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UC: quarter-final setback for Imperial

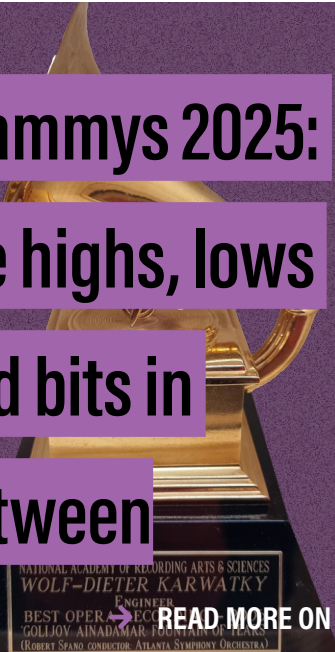


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We will, to the best of our ability, tell you the whole truth and nothing but the truth.

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.

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EDITORIAL

Valentine's Day

Felix Contributor
EMILY JACOBI

Exactly three years and one day ago, the day before Valentine's Day, the person I had loved the most passed away. Not a big fan of Valentine's Day, she taught me it was counterintuitive to shower your loved ones with gifts and attention for a single day of the year, and she showed me that to love someone means loving them every single day with a sustainable amount of love. Without a partner, she loved her children very much and for fifteen years focused on that – and her stellar career.

Once you lose someone, it calls for reflection. Therefore, what did I learn about love from her?

Love was, negotiating shorter working hours over a pay raise – such that you could leave the office at 4pm instead of 8pm – and be home with your children at 5pm after their school time. Love was, flying twice within the same day because you wanted to sleep in the same home as your kids. Love was, bringing home tiny little trinkets, like Sudoku puzzles or socks from the airport, because you had a bit of free time and thought of your children. Love was listening to your kids bitch about the mean classmate in the car or swooning over a boy at age 14. Love was being taught her iconic chocolate brownie recipe, setting up and planning her fourth 50th birthday party together, taking a yoga class together, going out for lunch, travelling together, taking over house-hold chores once the age allowed it, folding socks together, and never doing an assignment alone.

And there is so much more.

However, love not only exists with parents. As you become an adult, you may find it more love within your siblings. It is, when your sister calls you in the middle of her workday as you lay at home with a high fever in a different country and she googles all the symptoms and possible medications you can take. Love is, her sending you texts every four hours reminding you to take ibuprofen. Love is wrestling with your brother or laughing together years after his comedic attempt to make risotto with ¾ of a bottle of white wine; the recommended amount is ½ to one cup, not three cups.

Love can also exist with friends. At university, friends become family. A call, a text, a small bag of green tea brought back from Japan because your friend knew you could not find anything remotely similar nearby. Talking for four hours on the phone, though you only spoke last week. Teaching each other your favourite hobbies, figuring out life together, and learning from each other, especially when it comes to the topics you never wanted to speak to your parents with – see the Sex Survey for results.

However, the most important form of love is the love you have for yourself. With a lack of family, friends, and coworkers, yes – life can be lonely. But it should not rely on another person or a partner. Self-love is the hardest form of love to maintain, as we are most critical of ourselves, in the way we look, act or succeed in life, and we never really celebrate it big – except perhaps on our birthdays. We can only sustainably celebrate our self-love by respecting our own time, energy and life most days.

I grew up not celebrating Valentine's Day and mostly spend the day celebrating my friend, Valentina. February 14th can be a beautiful day, but it has been

overhyped and imposes too many expectations. People searching for a date on Valentine's Day has become a plea of desperation, its comedy only understood by matured adults. Jokes on social media can impose pressure on teenagers to treat this day as the holy grail – a day they naturally want to part take in, otherwise feel excluded from.

Valentine's Day does benefit restaurants and grocery stores capitalising on special "Valentine's Day" lunches and Valentine's Day chocolate bars, to which I see no problem. More money is more money. Businesses sell more gifts, but I often wonder if people would buy these gifts, even if it wasn't Valentine's Day. Is it the gift or the day? One of my favourite gifts I ever got from a ex-partner, – and I still have it – is a little ceramic coaster from the airport of Mallorca – a spontaneous gift I received after their trip. The had a matching one. The meaning, convolved with the timing, will always supersede the price tag.

Consequently, I do find small gestures on Valentine's Day endearing. A small card or a thoughtful gesture to just re-iterate that you love someone dearly never goes wrong. It is consistency, that matters.

In summary, I think three things: First, one should find the diverse love hidden all around oneself, since "to find love" should not implicitly mean "to find a partner". Second, to "celebrate love", as Valentine's Day is called, show a little more love at times when it calls for it and when it fits your life calendar, not because it as a random Friday mid-February. Third, physical gifts, only one of the five love languages, is given an unnecessary higher weight in our materialistic societies' definition of love.



NEWS

UC: Quarter-final setback for Imperial as Christ's College clinches win

Editor-in-Chief
MOHAMMAD MAJLISI

Imperial's University Challenge team faced a setback as they narrowly lost their quarter-final match 160–180 against Christ's College, Cambridge, following an “absolutely phenomenal” match against Wadham College, Oxford.

Imperial performed well, taking an early lead which they held for the

majority of the match. However, their opponents began catching up and a last-minute wrong answer led to Christ's College taking the bonus points, edging them just 20 points ahead by the end of the round.

The team still has a chance to compete as they earned the highest number of

points in the previous round: they now need to win two qualifying matches for a chance at the semi-final.

Host Amol Rajan called the bout a “ludicrously tight game” and described Christ's performance as “absolutely astonishing.”

“A lot of people at home weren't expecting it,” he told Christ's College, noting their comeback had been achieved “brilliantly.”



Plant-Based Universities wins council vote on plant-based catering

Activist group passed motion calling for 50% of all food offered on campus to become plant-based.

Editor-in-Chief
MOHAMMAD MAJLISI

Union Council passed an amendment calling for all university food outlets to “serve 50% plant-based options” by the 2027–28 academic year, with a 10% cumulative increase to plant-based offerings annually. The paper also called for the Union to endorse Plant-Based Universities' (PBU) campaign for 100% plant-based catering, and for the Union to include “a requirement in future contracts” for all external providers to follow the plant-based motion in its catering venues.

Plant-Based Universities is an “international network of students” campaigning for plant-based catering at universities. According to its website the campaign is active in over “50 institutions,” including the University of Cambridge and University College London. A previous attempt by the Imperial branch of the group calling for the Union to lobby for an immediate shift to 100% plant-based catering failed

to pass at Union Council in April 2024.

The paper caused much discussion, with several council members raising amendments or objections to the paper. In order to answer questions relating to health and nutrition, the PBU campaigners had arranged for Dr Daisy Lund, a General Practitioner and final-year Medicine student tutor, to attend the meeting. She answered several questions related to the necessity of meat in diets, explaining that western diets contained a surplus of proteins but were deficient in fibre.

ICU Ethics and Environment Officer and principal PBU campaigner Hollie Meyers, who also authored the paper, said, “We are overjoyed to see our fellow students join calls for Imperial to show that it takes the climate crisis seriously and begin the move toward cheap, nutritious, and delicious plant-based menus. Animal farming and fishing are wrecking the planet and the lives of millions across the globe and now is the time to take a definitive step towards a plant-based future.”



The PBU campaigners outside the Union Building. Plant-Based Universities

Union moves to remove DPFS role

Deputy President for Finance and Services (DPFS) position to be removed subject to the results of the democracy review.

Editor-in-Chief
MOHAMMAD MAJLISI

Imperial College Union has passed a paper calling for the removal of the Deputy President for Finance and Services (DPFS) role from the 2025 Leadership Election ballot, and as a sabbatical role subject to the results of the Union’s democracy review.

The DPFS was introduced for the 1993–94 academic year following an internal review of the Union’s leadership structure by then-President Chris Davidson. The resulting reforms introduced the role of DPFS as a replacement for the role of Deputy President – with the change seen simply as a “retitling” according to a report in *Felix* #966. The role “predates

the existence of permanent staff teams,” and as such is believed by the Union to be “out of date”. DPFS Stephanie Yeung told the Council that the reform is a “change that has been a long time coming.”

The democracy review, being undertaken by sector-specialist consultancy firm CounterCulture LLP, began in July 2024. Current Union President Camille Boutrolle, who authored the paper, described the purpose of the review as “enabling a more inclusive and representative students’ union in the future,” in a blog post published on the Union’s website. Although the democracy review has not been completed, CounterCulture have produced six “initial permutations” of the sabbatical officer team, with “all

options” calling for the removal of the DPFS as an Officer Trustee.

Despite the paper passing, several members of Union Council have tabled an amendment to the paper calling for “the wider student body” to be consulted via referendum, if the final findings of democracy review called for the removal of the role. However, Boutrolle disagreed with the amendment on the basis that referenda have historically had poor turnouts. Additionally, Deputy President (Clubs and Societies) Christian Cooper commented on the requirement for referenda to pass if 10% of Union members voted, in reference to Union Bye-Law E, as well as the fact that the CounterCulture had conducted both a survey and consulted students, and

Union Council, in order to complete research and prepare recommendations.

Boutrolle disagreed with the amendment; a subsequent vote on the amendment by Union Council ended with 24 votes rejecting the inclusion of a referendum and 12 votes in agreement, with one abstention.

Further changes are planned once the democracy review is complete. The Union constitution will be rewritten, as well as a reformation of Union bye-laws. However, Union Council, as the representative body for students, will vote on any recommendations provided by the final report, which is due to be published before the end of the current academic year.

Brady calls for greater science funding in annual address

Editor-in-Chief
MOHAMMAD MAJLISI

President Hugh Brady called for greater funding and science research to grow the economy and fulfil the purpose of being “useful” in his annual address. Brady’s speech highlighted the lack of government funding towards scientific innovation, as 3% of GDP is invested into research and development. China, according to OECD reports, invests between 10–14% of its GDP into research and development.

Brady linked the government’s upcoming Industrial strategy with Imperial’s own strategy Science for Humanity: he called for the new strategy to use universities and “the UK’s STEM talent pipeline” to facilitate

growth. The UK economy has stagnated, with only 0.1% growth in December 2024 following the Autumn budget’s attempt to revitalise the economy.

Additionally, President Brady warned of the dangers of falling STEM graduate numbers both domestically and from the international market, as well as a reduction in students taking STEM subjects at A-Level, saying, “If we are to compete internationally we need a system-wide response to address the crisis in maths and science education in our schools. We must address the Higher Education funding system to cover the costs of a STEM education, and the government’s upcoming immigration white paper must make it even easier for us to attract and retain highly skilled people – both international students and researchers.”

Protesters campaign for Imperial to “stop arming Israel”

Editor-in-Chief
MOHAMMAD MAJLISI


Around 20 pro-Palestinian activists returned to Queen’s Lawn with Palestinian flags and banners on Thursday, calling on Imperial to cut ties with arms companies.

The protest, the third of this academic year, was backed by the Trade Union Congress as well as the Palestine Solidarity Campaign, and had been announced earlier in the day. A source familiar with the matter told *Felix* that the protest organisers had received authorisation beforehand.

Organisers called on the protestors to continue engaging the Imperial community, as well as highlighting

the threat of an end to the ceasefire brokered by the Trump administration, following a tense week of negotiations between Israel and Hamas.

A member of the public who was passing through and had seen the organisers setting up described the protest as “disheartening” and believed the protestors were mistaken. However, several students passing by offered their support to the protestors.



Mohammad Majlisi for Felix

SCIENCE

Trump and DEI

Science writer Neha discusses how Trump's recent DEI policies affect scientific research.

Science Writer
NEHA YASIN

President Trump's latest crackdown on DEI (Diversity, Equity, and Inclusion) has left scientists and institutions unsettled over the future of scientific research in America.

Within the executive orders issued on 20th and 21st January is a call for the "termination of all discriminatory programs, including illegal DEI and "diversity, equity, inclusion, and accessibility" (DEIA) mandates, policies, programs, preferences, and activities in the Federal Government," including pulling "equity-related" grants, contracts and federal spending. An executive order also demands an end to the federal funding of "gender ideology," including the removal of "all statements, policies, regulations, forms, communications, or other internal and external messages that promote or otherwise inculcate gender ideology". This is set to extend beyond the federal government – with large non-profit corporations, state and local bar and medical associations, and institutions of higher education with DEI initiatives to be identified for potential civil compliance investigations.

A significant shift in federal policy

Trump's executive orders mark a significant shift in federal policy, with far-reaching implications for scientific research, education, and public health. In response to these orders, some

scientific associations are choosing to keep a low profile and have opted not to issue statements. Others have chosen to stand with their commitment to diversity. For example, the American Geophysical Union, for which federal grants account for 2% of their annual budget, sent a statement to its members reaffirming support for their communities. The American Society of Naturalists say they will not "shy away from our principles and will not self-censor".

Others, perhaps in the hope of protecting their federally funded programmes, have taken a more cautious approach. The American Society for Microbiology, who has received federal grants worth roughly \$28 million over the past five years, altered its website to remove references to diversity and equity. Articles highlighting scientists from under-represented groups briefly vanished from their website (although they have since been restored) and articles were altered without the consent of the authors – for example, the phrase "other marginalized groups in science and health care" was replaced with "other groups in science and health care" in one particular article.

The Howard Hughes Medical Institute, one of the world's largest private funders of biomedical research, abruptly cancelled a \$60 million initiative aimed at boosting diversity in science at universities. Despite the fact that it does not receive federal funding, it went as far as to scrub any mention of

→ CONTINUED ON PAGE 8

THIS WEEK IN SCIENCE

Written by Science Writer, Neha Yasin

A dynamic inner Earth

Scientists have long known that Earth's inner core rotates at a different and variable speed compared to the planet itself.

However, new research published in *Nature Geoscience* suggests that the core's shape is also changing. Seismologist John Vidale and his team analysed seismic signals from 168 pairs of nearly identical earthquakes to determine whether variations in the seismic waves could be attributed to physical changes at the inner core-outer core boundary.

By focusing on times when the core was in the same position and they could rule out the core's rotational shifts as the sole cause – they found evidence in support of these deformations, with sections potentially rising and falling by up to a kilometre over just a few years.

These findings challenge the traditional view of the inner core as a perfect sphere, but further research is required to fully understand these deep-Earth processes.

A long-lost relative

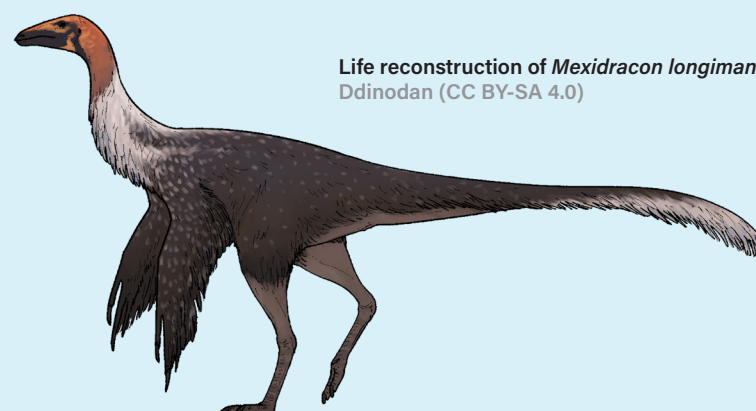
Paleontologists have identified a new species of *Paranthropus*, an extinct human relative, based on a 1.4 million year-old jawbone found in South Africa in 1949. Previously misidentified as a species from the *Homo* genus (our genus), new advanced 3D scans revealed that the jawbone shares more characteristics with the *Paranthropus* genus – also referred to as the "nutcracker man" due to their defining massive jaws and huge molars. However, this discovery has a smaller than usual jaw and teeth, distinguishing it as a previously unknown species.

Named *Paranthropus capensis*, this species coexisted with early *Homo* species and likely had a more varied diet than *Paranthropus robustus*, a different *Paranthropus* species. This discovery suggests greater diversity within *Paranthropus* and may reshape our understanding of human evolution.

Lost even longer?

A team of scientists from Mexico, the US, and Spain has identified a new genus and species of ostrich-like dinosaur within the Ornithomimidae family.

The fossil was discovered in Coahuila in 2014 but only recently had a fresh examination. The team were able to date the remains back approximately 73 million years. Distinguishable from others in its family due to its long hands – with a palm longer than its entire upper arm, similar to modern tree sloths, the species was promptly named *Mexidracon longimanus*.



Life reconstruction of *Mexidracon longimanus*.
Ddinodan (CC BY-SA 4.0)

Molecules to miracles: a chemical biology revolution

Science editor James Desmet gives an overview of the breakthrough drug therapies that redefined disease treatment.

