos.	Puzzlers	Pts.
1.	Louise Parchson	25
2.	Aspenlads	18
3.	S & J	17
4.	Hursh Popat/Xuangyong Tay	16
5.	Jasmine Nugroho	15
by Thu i	icture of your solved puzzles to puzzles.felix@sday to get yourself or your team on the lead Tuesday if you want us to count your scores in issue!	erboard,

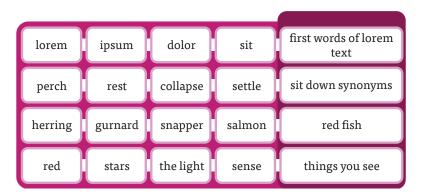
Last week's solutions



Rainmakers Cryptic



Quote from: Harry Potter and the Deathly Hallows (Albus Dumbledore)
Cryptogram (1-0-3)



Medium grouping grid

alpha	beta	gamma	neutron	types of radiation
delta	mouth	source	tributary	river parts
iota	morsel	scrap	bit	small things
lambda	function	object	pointer	programming terms

Hard grouping grid

SPORTS

Felix opens form for all sports teams

A call to all sports societies to submit their weekly scores

Sports Editor CHARLOTTE PROBSTEL

e welcome all sports societies to the revival of *Felix*'s Sports section after a few quiet months. A form was recently sent for them to submit their scores and successes, to be published in the subsequent issue. Thank you to Dodgeball, Netball Womens 3, and ICRunning for being the first teams to submit their results this week in response to the email sent out on Sunday 25th February.

If you wish
to submit your
scores or you
did not receive the email,
please email
felix@ic.ac.uk
or scan the QR code.





The IC Womens 3 Netball Team Mia Yap

Scores

Dodgeball: Men's and Women's win gold at University London Open

Shoutout to Nifemi for 'Catch of the Year'.

Instagram: @imperialdodgeball

Netball: Womens 3 win 37-33 at BUCS Southeastern Shield Semifinals!

Shoutout to Chloe as 'Player of the Game' and **special thanks** to Anna, Hauwa, Ella, Karen, and Celina for coming to support and for bringing the good vibes!



Instagram: @icnetball

Co-captains with cake to celebrate Mia Yap

Athletics: Multiple athletes in the semi finals. at 2024 BUCS Indoors athletics

Tom Street and **Andrea Panassidi** made it to the 400m semi-finals, and **Isabelle Franco** made it to the 3000m semi-finals.

A special thanks to Choice Vehicle Rentals for use of a minibus to make the trip possible!

Instagram: @icrunning



The ICRunning team from left to right: Andrea Panassidi, Oliver Telfer, Ka-Hunt To, Isabelle Franco, Sarah Stephan, Alex Field, Alastar Phelan ICRunning