Science Editor

JAMES DESMET

Many people rightfully credit the incredible doctors who work tirelessly to save millions of lives around the world each year. While doctors make a mammoth contribution to improving public health, their efforts are also underpinned by vast amounts of research into new ways of tackling diseases – whether through novel therapies, alternative drugs or breakthrough discoveries in our understanding of disease. Truthfully, the bulk of the effort in combating disease lies in the hands of scientists, with the last practicing clinicians to win the Nobel Prize in physiology and medicine being Barry J. Marshall and J. Robin Warren in 2005.

Our understanding of disease has vastly improved following the advent of the Human Genome Project, the Protein Data Bank, and in-silico protein modelling. These developments have allowed us to better understand the root causes of disease and their physiological impacts. Technologies such as AlphaFold 2 enable scientists to model novel proteins in in just hours; the Human Genome Project has opened the door to gene-targeting therapies; and the Protein Data Bank has made all known protein structures readily available. Innovations like these have given rise to a new field of therapies – often coined “biologics” because of their mechanisms of action and structures that draw heavy inspiration from naturally occurring processes and molecules. They have paved the way for the treatment of diseases once thought untreatable owing to a lack of understanding and the limitations of traditional small-molecule drugs.

Antibody-drug conjugates (ADCs)

Antibodies are proteins whose structures allow them to specifically bind to complementary cell surface receptors. They play a key role in the immune response,

as antibody binding often serves as a signal for white blood cells to destroy an invading pathogen. Since the 1960s, researchers have hypothesised about the possibility of attaching a “payload” to an antibody that is released when the antibody binds to its target. Such an approach could open the door to targeted therapeutic agents for diseases such as cancer. For example, an antibody with a structure complementary to a cancer cell expressing a mutated cell surface receptor could be engineered to have a drug attached via a linker (for instance, extending from a free cysteine, or amino acid, residue). When the antibody binds, the linker can be enzymatically degraded, releasing the payload drug.

This could lead to more specific cancer treatments by minimising the exposure of healthy cells to drugs.

This vision was realised in 2000 with the release of gemtuzumab ozogamicin for the treatment of acute myeloid leukaemia.

Today, there are 14 Food and Drug Administration approved ADCs, and significant untapped potential remains. Researchers continue to tackle issues related to absorption and degradation, as well as investigating innovative methods to release payloads.

Oligonucleotide therapies

Oligonucleotide therapies are among the most promising biological therapeutics. They target disease at a different stage of the central dogma. Whereas most drugs act on proteins that have already been expressed, oligonucleotide therapies aim to prevent (or promote) protein expression at the genetic level.

The primary mechanism by which this is achieved is through triggering the degradation of messenger RNA (mRNA) before it reaches the ribosome, thus preventing protein synthesis. This strategy has been pursued in various ways; the most famous example being the Nobel Prize winning RNA interference (RNAi) technology developed by Andrew Fire and Craig Mello. However, a uniquely interesting approach is that of Gapmer oligonucleotides.

Gapmer oligonucleotides are short polymers consisting of a DNA strand – designed with a sequence complementary to a target mRNA molecule – flanked by stabilising non-natural RNA nucleotides at either end. When these drugs enter the cell, they bind to their corresponding mRNA, forming an mRNA-DNA hybrid. This hybridisation triggers the body’s viral defence enzyme, RNase H, which naturally degrades RNA-DNA hybrids, thereby degrading the mRNA and preventing protein expression.



Technologies such as AlphaFold 2 enable scientists to model novel proteins in just hours.

There are currently no approved Gapmer oligonucleotide drugs; however, several large pharmaceutical companies are actively engaged in research and development.

Other approaches within the modality however, such as RNAi, have given rise to entire companies specialising in the technology – for example, Alnylam Pharmaceuticals, which boasts several marketed drugs (such as Onpattro, an RNAi therapeutic used to treat hereditary transthyretin-mediated amyloidosis).

Biological macromolecules

Biological therapies offer several significant advantages – notably, their ability to bind to or act on proteins that were previously considered undruggable by traditional small-molecule approaches. This capability is largely due to their substantial size and structural similarity to natural biological molecules. However, this very strength is also a weakness: their large size makes them difficult for the body to absorb, and their natural composition means they are often more readily degraded than small molecule alternatives.

TRUMP AND DEI: CONTINUED FROM PAGE 6...

the programme from its website.

From the Patient Safety Network website, a case study of a patient with endometriosis was taken down, among others, because of the final paragraph, which read: “...endometriosis can occur in trans and non-gender-conforming people and lack of understanding this fact could make diagnosis in these populations even more challenging”.

At the Centre for Disease Control and Prevention, phrases such as “gender, transgender, pregnant person, pregnant people, LGBT, transsexual, nonbinary, assigned male at birth, biologically male, biologically female” were used to guide decisions on whether to remove or edit content on the website.

The US Senate Committee on Commerce, Science, and Transportation Committee, analysed grants awarded by the National Science Foundation (NSF), with start dates between January 2021 and April 2024, and found more than ten percent went to “questionable projects” that promoted Diversity, Equity, and Inclusion (DEI) in five categories of Status, Social Justice, Gender, Race, and Environmental Justice.

Trigger words: how DEI language is being flagged

Scientists who receive NSF funding were put on notice last week to cease any activities that do not comply with the executive orders. A search of language was conducted in grants, aiming to flag anything with particular DEI-related words for review. The words triggering these reviews paint a picture. A sample includes:

Advocacy	Barrier	Biases	Cultural Relevance
Disability	Diverse backgrounds	Diversity	Ethnicity
Excluded	Equity	Female	Gender
Hate speech	Historically	Implicit Bias	Inclusion
Inequalities	Institutional	Inter-sectional	Male dominated
Marginalised	Minority	Multicultural	Oppression
Polarisation	Racially	Segregation	Socioeconomic
Systemic	Trauma	Under-represented	Women

As institutions navigate these new executive orders, the long-term effects on the scientific landscape remain to be seen.

MOLECULES AND MIRACLES: CONTINUED FROM PAGE 7

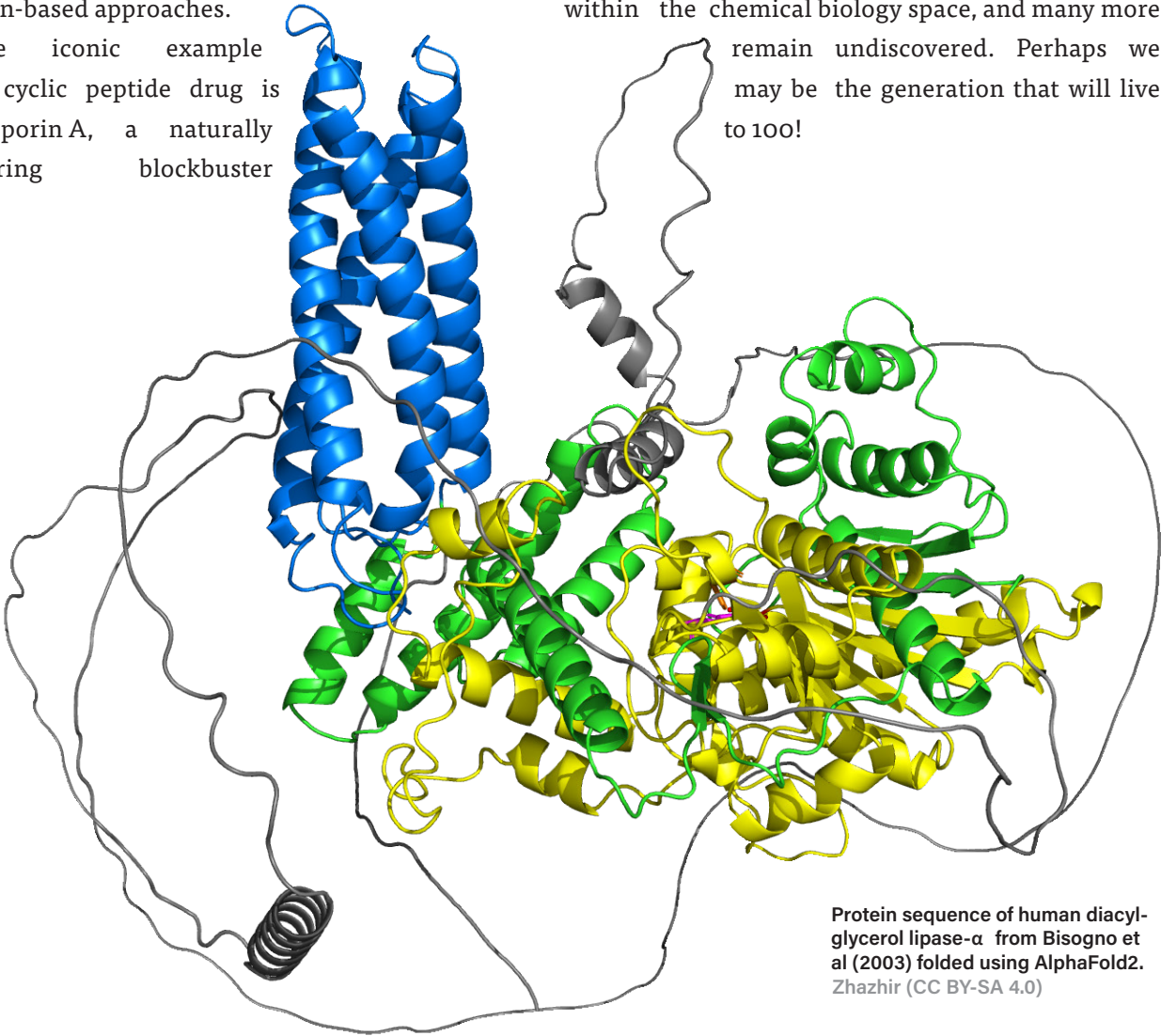
Biological macromolecules seek to strike a compromise between classic and modern approaches. One example of this modality is cyclic peptides. Typically consisting of 10 to 20 amino acids, these peptides are cyclised – often via the N-terminus and a free cysteine residue within the chain. Their smaller size and cyclic structure allow for easier absorption, largely because they can conceal hydrophilic groups within the ring to facilitate passage through lipid membranes. In addition, cyclisation masks the N-terminus, making it less susceptible to protease enzymes and thereby reducing degradation. Nonetheless, cyclic peptides remain relatively large – often exceeding 2,000 Daltons – compared with small molecules, which typically do not exceed 500 Daltons. This intermediate size offers a balance, enabling more effective absorption and a better degradation profile while retaining some of the increased potency characteristic of traditional protein-based approaches.

One iconic example of a cyclic peptide drug is cyclosporin A, a naturally occurring blockbuster

“
Biological therapies offer several significant advantages – notably, their ability to bind to or act on proteins that were previously considered undruggable.

immunosuppressant widely used in organ transplantation and the management of autoimmune diseases. It marked a breakthrough by allowing the gradual phasing out of traditional steroid-based immunosuppressants, which were associated with undesirable side-effect profiles.

Conclusion
These examples illustrate just a few of the therapeutic modalities that have emerged from recent advances within the chemical biology space, and many more remain undiscovered. Perhaps we may be the generation that will live to 100!



Protein sequence of human diacylglycerol lipase-α from Bisogno et al (2003) folded using AlphaFold2. Zhazhir (CC BY-SA 4.0)

The Felix Science Team are looking for writers, and also future editors!

To outline your interest, please contact our email: science.felix@imperial.ac.uk. In the Science team, we aim to publish articles that are novel and accessible to the Imperial community. If you'd like to hear more, please get in touch!

ENVIRONMENT

Feature: A call to cut ties between education and fossil fuels

Three climate activists investigate the complex connections between education and the fossil fuel industry.

Environment Writer

SEBASTIAN GONZATO

The continued extraction of fossil fuels poses an immediate, existential threat to modern societies. There is an urgent need to change courses and syllabuses, to cut ties with fossil fuel companies, and to foster a culture that empowers imagination, design, and the creation of just and fossil-free futures. We urge the reader to, where possible, embed the climate emergency into school and university curricula, consider climate activism themselves, and to work with colleagues to distance education from the fossil fuel industry.

As early as 1962, Shell's chief geologist wrote a book-length report warning of the effect of rising atmospheric carbon dioxide levels from burning fossil fuels. Evidence shows Exxon was well aware of climate change by 1977, 11 years before it became a public issue. An exposed 1979 Shell report described "severe stresses on human societies" from burning fossil fuels. The famous "Greenhouse Effect" internal memo from Shell in 1986 warned of climate impacts "larger than any that have occurred over the last 12,000 years". A confidential 1989 report warned that "many species of trees, plants, animals and insects would not be able to move and adapt" and that "the potential refugee problem [...] could be unprecedented. Africans would push into Europe, Chinese into the Soviet Union, Latins into the United States, Indonesians into Aus-

Environment Writer

PETER KNAPP

tralia. Boundaries would count for little – overwhelmed by the numbers. Conflicts would abound. Civilisation could prove a

Environment Writer

JULIA MITRA

climate change. One example of this is TotalEnergies' key involvement in the East African Crude Oil Pipeline (EACOP)



Begüm Yener

fragile thing".

Oil companies continue to amplify the risks for those most vulnerable to

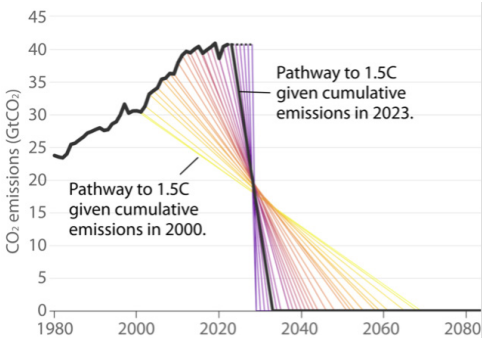
that will lead to the region becoming uninhabitable. Protest is aggressively silenced, with Shell complicit in the ex-

ecution of nine Nigerians who peacefully protested oil leaks in the Niger Delta.

Fossil fuel companies plough billions into denial, lobbying, disinformation, and manipulation designed to delay climate action by confusing the public and policymakers about the climate crisis and its solutions. Meanwhile, carbon dioxide levels continue to rise, threatening billions of human lives and countless species.

The fossil fuel industry also seeks to control those in power to maintain control of its profits. It has undermined attempts to reduce carbon dioxide levels in the atmosphere through: (i) fossil fuel lobbying groups, e.g. from Tufton Street, who manipulate politicians; (ii) fossil fuel interests in media companies, such as GB News owner's hedge fund with \$2.2 billion in fossil fuel investments; (iii) greenwashing advertising, showing abundant renewable energy while simultaneously scrapping plans to grow the sector; and (iv) sponsorship of education, culture, and research institutions to create a dependency on money from the industry.

These interventions from the fossil fuel industry have facilitated the exponential rise in carbon emissions that has made it impossible to keep the world's temperature below the critical 1.5°C above pre-industrial levels, as shown below. This means that devastating increases in food crises, droughts, fires, floods, and mass migration are now inevitable. The future of young people is bleak, and we cannot allow the fossil fuel industry to keep destroying it.



CO₂ emissions pathways remaining within a “safe” threshold is impossible due to continued burning of fossil fuels. UNEP Gap report

Here are some personal stories from people’s experience of fossil fuel manipulation tactics at each stage of education from childhood, school, and university, to working for fossil fuel companies.

A child’s perspective

While the fossil fuel industry works to normalise its activities with children, many children suffer the consequences of climate change and wars that they profit from. The chart on the opposite page shows that in 2022, \$134 billion in profits – more than the GDP of 119 countries combined – were taken by fossil fuel companies worldwide using Russia’s invasion of Ukraine to hike

PETER KNAPP

Lego was my childhood obsession in the 1990s. It provided a world where creativity thrived. It developed my spatial comprehension so that I can now easily visualise objects without having them in my hands. But how else did Lego affect my young mind?

Between 1966 and 1992, both Shell and Exxon were the only companies in Legoland. In 1992, this was replaced by Lego’s own oil company, Octan. Many Lego sets were oil tankers, petrol stations, and even oil refineries, and nearly everything in Legoland is reliant on oil. I was totally unaware of this until I started to think about it as an adult. I feel like my creativity was hijacked by fossil fuel companies who knew my future was being destroyed. It made it difficult for me to imagine a world that was not centred around oil.

Fossil fuel companies require a social licence to operate. If kids play with toys that legitimise oil, they are unlikely to question these companies or fight against them when they realise their world is burning. This is also why these companies sponsor artistic and cultural enterprises, such as museums and theatres, to make people think that pleasure is enabled by their brands.

I was led to believe that advances in human civilisation were thanks to fossil fuels. Cartoons like the Flintstones were funded by a fossil fuel thinktank in the 1970s, creating episodes where Fred wants to join an oil company, or where Fred discovers oil and humanity moves out of the caves. I was not taught

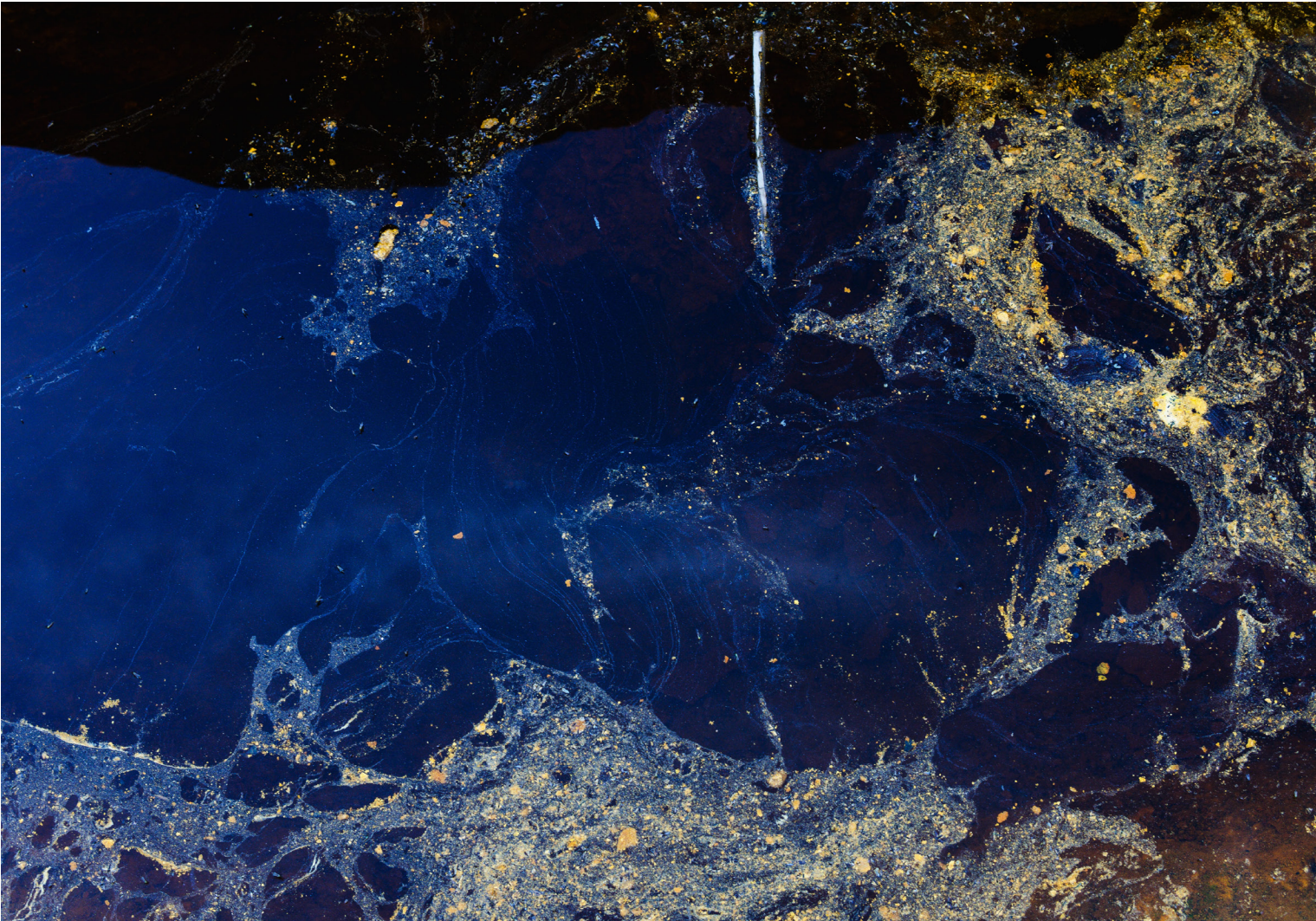
colonial history or introduced to the workings of sustainable indigenous societies and their rich communities, which I believe would have been extremely helpful to learn in school.

Now I am an activist fighting against the dominance and expansion of fossil fuels, against the destruction of nature, and for equity.

Recently, I protested alongside children at Kidzania, where children role-play different careers and where Shell is a major sponsor. Children may even act as petrol station attendants wearing Shell uniforms and use it to recruit ‘budding scientists to create sustainable fuel’. I cannot bear to see future generations being manipulated as I was.

I regularly protest at London’s Science Museum, which I loved as a child, because they accept donations from fossil fuel companies such as Shell, BP, Equinor, and Adani to legitimise their planet-destroying brands to young people. The new Adani Green Energy Gallery is sponsored by the renewable arm of Adani – the world’s largest coal company – which uses its renewable capital to expand coal operations. This led to hundreds of teachers pledging not to take their students to the Science Museum.

When I realised how the fossil fuel industry manipulated me as a child, it made my skin crawl. I thought fossil fuels were normal and important until quite recently, but once I learnt the insidious and manipulative tactics the fossil fuel industry applies to children, I couldn’t stand by and watch it continue. I stand up to stop it.

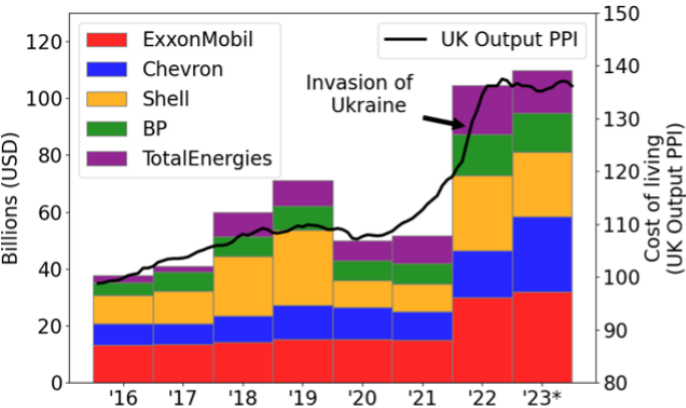


Polluted water at a mining park, Spain. Envato Elements




Young people protesting at Kidzania in March 2023 against Shell’s sponsorship and presence. Extinction Rebellion Families

up oil prices. This greed has increased vulnerable people’s food and heating bills. In a 2023 report from York University, eight out of ten councillors say that children in low-income families were at risk of destitution in their area due to the crisis. Financial pressure on families has led to increasing safeguarding concerns of vulnerable children, additional support, and absenteeism in primary, secondary, and special needs schools. Crises are money-making opportunities for fossil fuel companies, and this is their bottom line – even when children bear the cost.



The costs to UK consumers (Output PPI) rocketed upward during the invasion of Ukraine, matching increased profits of western fossil fuel companies. 2023 profits are the third quarter values scaled by 4/3. PPI values from ONS; profits from the Guardian Peter Knapp

A teacher’s perspective



Drilling for Oil in the Ocean

Question
How do scientists drill for oil in the ocean without getting wet?

Hypothesis

Materials

- Foam platform
- 2 Clear plastic straws
- Aquarium with sand and water inside
- Clear tape

Procedure

1. Tape two straws together end to end so that the juncture is completely sealed to make a drill.
2. Try to strike oil. Insert your drill through the hole in the deck into the sand until it hits the bottom of the aquarium. Cover the end of the straw tightly with one finger and remove the straw.

Conclusion
Is there any dark sand in the end of the straw? Did you strike oil? How many times did you drill before you found oil?

Research Questions

1. How do geologists determine where to look for oil under the ocean?
2. What are the challenges of finding and producing oil from offshore basins?
3. What would life be like working on an offshore oil rig?

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©2019 The NEED Project. Wonders of Oil and Natural Gas. www.NEED.org

An example of a free lesson plan provided by NEED, who are sponsored by fossil fuel companies including BP and Shell. NEED

An undergraduate’s perspective

JULIA MITRA

I pursued chemical engineering at Imperial College London due to my interest in sustainability, but I’ve been disappointed by the attitudes prevalent among students and staff here. Although we learn about sustainable processes, we’re equally taught about oil refining and extraction, and there is an absence of any education on why climate change is such a big issue. Even in the carbon capture project there is little explanation regarding the severity of the detrimental effects of high atmospheric CO₂, and there is no discussion of how carbon capture and storage (CCS) has been historically used to delay climate action. The message students receive is that both the fossil fuel, carbon capture, and renewable energy sectors are expanding and important.

This lack of information around the climate crisis is then coupled with prevalent marketing from companies like BP and Shell, which offer careers talks, internships, and even CV workshops to students. From my experience, the student body is mostly climate-conscious,

IAN MCDERMOTT

I am an A-level Chemistry teacher. In my experience, teenagers are environmentally aware, and surveys show that some are avoiding companies that don’t align with their values. For some in my able and urban cohort, Shell is not an attractive employer, but others have absorbed the greenwashing that fossil fuel companies must “lead the transition” and that they can make “change from within”. These false narratives are designed to keep political power within these industries who have abused it for decades. The fossil fuel industries target those from free school meals backgrounds looking for more secure lifestyles for whom the high income is a way to escape hardship, which is created from the inequality these businesses thrive on.

Young people are immersed in the 24/7 horrors of social media, where influencers glorify high-carbon lifestyles, and the fossil fuel industry’s manipulative tactics lurk. Often, young people are made to feel guilty for aspiring to such lifestyles, but they are subjected to the most advanced and insidious marketing, and they cannot be blamed. We should certainly not be telling them that it is their duty to fix all the problems that those in power are responsible for now.

At my school, most young people tend to engage with climate-related lessons or talks but feel like there’s not nearly enough, especially on transformative action and social justice. They know how bad the future looks – they don’t need us to tell them – but do not feel protected or hopeful that things will improve.

Formal delivery on the reality of the climate emergency barely features in A-level. The Edexcel Chemistry course I teach specifically excludes climate change. The only mention is in the acid rain section: “understand the problems arising from pollutants from the combustion of fuels, limited to the toxicity of carbon monoxide and the acidity of oxides of nitrogen and sulphur”. The Physics and Biology specifications are similarly unhelpful, with no prospect of including the climate emergency in sight. All young people are left with is what they learn from social media. Learning about an existential threat from social media may not provide the same safeguards against poor mental health as formal delivery in school may do, and omission of climate change from the courses leaves young people to discover all the horrors alone.

We also cannot expect young people to learn about political engagement and power imbalance outside lessons, and education should not shy away from it. We need a planned, cross-curricular, age-appropriate, differentiated, and psychologically-aware curriculum delivered by trained teachers. Group grades rather than individual grades may prepare students for a collaborative future rather than a fierce and self-protecting one.

Above all, young people have not caused the climate emergency and adults have failed to protect them from it. We have failed to deliver compelling, hopeful, and empowering visions of the future. Our students need totems of success, better stories, giving them power over their futures, and the freedom to be teenagers.

but the messaging from fossil fuel companies leads many of my peers to either believe that the damage has been overstated or that they will be able to change these companies from the inside. Some of us pushed to reduce our affiliations with these companies, which finally happened this year due to a motion from Imperial’s student union requiring societies to cut ties with fossil fuel, arms, and tobacco industries.

This motion came in the absence of action from Imperial College as an institution. I’ve been involved with Imperial Climate Action’s divestment campaign for two years now and have seen a resistance to change, even to making a statement regarding a tangible commitment to sustainability. Even as the campaign generated hundreds of student signatures in support of divestment, as well as official support from the student union this year, Imperial has clung tight to the “engagement for change” narrative, while ignoring that their relatively small endowment is not near substantial enough to exert influence over these companies. This is in contrast with more than 100 UK universities that have rejected

higher education investment in these industries. It has become obvious that the senior management of Imperial College London prefer to work alongside fossil fuel companies rather than the student body. This is not hard to believe when the personal involvement of university presidents and chancellors in fossil fuel companies is tolerated – the previous president of Imperial Alice Gast sits on the board of directors at Chevron.

The momentum of Imperial’s many sustainable initiatives keeps me hopeful, though. For example, the highly successful Imperial Green Careers Fairs have proven the widespread interest in sustainable careers, and last year a network for sustainable initiatives was created to facilitate the success of each campaign. However, all of these are run by students and staff who are already overwhelmed with a heavy workload, are often platforms for fossil fuel companies to greenwash, and often face pushback instead of support from the College. I want my university to cut ties with fossil fuels, so we can present a more truthful narrative around climate to students.



Geothermal plant in Iceland. Envato Elements

Fossil fuel companies, including BP and Shell, partner with NEED (National Energy Education Development) to provide free educational materials to cash-strapped schools. Lesson plans include making an oil rig using a desk, and have learning objectives such as: “Students will be able to identify and describe careers in the natural gas and energy industries, and skills and qualifications for each job”. The meat and dairy industry use the same tactics to provide free educational materials for Maths, Science, and Literacy that aim to legitimise the industry, despite major cuts to meat and dairy consumption being essential to reach even the 2°C goal specified in the Paris agreement. Both industries use similar strategies to target children, such as paying influencers and celebrities to run advertising campaigns.

Cambridge University Press and Assessment claim climate education is “undervalued and underrepresented in the curriculum”. A Teacher Tapp survey found about 35% of secondary teachers did not believe they spent enough time teaching it, and about 40% of these teachers said

they required more resources. Additionally, the fossil fuel companies responsible have been polluting education for decades.

A PhD's perspective

The influence of fossil fuel companies in education should not be left to the whims or opinions of unrepresentative, self-in-



A Shell-sponsored sports day at Imperial College London designed to legitimise their oil and gas operations and their presence within academia, as well as recruit students. Julia Mitra

SEBASTIAN GONZATO

When I started my bachelor's degree in Chemical Engineering at Imperial College London, I was highly sceptical of the fossil fuel industry and other extractive industries because I knew about their disinformation tactics and heavy lobbying to delay climate action. The industry was everywhere at Imperial, at the countless careers fairs, careers workshops, guest lectures, event sponsorships, student bursaries, and so on. Before I knew it, my view of fossil fuel companies as bad faith actors who needed to be dismantled had softened to seeing them as a necessary evil for the transition.

Their presence at the university legitimised them. Since my friends wanted to work for BP to reduce methane leakages, and my lecturers worked with fossil fuel companies on carbon sequestration, I convinced myself that the harm that the fossil fuel industry had done in the past was water under

the bridge, and that they were learning to change and to become more responsible. They sponsored sports days and pizza nights, so that I would associate them with good times. This is the image they present to encourage people to work for them, and to see them as a part of the solution. But it is simply another manipulative tactic that I and many others fell for.

I recently talked to a chemical engineering student who was planning to climb to the top of the ladder at a fossil fuel company and, after 20 years, change it for the better, blissfully unaware of how useless climate action will be then. When you're surrounded by people who think like that it is all too easy to start doubting your own sense of urgency and the scale of the climate crisis. In my opinion, this influence on university students is the greatest damage that the fossil fuel industry wreaks on higher education.

**A Shell advisor’s perspective
(Safety and Operations)**

CAROLINE DENNETT

I spent 10 years helping Shell to improve its operational and process safety culture. I saw no evidence that Shell intended to change its core focus away from fossil fuels. I severed ties with them in 2022 after an Extinction Rebellion protest at the Shell HQ encouraged people to jump ship.

Organisations and entire industries can change; they do and it’s not always a struggle. One thing is certain: change is only possible if you have leadership. Not because “Management” have all the ideas and answers, but because they have decision-making power and hold the keys to unlock the necessary resources to enable transformation.

At the operational front line there is no talk of energy transition. We surveyed 20,000 personnel between 2011–2021, rarely did anyone mention climate change, net zero, decarbonisation, emission targets, or a transition. Shell has always been motivated by oil and gas production and managers are rewarded on this basis. Since Wael Sawan became the CEO at the start of 2023, he has crystallised this positioning.

Sawan has made it clear in published articles and in investor meetings that focus must be on oil, gas, and petrochemicals to maximise profits. “Drill, baby, drill!” you might say.

In June last year, Sawan indicated Shell would be scaling back their renewable energy efforts, causing the Head of Renewable Generation to leave Shell weeks later. An open letter written by two employees from their Low Carbon Solutions division of Shell urged Sawan to continue their low carbon investments and practically begged him not to rollback on their energy transition efforts. The letter was seen by 80,000 staff and supported by over 1,000 Shell employees.

Sawan’s response was to eliminate 200 jobs from the department and review a further 130 positions for redundancy in 2024.

Yet Shell has just launched a promotion for their energy transition skills hub in February 2024, a training and education program “aiming to prepare people for jobs focused on energy transition”. This is a classic example of greenwashing education and careers. It’s not change, it’s window-dressing.



Flooded church. Envato Elements

terested, or privileged individuals easily susceptible to manipulation. Instead, university management and staff should listen to and facilitate bottom-up sustainability initiatives. Examples include the University of Cambridge with its report on divestment, the University of Lausanne encouraging academic advocacy, and the University of Barcelona agreeing to mandatory climate education following student protests.

A Shell employee’s perspective (R&D)

Shell claim to give money to organisations devoted to “saving humanity” and protecting biodiversity, but they also state on their website that “we may not always agree with their opinions on topics such as climate change”. For example, Shell sponsors Earthwatch, who provide corporate training enabling “profound change in their business to meet sustainability goals,” demonstrating that Shell is happy to pay to be associated with these organisations to improve their image, despite clearly acting against their goals. Shell additionally states on their website that, in cases of disagreement, “we make our views known within the organisation and seek to influence its position on certain policies.” This demonstrates Shell uses its sponsorships to reduce an organisation’s

DR GRAHAME BUSS

I worked at Shell for more than 30 years after getting a PhD in engineering. I started in Research & Development, then as a principal scientist working with management up to Board level. I can tell you this: you cannot change an oil and gas company from the inside.

When I joined, my colleagues talked about getting Shell away from oil and gas. When I left, Shell was still talking. Unfortunately, that was all it was – talk. When I joined it was an oil company. When I left it was a bigger oil company. A former head of strategy once said to me: “Shell has two drivers: its survival and its profit”.

“We are on a highway to climate hell with our foot on the accelerator,” said the UN secretary general António Guterres in 2022. The hottest year on record was 2024, breaking 1.5°C of warming for the first time. Fossil fuel interests are actively making things worse – bribing politicians, promoting false solutions, and denying the need

impact. Shell’s list of partners includes the Alliance to End Plastic Waste, the Jet Zero Council, the UN Environment Programme, The Nature Conservancy, and the World Economic Forum, all of whom are at risk of manipulation from Shell.

to reduce oil and gas. A recent internal memo for Shell staff on “how to have conversations about Shell” didn’t mention the climate crisis or the science behind it once. It did mention the need to maintain profits.

We must accelerate the energy transition out of fossil fuels. No new oil, gas, and coal is the key, as the International Energy Agency, the World Health Organisation, the UN, the IPCC, and the vast majority of the scientific community have all been saying for years. The oil and gas industry is opposed to this.

It doesn’t matter that you are a good person, that you desire change. It doesn’t matter how much you sincerely believe you will make a difference. You won’t in the oil and gas industry. The machine grinds on.

If you want to work in energy, the best thing you could do as a chemical engineer is to work in the renewables sector. The oil and gas industry will chew you up and spit you out. Refuse to work for them and show them a better way.

Conclusion

It is time that we stop allowing the fossil fuel industry to influence education and manipulate us. This industry associates branding with children’s activities; it provides free resources to underfunded schools designed to recruit and brainwash; it distracts students from climate

action by promoting techno-optimism; and it positions fossil fuels as a necessary part of the future when there is no room for new oil, gas, and coal extraction. The deliberate and disingenuous strategies used by fossil fuel companies intentionally hide the severity of their destructive practices so that they can continue to maximise profit. Sadly their strategy in education has proven successful so far, as we have illustrated in this article. We hope that this article will reduce their impact on others by shining a light on these tactics and inspire others to become climate activists.

The fossil fuel industry has proven time and time again that they prioritise profit over ethics and will continue expanding fossil fuel extraction until they are forced not to. We are on a climate cliff edge, and we urgently need to make necessary – albeit tough – changes. This is why we call on educational institutions to cut all ties with fossil fuel companies and put an end to their false narratives. Instead, we need new narratives that place nature-based solutions, reduced consumption, active travel, equity, empowerment, and collaborative community at the centre of education.

The authors and contributors are all active in the climate movement because we believe in the necessity of non-violent direct action against the fossil fuel industry.



Copper mine waste water. Envato Elements

COMMENT

Ukraine at war, three years on

Felix sat down with the Ukrainian society and Russian-speaking society to discuss the impact of the ongoing invasion on Imperial students.



Ukrainian tank crew in training before the onset of the war. Ministry of Defense of Ukraine

Comments Editor GUILLAUME FELIX

This week, Russia's brutal and unjustified invasion on Ukrainian soil enters its fourth year. This grim anniversary concludes a year marked by heavy losses for both sides, the intervention of foreign troops on the frontline, and mounting war fatigue both in Ukraine and its allies. Indeed, the conflict has accelerated in the past months, and important territorial losses

combined with political uncertainty – mainly caused by the recent administration change in the United States, Ukraine's largest military supplier – have increased doubts on Ukraine's ability to repel the invader.

The three years of invasion have been gruelling. While estimates vary, most analyses concur on a military death toll of around 60,000 for the Ukrainian army and 150,000 for the Russian army, excluding their respective affiliates. Over 40,000 civilian casualties (war-related deaths or injuries) have been confirmed,

although the actual figure is expected to stand much higher.

The innumerable atrocities of the conflict, renormalisation of threats of nuclear warfare, and food shortages due to the war's disruption of global supply chains have been widely reported on. But three years on, Felix has sought to understand the impact of the conflict on Imperial students having personal, familial or cultural ties to Ukraine and Russia. I sat down with Danil Zadorozhnyi, President of the Ukrainian Society, and Alex (name pseudonymised),

a member of the Russian-speaking society, to collect and share their stories.

Ukrainian society interview

The Imperial Ukrainian society was created in 2022, in the wake of the invasion. Previously, most Russian-speaking Ukrainian students were members of the Russian-speaking society. "When the war started, the Ukrainians felt the need to feel their identity as Ukrainians, not just a part of Russia, because that was sort of the reason for the war", explained Danil.

He added that the community includes both Russian- and Ukrainian-speaking Ukrainians (over a third of the country's population is Russophone), as well people that speak neither language, and are simply looking to reconnect with their Ukrainian origins. "They have a willingness to connect with their roots, to speak with fellow Ukrainians, to understand the mindset of these people".

The second reason for the creation of the Ukrainian society was the large influx of young Ukrainians to the United Kingdom, including at Imperial College. "And then from a simple initiative, it started growing and growing, to the point that we are having events for 150 people this year," remembers Danil. This allowed the society to fundraise for the people hit by war.

But while in the beginning, funds were "flowing," the society faces increasing difficulties to fundraise. Danil laments that Ukrainians and non-Ukrainian alike now ignore their pleas for donations, for instance to help a bombed children's hospital. "People who are not from Ukraine would not even bother to click the link," he regrets. This has led to a change in their strategy: "Now when we need to fundraise money, we create fun events. And when I say fun, I mean engaging: quizzes, public communication, etc. That's the only way people can feel the presence the effort from the community." The society has lately turned to auctions, with items including a flag signed by Valerii Zaluzhnyi (a renowned Ukrainian general), which sold for £1,400.



Many Ukrainian students might look like they're getting used to it, but in reality that's just the way the organism adapts.

Danil also says that people's knowledge of the war has slumped: "I recently took an Uber, and the driver asked me where I was from. I said I was Ukrainian. And he had this question, 'how did the war end?' I think it's very indicative of how the knowledge of the war in the British society – especially among those people who are not very into politics – decreased



"Unissued diplomas", a Ukrainian society-organised exhibition honoring fallen students, held in May of last year. Brendan Foster for Imperial College

drastically, exponentially compared to a couple of years ago." He notices that the visibility of the conflict has lowered, both in traditional media and social media, where mentions of the war have been drowned in a flood of content.

The British government initially launched life-saving initiatives to help Ukrainian refugees, including the Ukrainian scheme, which granted successful applicants the right to stay in the UK and pay home fees in universities. Danil is grateful for these initiatives, but regrets that support is now waning: the scheme has been extended once already

Indeed, the war has taken a heavy toll on the mental states of Ukrainians at Imperial. "More than 50% of Ukrainian students still have their families in cities such as Kharkiv or Kherson, that are close to the border with Russia and are bombed every single day. They have this impact when they communicate with their parents, which increases their stress levels. They might look like they're getting used to it, but in reality that's just the way the organism adapts," reckons Danil.

"I have a friend whose father died on the frontline last year. She was in the community of the Ukrainian society, a very proactive, fantastic girl," he recalls. Her heartbreaking story is but one among many. Another member of the society received a call from her parents one morning, informing her their building had been struck by a missile. "Luckily they survived, but that has clear implications on the state of a student, their performance, their feelings." The Russian army has conducted indiscriminate attacks on civilian targets, including residential buildings: according to Ukrainian estimated, 97% of Russian missiles have hit such targets. "A good friend of mine has parents in Kherson – that's the region occupied by the Russians," continues Danil, "I ask

him the usual question for the Western world: 'Hi, how are you?' And he does not respond with 'I'm good, thanks'". Instead, the student explains that his father, a farmer, refused to cooperate with the invading forces: "they took him away from his family, from his wife, from his other son, into his basement to teach him a lesson. And this includes physical impact as well as financial impact."

Thankfully, the Ukrainian community has demonstrated exceptional solidarity. Danil emphasises that any Ukrainian seeking help – to deal with anything from personal statement application to a foreign university to a home destroyed by bombs – can simply contact the community to be put in contact with "the person who'll be able to guide them".

Russian-speaking society interview

Perhaps less visibly so, the Russian-speaking community at Imperial and abroad has also been gravely affected by the Kremlin's war, as well as repression at home. Roughly half of Russophones live outside of Russia, and Alex clarifies that their society is open to all of them: "We have members from the main parts of Russia, but we also have a lot of members from Kazakhstan, Georgia, Armenia, the

Baltic countries, and even a couple of Ukrainian members. I think this is really good because it helps broaden connections and build up this community.”

Immediately after the invasion, in an attempt to weaken Mr Putin’s regime, Western governments led by the United States and the European Union instigated drastic sanctions against the trade of Russian goods, the property of high-profile Kremlin-linked individuals, and the movement of Russian capital abroad. Alex denounces the sanctions’ consequences on the lives of ordinary Russian émigrés at home.

In particular, many Russians are faced with great difficulty to pay for tuition fees, as their money is stuck in their native country. “I don’t think there is a single bank that still allows you to transfer large sums of money,” they

your passport. Sorry.”

Alex says expatriate Russians feel a pervasive lack of visibility and understanding of the issues they face. They emphasise that this doesn’t detract from the horrors the Ukrainian



Of course, we’re not saying that we’re affected worse than the Ukrainian students. It’s not even close, but it’s not nothing either.

community lives through: “Of course, we’re not saying that we are affected by something that’s worse than what affected Ukrainian students. It’s not even close, but it’s not nothing either.” They also throw light on what some perceive as a lack outspoken criticism of the

why they “promote the language of a terrorist state”. “We don’t react to that, but it makes you realize that some people might encounter it personally and might not even know what to do,” they analyse. “You either have a stable

emotional condition or not. If you’re not so stable, then it affects you a lot. If you’re stable, you learn to live with that and to just accept that some people will draw conclusions without giving it a proper thought.”

As a result, many Russians living

when as a regular person you get exposed to it, that image builds up in your head. You’ll end up saying you’re from Estonia because your parents moved there rather than say you’re Russian.”

This has impacted the visibility of the society. Last year, the committee decided not to display a Russian flag at the Fresher’s Fair, to avoid unwanted offense against people who associate the flag with the Russian government or army. This confused students who might have liked to join the society. “This year, we did put our flag on, and we had more second- or third-years coming up to us and saying, ‘Oh, we thought the society was closed’”.

Alex remembers that some acquaintances questioned them on the invasion when it started, but that these interrogations stopped being “a way to judge” him when they explained their views: “we’re friends, no matter what goes on.” And for now, employment prospects have apparently not been undermined by the war. Businesses are “looking to make money, and if they think you’re a right fit for them, they hire you, no matter where you come from,” quips Alex.

The society therefore primarily aims to provide support, by organising regular events, sometimes jointly with other universities. “The goal of our society is mainly to create a safe space for Russian people,” outlines Alex, “where you can come and speak in your language. It’s a natural desire for every person – there is nothing wrong with wanting to speak the language your parents taught you. [...] The best thing we can do is give Russian people the opportunity to come to our society without shame, without the fear of being judged for saying ‘Yes, I come from Russia. Yes, I was born in Moscow.’”

At the time of writing, Mr Trump claims to engaged in discussions with Mr Putin to negotiate a end to the violence. Whether Ukraine obtains strong guarantees against further violence, whether Europe finally wakes up to the threat of aggression, whether the authoritarian Russian regime finally falters is out of our hands. Nonetheless, it remains everyone’s duty to ensure that the distinctions between regimes and populations, politics and culture, are respected.



Arrests of Russian civilians protesting against the invasion in February 2022. Wikimedia Commons

explains. “If you had time to do it before the sanctions, you could use the last bank left to transfer money into your account. Some people still go back to Russia to take cash and then come back here.” Some of Alex’s friends, enrolled for a master’s degree, had to leave university with only a bachelor’s, for a lack of access to their tuition money. “I didn’t even have the option to open an international USD account at HSBC,” they go on, “I asked for an explanation, and they said, ‘It’s just

Kremlin’s actions: “The Ukrainian society is trying to raise awareness. For us, it’s harder. Some people here have nothing to lose. But others like me go back to Russia and have a family still living there. So if we just go out and start chanting that we’re against the war, this might have serious consequences for ourselves.”

Life has become harder in other ways. Russian-speaking society members have had to face aggressive messages of social media users asking them

abroad struggle with their own identity. “I think it’s really an absurd situation that someone should be ashamed of where they were born,” muses Alex, who also blames the media for accusing Russians that try to cope with the situation of being complacent. “For instance, if an artist kept having concerts in Russia after the beginning of the war, they got labelled as a murderous monster and weren’t allowed in Europe, in the US, in the Western part of the world. And I think

CULTURE

The Battle of the Grammys' Darlings

The Grammys are once again trying – and failing – to go a year without controversy about who they award, and who deserves it more

Culture Writer
RUBY LYDFORD

The Grammys and its pre-show ran for a total of eight hours on Sunday night, with the main ceremony beginning at 1 am GMT. For many, this means a skip and reading a recap. For me, this means watching the full eight-hour show and writing the recap for you to read. The Grammys is the pinnacle of pop culture. It is the night at the end of the musical year to see how marketing and streaming, as well as financial, commercial, and critical successes translate into the awards season. They are the most important accolades in the music industry, and even if they are misawarded and labelled rigged time and time again, they are still consistently used as a measure of success. Beyond the music, we have the interactions between A-listers to look at, red carpet

looks from designers to analyse, and we also receive future hints to what the upcoming year in music may look like.

Part one: The red-carpet highlights

Billie Eilish, the nine-times winning media-proclaimed “Grammys’ darling” (we’ll get to this later), wore a simple, clean Prada look complete with a sailor’s hat to the evening. This look felt a little underwhelming to me, a comment that can be extended to Billie’s entire evening. Chappell Roan wore a vintage (2005) archival Jean Paul Gaultier dress to the red-carpet. Being Chappell Roan, she proceeded to deliver multiple show-stopping looks throughout the night.

A special nod to her gigantic princess cone hat that fell off during her acceptance speech.

Charli XCX wore a custom Jean Paul Gaultier look by Ludovic De Saint Sernin (the haute couture guest designer this season). For me, it felt like

another Charli XCX tatty rag, while many would say it’s “on vogue”.

Doechii wore a multitude of Thom Browne looks over the evening. The first was a suit-dress evening wear look, which was the most demure in her rotation. Her more notable looks were her second extreme wide-hipped suit when receiving the Grammy, and her ruched bubble suit on red-carpet after the ceremony.

While Lady Gaga’s first gothic Samuel & Lewis dress with a Tiffany & Co yellow diamond necklace was fun, it was Gaga’s second outfit, an Americana light gothic look during her “California Dreamin’” performance with Bruno Mars, and her third, an Oscar-reminiscent dress, that really stood out.

Gracie Abrams wore a gorgeous Chanel look. The draping head piece was beautifully done; it felt very virginal *Handmaid’s Tale*. This was a rare high for the singer.

Jaden Smith wore a Transylvania Dracula castle on his head, by the brand Transylvania. It was rather odd and strange, but he was doing more than the countless men who just showed up in a basic tuxedo.

Kanye West and his wife Bianca showed up to the red-carpet and were then promptly kicked out. Bianca wore a fur coat, to then reveal total nudity underneath, with a piece of clear mesh labelled a “dress”. It felt like a poor, classic Kanye exhibition of performance art, with a woman’s body at the forefront.

Sabrina Carpenter wore a light blue ostrich-feathered JW Anderson dress, and then a second gold, glittery dress during the ceremony with a matching hip flask. They were simple, elegant looks, very Sabrina, playing nicely to her boudoir 1930s old Hollywood wardrobe.

Taylor Swift wore a short, red, custom Vivienne Westwood dress with her signature red lip. While not being very memorable, it was a beautiful look. While many expected her to wear an easter egg to *Reputation (Taylor’s Version)* this evening, but she threw us all off, and kept it *Red (Taylor’s Version)*, or perhaps Kansas City Chiefs.

Troye Sivan wore a lavender, silk Prada suit, and he fittingly looked like the child of Daphne and Fred in a lavender marriage.

Beyonce did not attend the red carpet but wore a gold encrusted Schiaparelli dress to the ceremony. A beautiful look from the highly contested woman of the evening.

Part two: The awards

The night started with the pre-show, taking place before most of the big nominees showed up on the carpet. Sierra Ferrell clean swept, winning all her categories and taking home four Grammys in the Americana categories.

Charli XCX won three Grammys, with all being in the pre-show: Best Visuals for *Brat*, Best Dance Song for “Von Dutch,” and Best Dance Album for *Brat*. However,

The Grammys’ trophy.
Bernd Schwabe (CC BY-SA 4.0)



she notably wasn't there to collect any of these awards, only showing up with the Album of the Year nominees. In hindsight, this wasn't the best decision, and we consequently didn't receive an acceptance speech from her, which was a real shame. Though Sabrina made the same decision, being the favourite to win Best Pop Vocal Album for *Short 'n' Sweet* and Record of the Year for "Espresso," she ended up taking the first of these awards home, so we still got an endearing acceptance speech from the artist. Sabrina Carpenter also won Best Pop Vocal Performance for "Espresso" in the pre-show, taking home two Grammys in total on Sunday evening.

Producer of the Year went to Daniel Nigro, for his work on Chappell Roan's *The Rise and Fall of a Midwest Princess*, and Olivia Rodrigo's *GUTS (spilled)*.

Being such a prominent figure in the music industry right now, this felt a long time coming. Beyoncé's producer for *Cowboy Carter* was also nominated for this award. Jack Antonoff (producer of *The Tortured Poet's Department* and *Short 'n' Sweet*) was not, although he has won it for the last three years. Surprisingly, FINNEAS was also not nominated in this category for his work on *Hit Me Hard and Soft*. These should have been early main tell signs for the events that unfolded that evening.

Doechii won Best Rap Album for her mixtape *Alligator Bites Never Heal*, becoming the third woman to win the category, after



The Grammys is the pinnacle of pop culture. It is the night at the end of the musical year to see how marketing and streaming, as well as financial, commercial, and critical successes translate into the awards season.

Lauryn Hill and Cardi B, something she emotionally noted in her speech. She then went on to cement this win with a standout live performance of her songs "Catfish" and "Denial is a River".

Chappell Roan beat Sabrina Carpenter, Doechii, and Raye to Best New Artist, using her speech to address the misfortune dealt by labels to upcoming artists. She also gave a powerful performance of her song "Pink Pony Club" earlier in the evening, citing it as an ode to Los Angeles. It was almost as good as her Joan of Arc inspired performance of her Grammy-nominated song, "Good Luck, Babe!," at the VMAs this year.

To no one's surprise,

Lady Gaga and Bruno Mars took home the Best Pop Duo award for "Die with a Smile".

Beyoncé made a surprise appearance to collect Best Country Album for *Cowboy Carter*, an award presented by Taylor Swift, as she won the category back in 2010 for her country album *Fearless*. This gave many fans a full circle "Tayonce" moment, referencing back to the 2009 VMAs moment in which Kanye West (who at this point had been kicked out of the venue) interrupted Taylor Swift collecting the award to say Beyoncé was better deserving.

Kendrick Lamar then went on to win Record of the Year for his hit song "Not Like Us," presented by Miley Cyrus (winning last year for her song "Flowers") who also won earlier that evening for Best Country Duo with Beyoncé. With "Espresso" having been the favourite to win the category, Lamar's win was unprecedented. An even bigger surprise was that Lamar went on to collect Song of the Year moments later, when the favourite to win had been "Birds of a Feather" by Billie Eilish. Kendrick Lamar clean swept Sunday evening, winning five Grammys in total, becoming the most awarded artist of the night.

The final award of the night, the highest accolade in music, Album of the Year, was long-awaited to be Billie Eilish's first Grammy of the evening, for her third album *Hit Me Hard and Soft*. However, when the LA fire brigade announced Beyoncé's *Cowboy Carter* to be the winner, this led to much outrage online and even tears from Eilish. Many believe the award was rigged and "tainted," owing the win to Jay-Z's speech while collecting the Global Impact Award Grammy last year: "[Beyoncé] has more Grammys than anyone and never won album of the year. So even by your own metrics, that doesn't work". This meant that Billie Eilish, the

favourite to win of the night in the major categories, went home Grammy-less.

Though I do agree that Billie Eilish's *Hit Me Hard and Soft* and "Birds of a Feather" were the deserving winners of the evening, arguing that the Grammys are biased is like arguing that the sky is blue, unfortunately. Artists are misawarded every single year. This year's snub of Eilish for Album of the Year is no larger than SZA's snub last year for *SOS*, giving the prize to Taylor Swift's *Midnights* instead, to say the least. If I were to call it "the biggest snub of all time," as many are, I would have to address Arcade Fire's *The Suburbs* beating Katy Perry's *Teenage Dream* for Album of the Year, or the posthumous nomination of Mac Miller's *Swimming*, inviting his parents to the ceremony, only to give the award to Cardi B's *Invasion of Privacy*. Though Kendrick may have been over-awarded on Sunday, he certainly was not when Taylor Swift's 1989 beat out his magnum opus *To Pimp a Butterfly*. Beyoncé may not have been deserving this year, but she was when *Renaissance* was unfairly seconded to *Harry's House*. The voting academy is constantly correcting their past mistakes, and in turn, creating new ones every year.



Billie Eilish
at a concert.
the CWE
CC BY 3.0



BOOKS

Sally Rooney's Intermezzo...

A departure from the Rooney we know; *Intermezzo* is not a bad book, but it isn't a good book either.

Books Writer
LILA BULL

If Rooney aimed to embody everything unlikable about Suit-and-Tie City men in their early 30s – those with massive victim complexes who crave attention more than their younger brother's dog – I am all for it. If instead, she intended to portray them as a nuanced yet somewhat contrived, grieving characters who can't let go of two women despite hurting both, I'm here for that too, though with a tad of skepticism.

Intermezzo is a novel that delves into complex relationships, grief, and self-awareness – a common theme in Rooney's work – told through a dual narrative of two brothers coping with the death of their father.

Peter, the elder brother, is undoubtedly the most captivating character in the story. Once you adjust to its Joycean narration (albeit borrowing too heavily from him) Peter's chapters become harder to put down. I could not help but crave his failure at times, often wanting him to fall short of his desires. Sylvia and Naomi, his two love interests, both deserved better; Peter is not a good man. And the fact that he knows he is not (in the sense that he is fully aware of his own selfishness) does not make his actions any less frustrating or painful to witness.

Rooney writes Peter's relationships through his own perspective, or at least, it feels like she wants us to believe that is the case. For example, Naomi, at times, comes across as pathetic largely because Peter views her that way. Peter views Naomi as passive and pitiable, yet

Rooney deserves credit for not letting her be defined solely by his lens. Despite his perception, the story subtly reveals Naomi's more nuanced side, highlighting a quiet strength and independence that Peter overlooks. She proves to be more self-aware and resilient than he realises.

In contrast, Peter's view of Sylvia is undeniably more favourable, likely because there is an element of pride through his lens. He seems to regard her as someone worth admiring, and even a reflection of his own success. There is a sense of ownership in how he views Sylvia, an almost possessive pride in the way she allows him to shape her narrative. This dynamic adds a layer of complexity to their relationship: despite being an object of his admiration whose value is defined by his perception of her, Sylvia still holds a degree of autonomy within that lens, thus over him.

The exploration of non-monogamy throughout, and especially towards the end of the story feels frustrating. Peter is left in a dilemma: should he choose the glamorous, alluring figure or the intellectually driven, asexual academic? Which relationship serves to boost his own self-image? His grief becomes an excuse for his indecision, but it feels like a painfully reductive portrayal of the Madonna-whore complex. Both overly demure women offer him too much sympathy, allowing him to keep both as options, even to the end.

While the prose is undeniably well-crafted, the way these relationships are handled feels overly simplistic and unsatisfying.

Ivan, the younger brother, and his love interest Margaret, were characters

I found myself caring for a little less than the others. While I did not mind Margaret's perspective, their relationship lacked the same intrigue. Their dynamic was prone to unnecessary rambling, with moments of introspection and dialogue that dragged on, making it difficult to stay fully engaged, even during the buzz of a sex scene.

This book is certainly not centred around the relationship between grieving siblings, as was marketed. At least, not until the very end – a conclusion, I must emphasise, that feels rushed. Instead, it delves into the complexities of relationships between individuals of varying ages and backgrounds. The strength of the writing, along with the exploration of Peter's psyche, is what propels the plotless narrative forward. As a result, I feel compelled to rate it a 3 out of 5.

Unlike *Normal People* where Connell's character is relatable, especially to the average self-pitying Imperial man, Peter doesn't evoke the same empathy. Ivan is more likeable but still falls short compared to Connell. In fact, Ivan is absolutely a more accurate portrayal of the average self-pitying Imperial man. That said, the book is still worlds better than *Beautiful World, Where Are You*, which lacks serious emotional depth and is poorly paced. It is her second-best novel to date despite its flaws.

I know Ruby will consider the novel contrived, narratively complex for the sake it, and dishonest to its marketing.

AUTHOR OF **NO**
SAL
ROO



INTER

... from two perspectives

The disappointment of Rooney's latest novel comes with no surprise, neither does the craze to read it.

Books Writer
RUBY LYDFORD

I will not deny that I have been hypercritical of Rooney in the past, and then hypocritically consumed her novels and become overly preoccupied with her characters. I have even gone out of my way to suggest her first two novels to other editors and students.

I am afraid to admit that I have not broken away from this habit of mine with *Intermezzo*. But I hope that Rooney, clearly such a fan of nuance herself, would be understanding with the obsession in something one mildly dislikes. Perhaps that is her brilliance, or alternatively this is a rare situation only provided by a huge platform and marketing budget.

I do not like the James Joyce modernist narrative. I think it is contrived. I understand Rooney is highly intelligent and well-read. I know that James Joyce is also Irish. I do not think Rooney is James Joyce.

The narrative style is a build-up and plot point for the eventual climax of the novel, but Rooney could not have done more heavy lifting with the narrative to avoid use the overwhelming stream of consciousness style. While I think the style makes the novel more interesting and addictive, it makes Peter's narrative entirely unlikeable and hides important details in its difficulty. Peter's chapters are not good because of the narration, they are good in spite of it.

Ivan's chapters are not good because of his plot, but their narration does not hold them back. Perhaps I am not the target audience. Or maybe I am not clever enough. But Rooney is supposedly

writing "real" people, and I am a real person, not a contrived academic, and I think it takes away from the possibility of what has the potential to be wonderful character work.

Rooney is consistently praised for writing real, complex, nuanced characters. I will not disagree with the latter two adjectives; I only hold fault with the first. Rooney is obsessively preoccupied with making all her characters extremely intelligent and awarded. I see why she does this, because she herself is extremely intelligent and highly decorated with accolades. However, this baseline requirement for every character means their full personality does not feel real to me. Her characters morph into a textbook nuanced, morally grey, tortured, modest, yet egotistical, but illogical (and demure, if a woman) Trinity College Dublin undergraduate or postgraduate (Oxford for the English reader equivalent). These could be real people if they were, ironically, "normal people," rather than hyperintelligent top university scholars.

My last qualm is that Rooney cannot write endings. This holds true for *Intermezzo* too. The lack of ending in *Normal People* works. The ending in *Intermezzo* is frustrating. It is purposeful, it attempts to hold a mirror to society, but it is still bad. Yes, men get away with

their bad behaviour in real life, et cetera.

It is a book. I want to end up in a different place than I started. To not do so feels unrealistic and negligent to the characters, especially Sylvia and Naomi's emotional arcs.

I wanted to read a book, as advertised, about a relationship between two brothers exploring their complicated, platonic dynamic as they grieve. I was impressed with Rooney challenging herself in this way. Instead, I had to read a novel about heterosexual semi-successful non-monogamy. And was still expected to take Peter's love seriously. This is very Rooney.

I think Lila will give this a 3 out of 5 stars, despite not liking the novel, because she is afraid Rooney will somehow contact her and explain everything is purposeful. I am not afraid of this, because I too believe it, but I am not convinced or charmed by her depiction of modern life.

Sally Rooney
Chris Boland / Flickr



FOOD&TRAVEL

Heathrow's non-ideal expansion

Travel writer Dan discusses the pros and cons of Heathrow's third runway, recently confirmed for construction by the Labour government.

Travel Writer
DAN RHODES

Expanding Heathrow sounds like a good idea in principle. More flights mean easier travel to other parts of the world, and it's construction and maintenance would create jobs. However, after considering environmental impacts, relocation of people, and alternative uses of the money, expansion doesn't sound so attractive.

The benefits

The main benefit of expanding Heathrow would be accommodating the capacity needed for long haul flights. However, it can be argued that improving existing rail connections would be a better use of this money than for shorter flights. Heathrow connects London to cities such as Manchester, Paris, Newcastle, and Edinburgh. These destinations are close enough that high speed rail would be faster, including travel time to the airport and time spent passing through security. Naturally, this assumes these high speed rail lines already exist. Diverting people from these plane routes onto high speed rail instead would free up the limited space available at Heathrow, thereby reducing the need to expand. Heathrow is also one of five airports serving London, so it is a big question

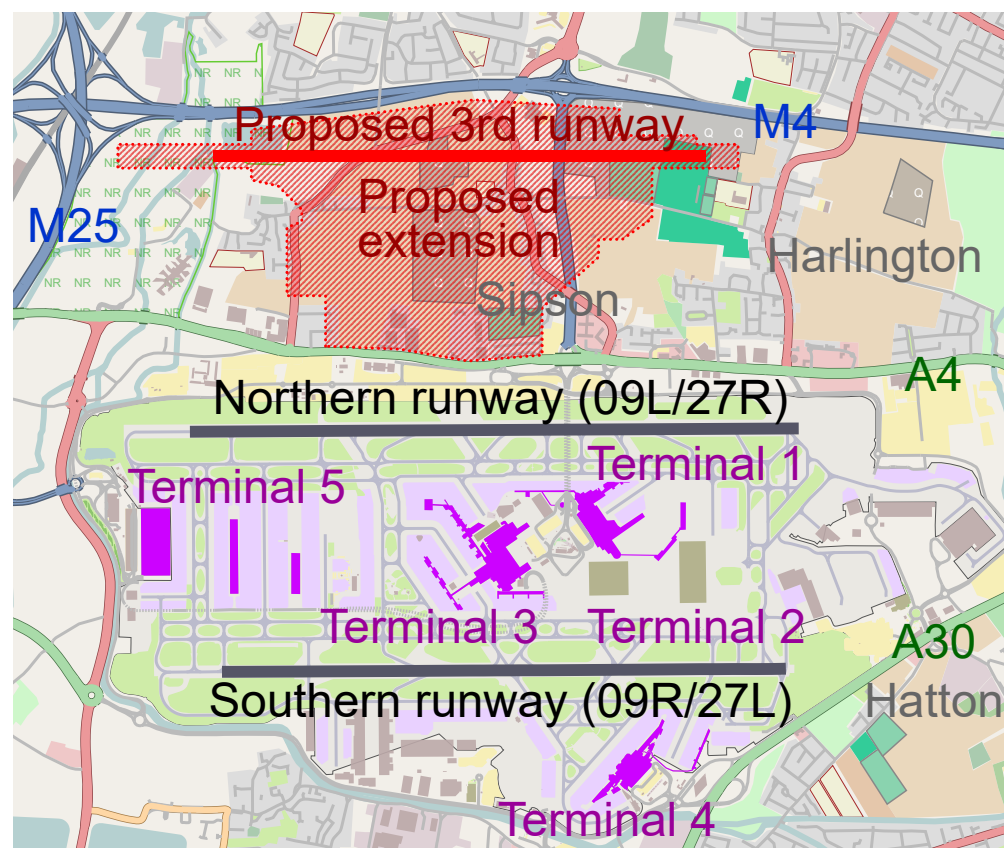
whether this expansion is necessary in the first place.

The cost of construction

Heathrow estimates that the new runway will cost £17 billion, but this doesn't take into account building

come from taxes which could be better spent elsewhere.

Also, as of 2019, Heathrow is in a legally binding agreement to offset any carbon emissions that would be created, which is expected to cost £100bn. This is the same projected cost for finishing the



Map of expansion cmglee and OpenStreetMap contributors

rail and road infrastructure. While estimates vary wildly for this, Transport for London (TfL) estimates this would cost around £18bn after considering knock on effects for the rest of the tube network. The bulk of this money would

high speed train (HS2) to Manchester, which would eliminate the need for short haul flights between Heathrow and Manchester, freeing up space for planes elsewhere.

The passengers

We can also talk about comfort. A recent poll showed that people prefer trains to planes, assuming the cost was the same despite the train taking slightly longer, with 66% of respondents preferring trains, 25% preferring planes, and 9% voting as undecided. Of course, trains in the UK are currently very expensive and unreliable, which is a large factor in people's travel decisions. There is a big argument for using the money that would go to Heathrow on train improvements to the UK instead.

Additionally, expanding Heathrow would harm the locals living around the airport, as the construction would necessitate the destruction of around 700 homes, forcing these people to move elsewhere. Otherwise, in terms of making travel more environmentally, trains are 96% more carbon efficient than planes, therefore the expansion would be a step back.

Space and Relocation

A lot of people in the UK wouldn't particularly benefit either, considering Heathrow generally has the more expensive flights out of the London airports, and many people in the UK can't afford holidays due to increasing living costs. The building of the runway would create jobs in construction, maintenance, shops in the terminals and flight crew, but expanding the train network or spending the money on renewable energy sources would also create jobs. Most of the economic benefit from the expansion would be felt in the southeast, pushing the rest of the UK further behind London.

In conclusion, expanding Heathrow would be at best irresponsible and at worst detrimental. The expansion has many benefits, making air travel easier and contributing to the local economy, however lots of this money wouldn't actually go to the UK economy, instead to private air companies. There are also massive costs to the climate. The climate crisis is only worsening, so we should be spending money on reducing air travel, not increasing it.

KINK SHAMING

SURVEY

25

SURVEY

25

ABOUT US

A Sex Survey? Shocking! We know. But this is old news. *Felix* began with the annual Sex Survey in 2011 (Issue #1480) and since then a few surveys have been released, each in a different style and with different questions. Every year a few questions are added or removed, depending on what the current team was curious about. As the world progressed, so did the survey. This is best seen in the Gender category, where this year we had more than 30 non-binary people answer, broadening our data analysis to welcome more students. Most of our questions were also tailored to include more students from sexual minorities, such as asexual or questioning students.

Last year, we revived the Sex Survey from its COVID-induced slumber and we noticed a significant drop of roughly one thousand responses compared to the responses from the 2020 survey. We hypothesise that since most students arrived at Imperial after the last survey was published and never got around to learning of it. With a four year gap,

many missed out. The 1500 responses were wonderful, but many were incomplete and the survey, with most questions providing a text-box answer, a rather rookie mistake, was a hassle to analyse. I almost fainted in the Chemistry building categorising the Porn and Kinks questions. So this year, we changed things up again.

Every answer was mandatory but included a SKIP option, for those that did not want to answer. Deeper questions, such as “Where did you have sex on campus?” were linked behind yes/no questions such as “Have you had sex on campus?”, which blocked a student from answering a question they could not relate to. This year, we also decided to release the survey in Autumn compared to the usual Spring release. Hence we have about half the responses from last year.

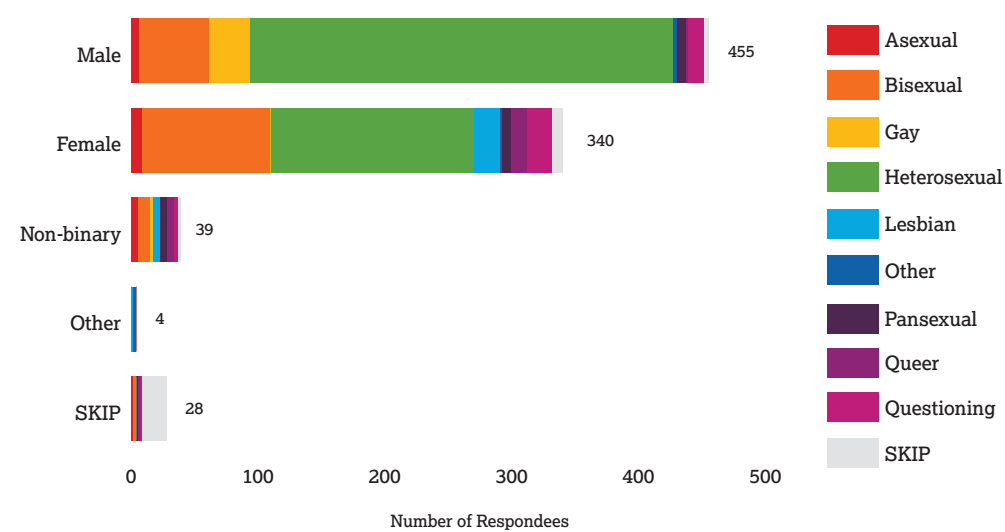
Writing the Python code and generating graphs in Illustrator, Canva and Flourish has been a pleasure. It definitely was no easy accomplishment, but with the help of editors, digital desginers and illustatrators, the 2025 Sex Survey became what you will read and see in the following pages.

We wish you a lot of fun indulging in the numbers and learn what the Imperial norm is and answer questions you may have never asked yourself.

ABOUT YOU

What is your gender, split by sexual orientation?

Number of responses: 866 (100%)



20% Bisexual, 4.2% Gay, 3.2% Lesbian (7.6% attracted to the own gender), 4 % are Questioning, 2.3% are Pansexual, 2.3% are Asexual and 0.82% expressed they were something we had not listed.

Gender Expression

In terms of gender expression, 85% of Imperial is cisgender and 3.9% of our respondents are transgender. females and males are 92% and 91% cisgender respectively, and 2.4% and 0.66% are transgender, respectively. For non-binary people, 15% are cisgender, and 59% are transgender. As we learned about these percentages, we were happy to learn that Imperial is not just pink or blue, but rather a wonky version of the rainbow. Life would be boring if everyone was straight.

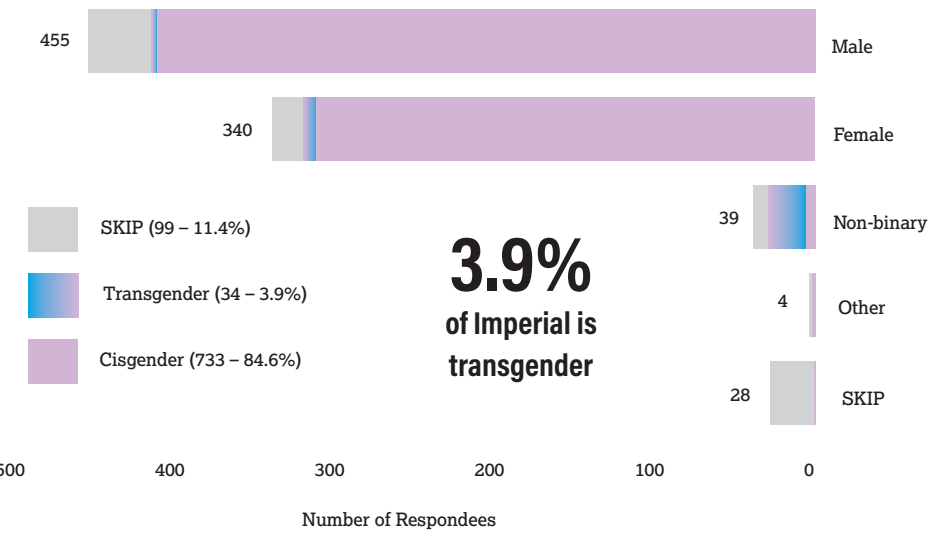
The About You section has stayed rather consistent in the past. The average responder will be male, heterosexual and an undergraduate, most probability in their early 20s. But, that does not mean that Imperial is white, male and undergraduate. The DEI department would have greatly failed otherwise.

Gender

In the gender section, we werehappy to learn that 39 non-binary people answered the survey, allowing us to use their answers for a statistical analysis. The majority of non-binary are bisexual, and most of males (73%) and females (47%) are heterosexual. From the most common sexual orientation to the least, Imperial hosts the following: 57% Heterosexual,

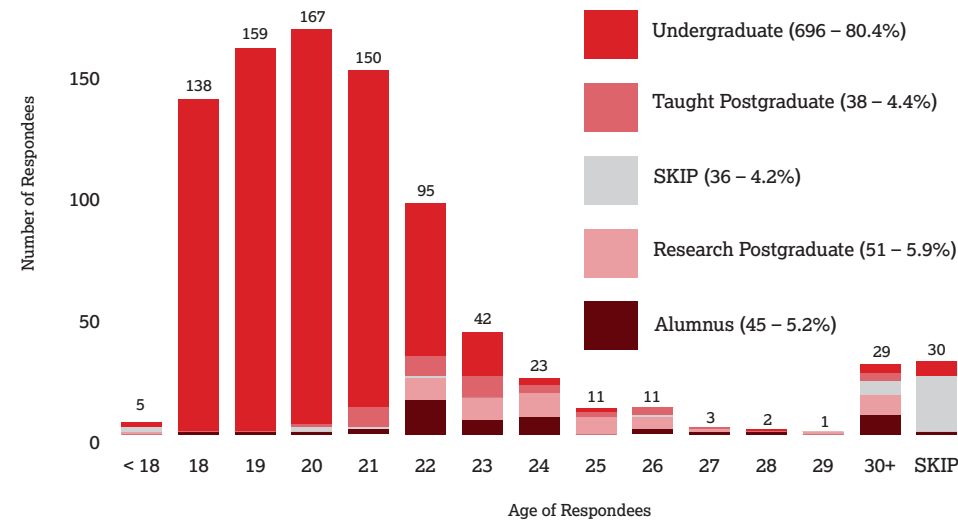
What is your gender expression?

Number of responses: 866 (100%)



Undergrad, Postgrad or Alum?

Number of responses: 866 (100%)



The survey is always announced in our newspaper and on our social media, thereby more accessible to those who pick up the newspaper and sneakily scan the QR code or to those who clicked the link on our Instagram story. Regardless if people were looking out for the Sex Survey or happened to come across it, 80% of the respondents were undergraduates, with no other education level even close to that number.

Alumni

We are happy to learn that 45 Alumni still responded to the survey, hoping to score many more in the future.

Virginity

As this report is moving forwards, it will definitely

68%
of respondents have lost their virginity

72%
of females have lost their virginity

82%
of non-binary people have lost their virginity

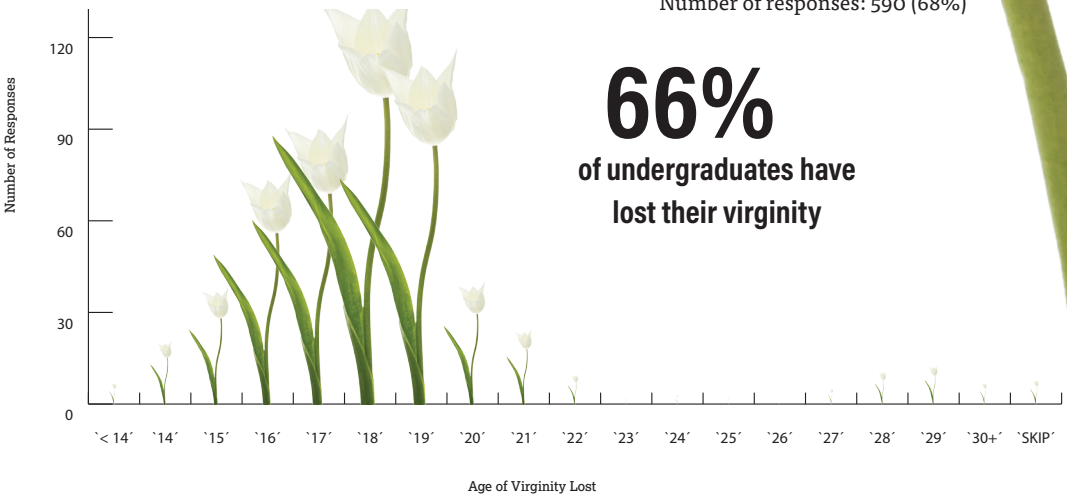
66%
of males have lost their virginity

get spicy, starting off with the first easy question; the age at which people had lost their virginity. While the most common age is 18 for everyone, including females, males and non-binary people, we do wish to emphasise that there is no pressure ever to lose ones

virginity unless it is for a good reason. Virginity is not about winning a race or gaining the experience. Every first experience can be terrifying and the only thing that helps is going through it with someone either slowly and safely.

Your ages when you lost your virginity

Number of responses: 590 (68%)



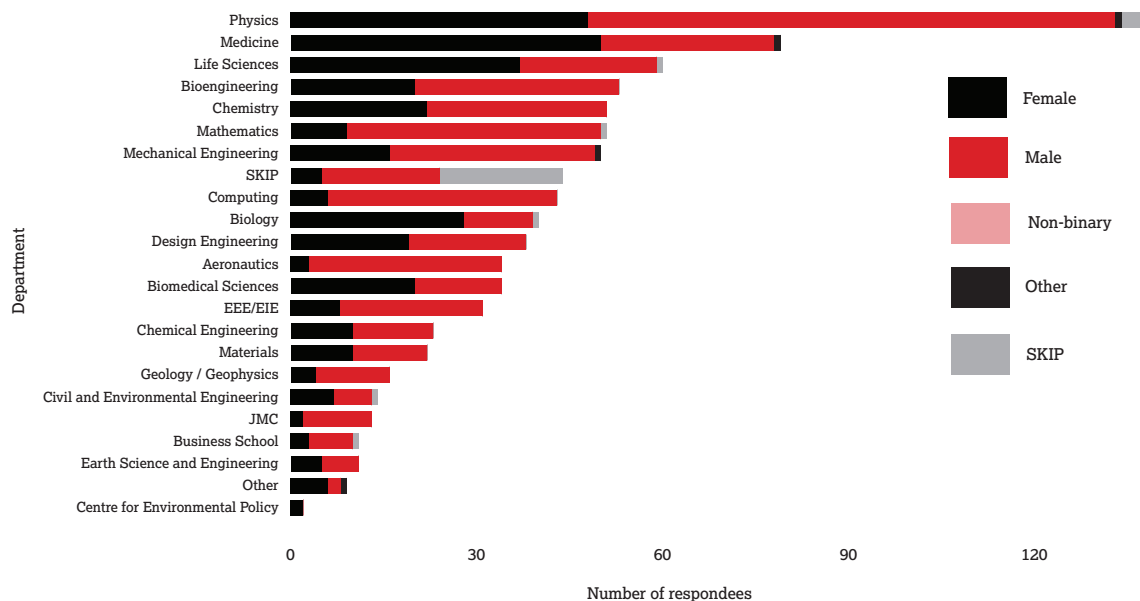
66%
of undergraduates have lost their virginity

Department Distribution

Admittedly due to an imbalance in the *Felix* marketing strategy, more Physics students responded to the survey than any other department and almost by twice the number of respondents from the second biggest response group: Medicine. Nonetheless, most departments had more than 30 students respond and these were then considered for percentage based statistics. It would be unfair to report that 50% of the Centre for Environmental Policy is transgender when only two people answered the survey.

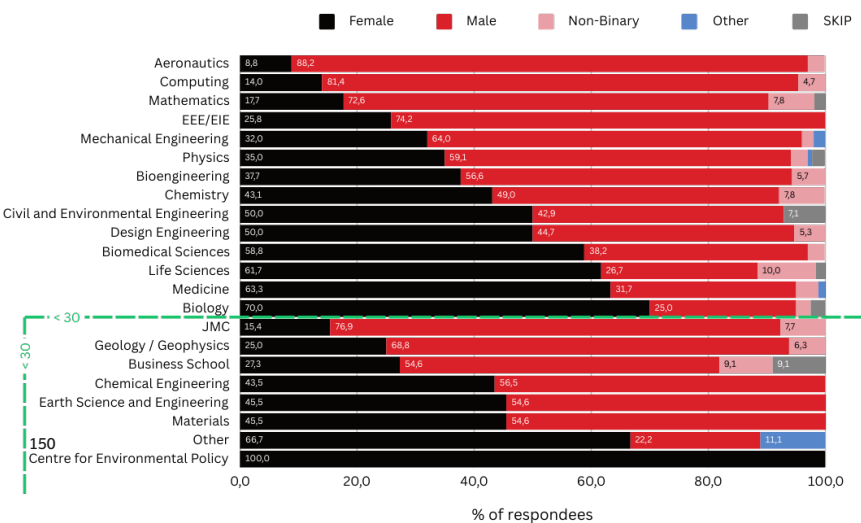
Your department

Number of responses: 816 (94%)



The top 5 departments who responded to the survey were physics students (16% of the responses), Medicine (9%), Life Sciences (7%), Bioengineering (6%), Chemistry (6%), Mathematics (6%) and Mechanical Engineering (6%). All other departments made up less than 5% of all the responses.

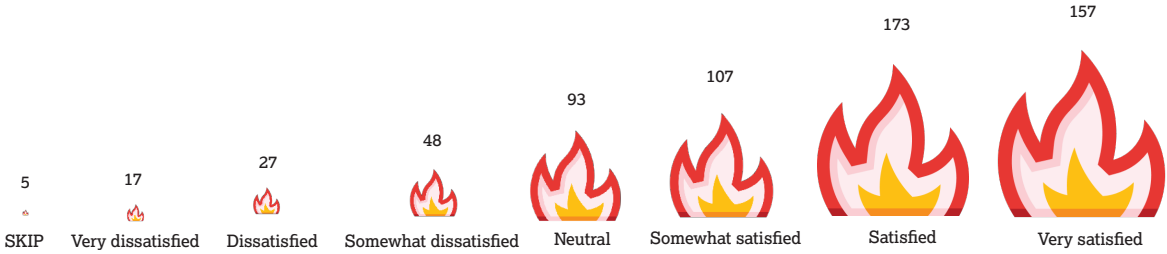
53% of responses were male, 39% female and 5% are non-binary. The split per department are seen below.



LET'S ADD SOME SPICE

How satisfied are you with your sex life?

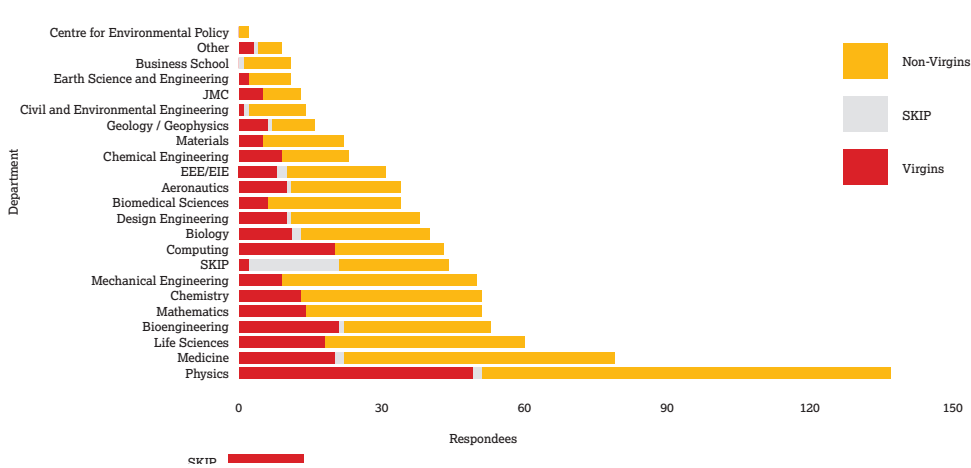
Number of responses: 827 (95%)



To be satisfied, especially with one’s sex life, is not a half-bad way to go through life. The majority of students are satisfied, with 50% (437 students) of respondents at least somewhat satisfied. The majority of females (33%) are satisfied, and the majority of non-binary people (29%) and males (24%) are very satisfied.

How many virgins per department?

Number of Reponses: 827 (95%)

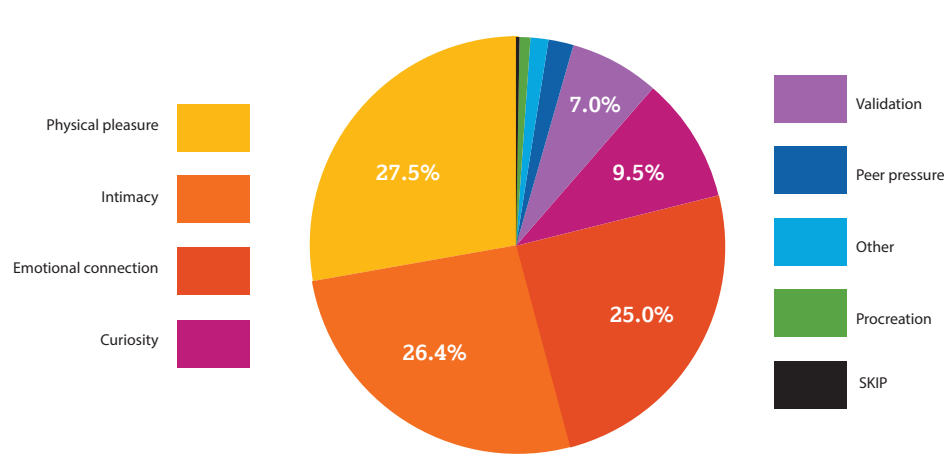


yellow spike shows a substantial change.

Next up, we can discuss the percentage of virginity. A common joke and stereotype, Computing has the highest proportion of virgins, with Bioengineers and Physics in second and third place. Departments with n < 30 were not included.

Why does Imperial have sex?

Number of responses: 590 (68%)

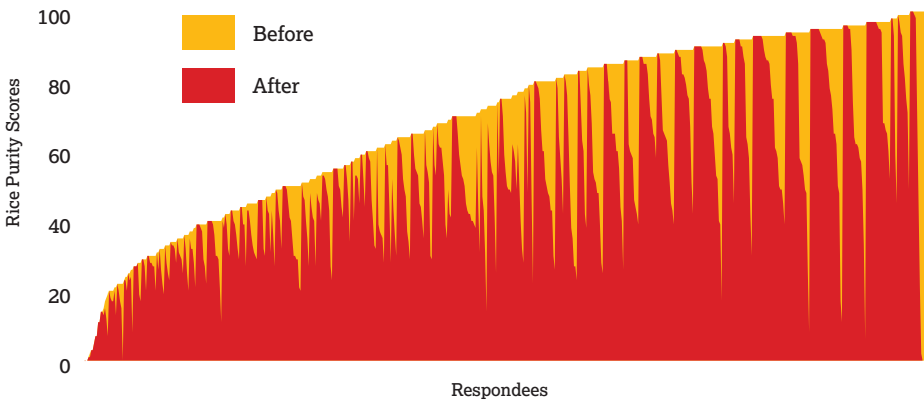


Why – oh why – do we actually have sex? As University students, sex can have a different meaning and a different purpose – see the “Friends with Benefit” section later on for more reasons. The top four answers are beautiful reasons to have sex; On the other hand, there is Validation and Peer Pressure; two questionable reasons to have sex. Sadly, Imperial does not hand out awards for this.

The average number of partners is 4.8 , however the average number of partners for female, male, and non-binary respondents is 4.3, 5.1, and 7.1 respectively.

What was your Rice Purity score before and after joining Imperial?

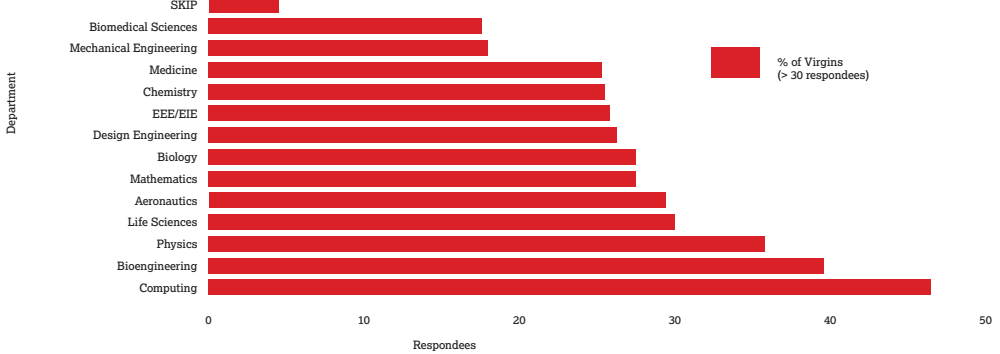
Number of responses: 816 (94%)



The Rice Purity score graph above shows us that despite the score that most respondents started university with, their scores tend to drop. The average “before” score was 69, and the average “after” score was 54.3, giving us an average drop of 15.7 points. Each red spike tells us the student had not changed their score, and a deep

Which department has the highest proportion of virgins?

Number of Reponses: 827 (95%)



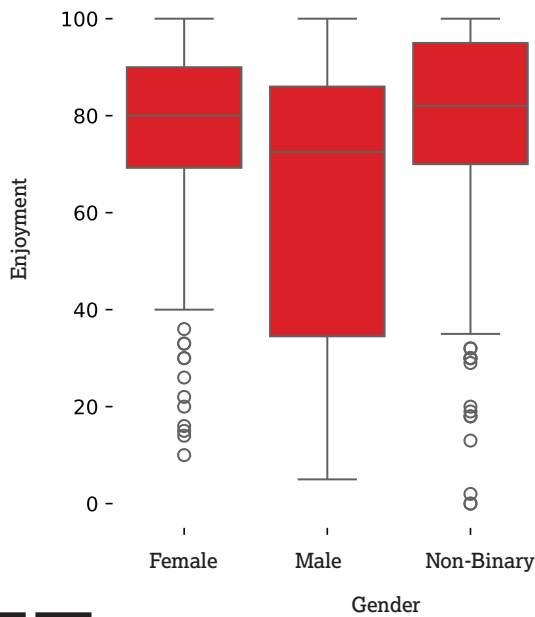
How many sexual partners per gender?

Number of responses: 590 (68%)



How much do you enjoy sex?

Number of responses: 583 (67%)



Respondees were asked to rate how much they enjoyed sex from a scale of 0 to 100, which revealed an average score of 77, non-binary people and females enjoying sex marginally more than men. What we like about this graph is that it trumps the idea that sex is the most amazing thing in the world. It can also be bad. Sometimes terrible. But the thing is, some people do not enjoy it because it is not for them. And of course, that is perfectly fine.

On another note, looking at the graph of masturbation vs sex, most people get busy multiple times a week, regardless if with sex or masturbation. Had the graph shown a clear left to right diagonal, one could conclude that the ratio of sex:masturbation would be consistent, however,

77
is the average level which respondents enjoy sex, on a scale of 0 to 100. The standard deviation is 21.

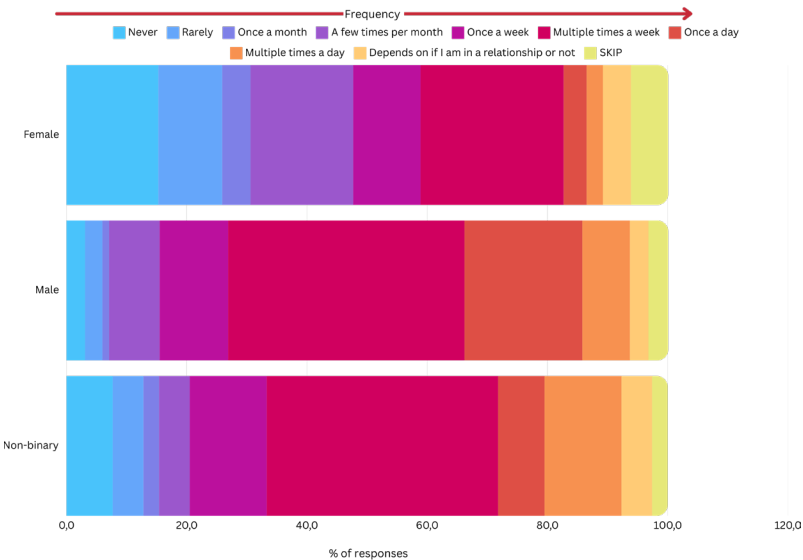
it does not seem that way. Respondents may have more or less sex than they masturbate, however further research in that would be required as to by how much. Two or seven times a week? When splitting the masturbating data according to gender, a clearly

picture is painted. 50% of females either never, rarely, once a month or masturbated a few times a month. 50% of males masturbated at most once a week, similar to non-binary people. Of those that never masturbate, females are on top, however of those that masturbate once a day, non-binary are on top.

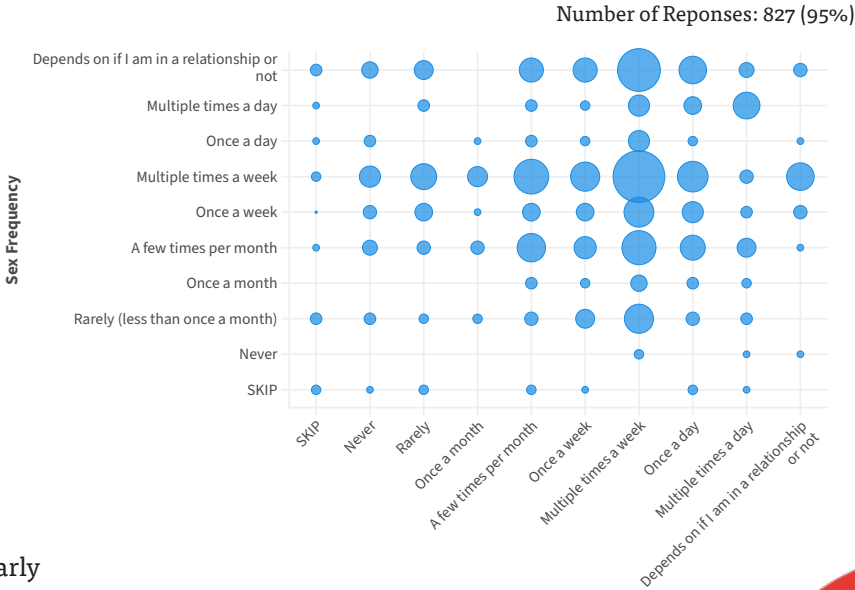
Sex education is vital for adulthood. At school, we all went through awkward classes of sex education, which at the time was like learning what chocolate tasted like without actually having chocolate around. It is essential, and better taught too early than too late, however somehow the education just ends at the critical point: university or at least, at the age of 18. Fortunately, there is the internet, or is that misfortune? We did not ask what people googled or yahooed on the topic of sex, and if they went on Glamour Online, Pornhub or the Mayo Clinic website for further information. However, the internet does provide the ability to educate oneself without feeling embarrassed. Sex can be an uncomfortable topic to discuss with family. Which is where friends come in. Friends are best to ask for experience and advice, not technical topics. Having an experienced friend is a godsend, and so if you could be that friend, you are a godsend.

How often do you masturbate?

Number of responses: 834 (96%)



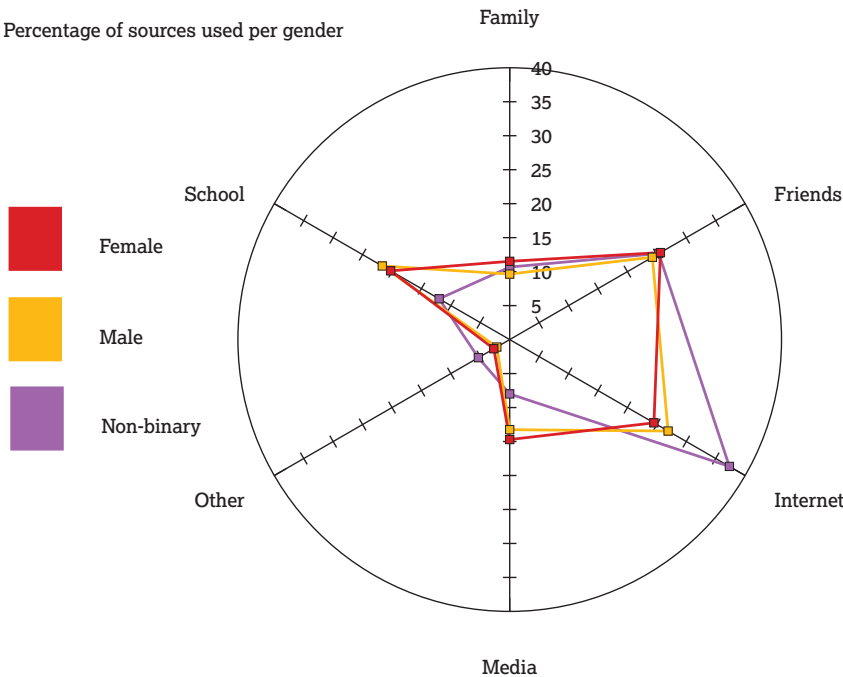
How often do you masturbate and have sex ?



60%
of respondents learned from the internet, 58% from friends, 47% from school, 31% from media, 24% from family and 6% from other sources.

Where did you learn about sex ?

Number of Responses: 802 (92%)



INTER-COURSE

INTERCOURSE

Three pie charts illustrating the distribution of responses for the question "Do you have a current or former partner?" across three groups: Non-Binary, Females, and Males. The legend indicates that blue represents "Yes", dark blue represents "No", and light gray represents "SKIP".

Group	Yes (%)	No (%)	SKIP (%)
Non-Binary	56%	38%	6%
Females	52%	47%	1%
Males	33%	64%	3%

I study...

My partner studies/studied..

Legend: 0, 20, 40, 60, 80, 100

But what about personality? To that, we are rather stumped. University is a difficult time of trying to figure out who you are and what you like. Are you into girls or boys or no gender? Are you bi-curious or perhaps asexual? The questions flow out and all you can do is explore. And where do people explore? In their own departments of course.

But the idea that Earth Science and Engineering finds Geophysics attractive and Chemical Engineering has the hots for Chemistry, is adorable.

I study...

I find this department attractive...

Heatmap showing the relationship between departments students study in (rows) and find attractive (columns). The color scale ranges from 0 (lightest blue) to 100 (darkest blue).

Departments studied in (rows): Aeronautics, Bioengineering, Biology, Biomedical Sciences, Business School, Centre for Environmental Policy, Chemical Engineering, Chemistry, Civil and Environmental Engineering, Computing, Design Engineering, EEE/EIE, Earth Science and Engineering, Geology / Geophysics, JMC, Life Sciences, Materials, Mathematics, Mechanical Engineering, Medicine, Other, Physics, SKIP, Total.

Departments found attractive (columns): Aeronautics, Bioengineering, Biology, Biomedical Sciences, Business School, Centre for Environmental Policy, Chemical Engineering, Chemistry, Civil and Environmental Engineering, Computing, Design Engineering, EEE/EIE, Earth Science and Engineering, Geology / Geophysics, JMC, Life Sciences, Materials, Mathematics, Mechanical Engineering, Medicine, Other, Physics, SKIP, Total.

LOCATION, LOCATION, LO...

Where have you had sex?

0-4 cases

5-9 cases

10-14 cases

15-19 cases

20-24 cases

25+ cases

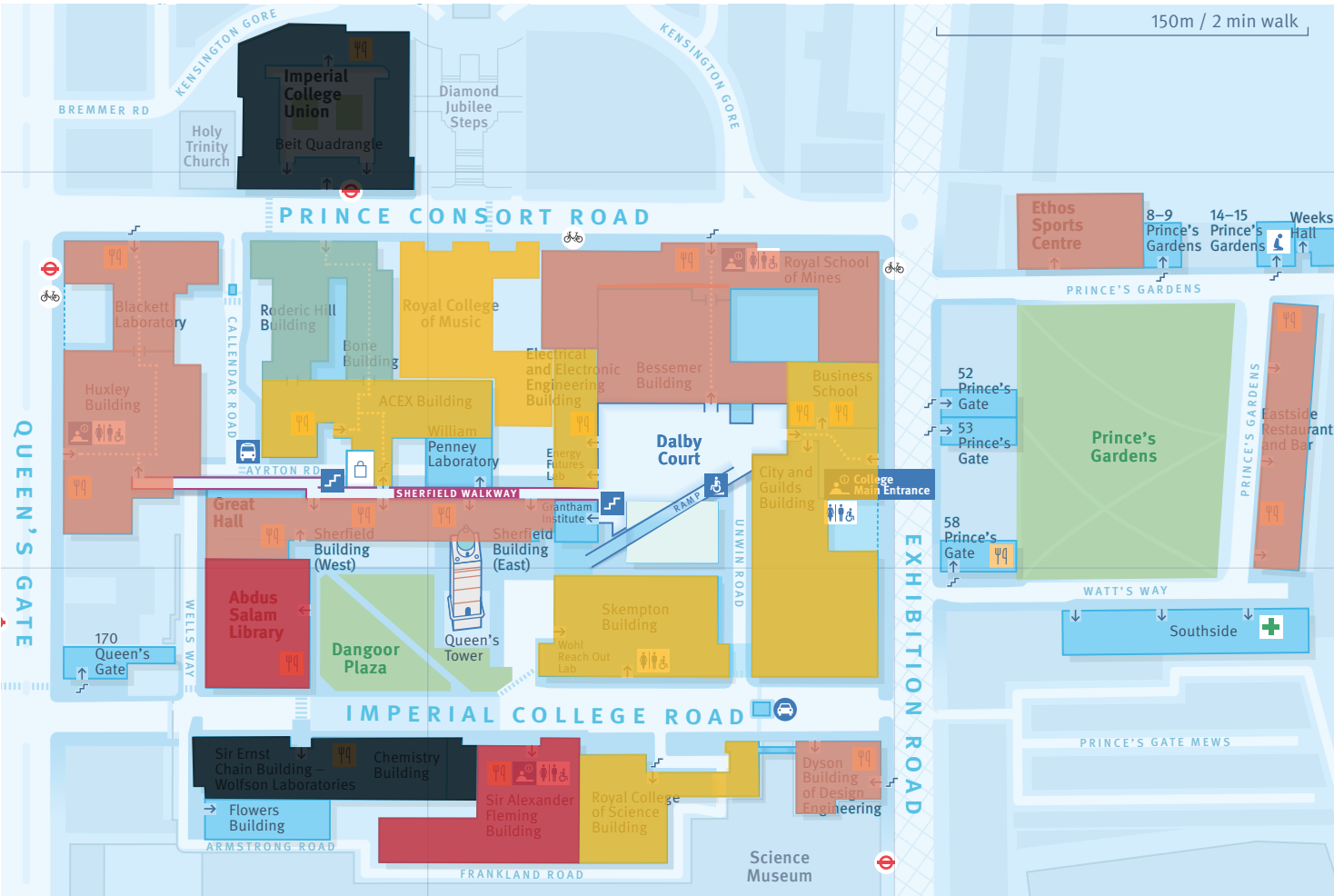
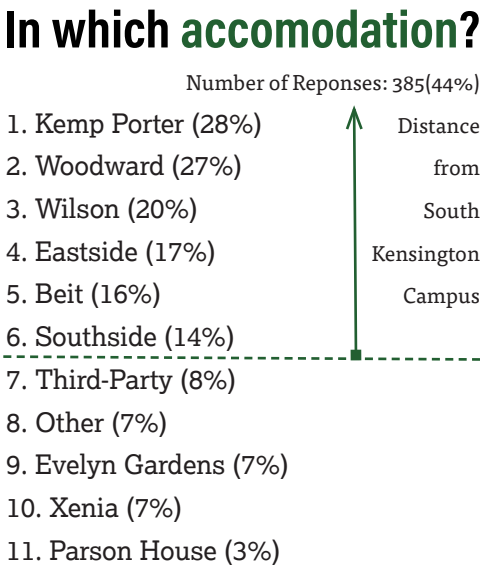
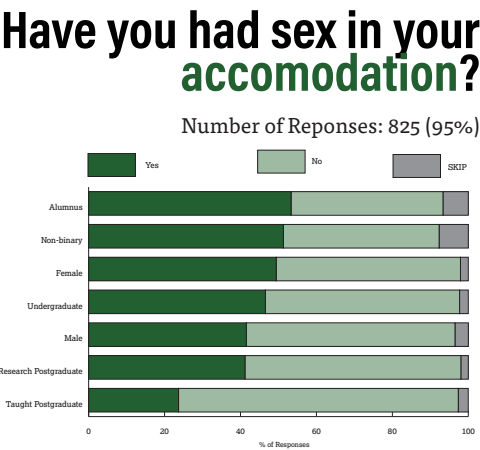
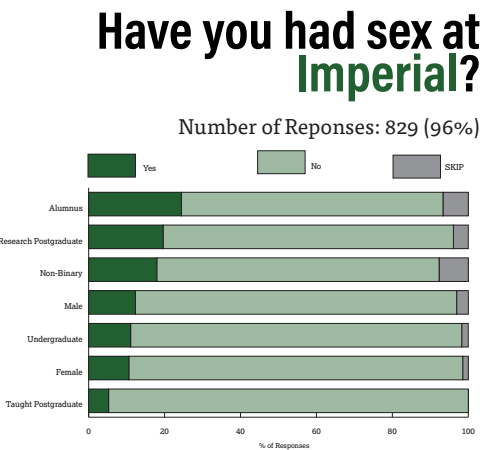
Number of Reponses: 104 (12%)



Charing Cross

Hammersmith Hospital

White City



South Kensington Campus

An important factor that helps make a shag be good or great – second to the partner – is location.

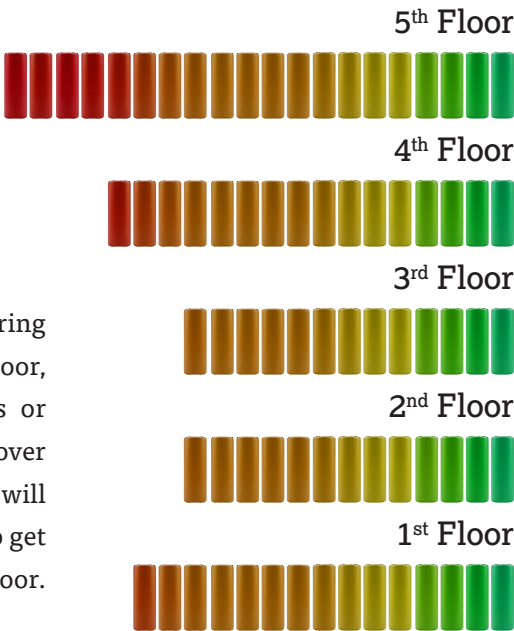
The Union has held another top record for being the place with the most sexual activity, however this most likely is due to Beit Hall being closeby. In second place stands the Chemistry building, a rather

interesting score considering the many labs and locked rooms for non-Chemistry students.

On the other hand, Roderic Hill seems the safest place to avoid sitting where two people might have had the night of their lives, however, as no building on campus had 0-4 cases, it seems to us as if no place is safe. Of course, not even the room you

rented in your first year.

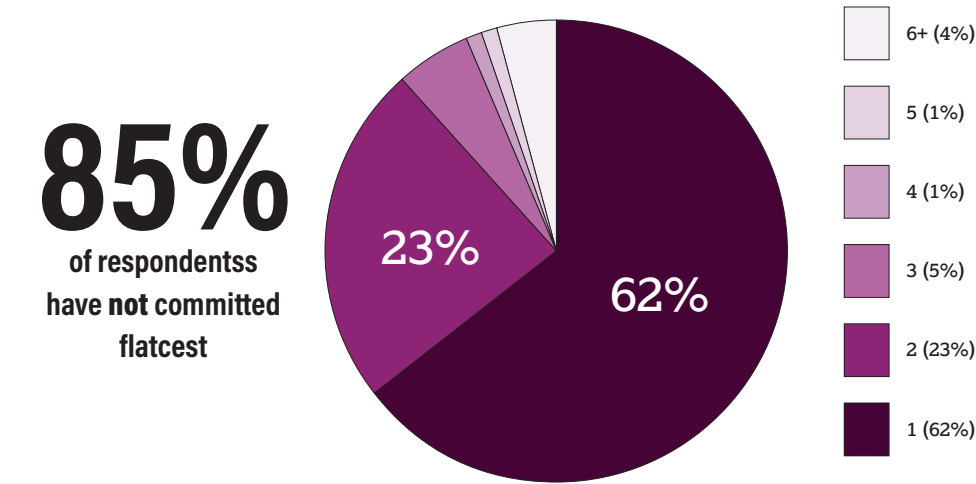
The Library, a typical choice considering it's open 24 hours, despite the open floor, makes us question if the bathrooms or private study rooms became victim to over 20 moments of passion. Though we will never know, we pray nobody decided to get funky in the chairs we sat in on the 5th floor.



MEETING NEW PEOPLE

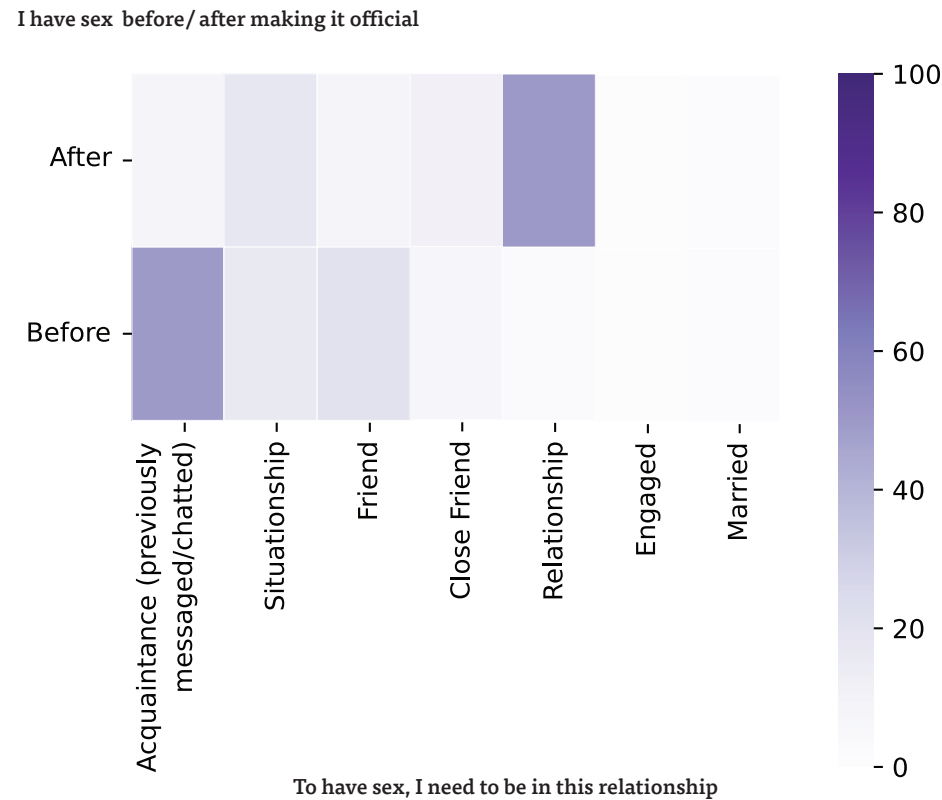
Which year did you commit flatcest ?

Number of Reponses: 134 (16%)



Do you have sex before or after and what predetermined status do you need?

Number of Reponses: 866(100%)



To read the plot, you say "Roughly 70% of the people who voted for After, also voted for Relationship.

Every couple has their meet-cute story. May it be at the bar, or at a party or because you both sat down next to eachother at orientation and locked eyes. Ok, I admit, the last one is straight from any rom-com.

Interestingly enough, the majority of students met their partner before they even entered university (45%). Hence, the most common place to meet a potential partner is via the second-place answer: via friends (34%). Accomodation (23%) and Dating Apps (19%) are current solutions thanks to inter-sex accomodations and the digital age. Even though there may be a popular idea in media to meet your partner at a nightclub (12%), remember what Ed said, and so you should probably avoid the club and try the bar.

66% of students claimed they are not on – and never have been on – dating apps. However, Hinge is staying strong as the number one dating app. Admittedly so, Tinder has received a reputation for being a hook-up app and bumble limits the first-step action to females, an awefully exhausting task and not necessary. Muzmatch, the world's only Muslim dating app, has receive 1.15% of Imperial College's attention (that was Editor Mo's suggestion.)

Changing the topic to flatcest, where two individuals who share a flat decide to become economic and share only one bed, Imperial has only 15% of students try this new money saving hack. Yet is it really, if the majority did so in their first year in their own halls? The more interesting number is the number of second year students (23% of the respondees) who thought moving in together in the

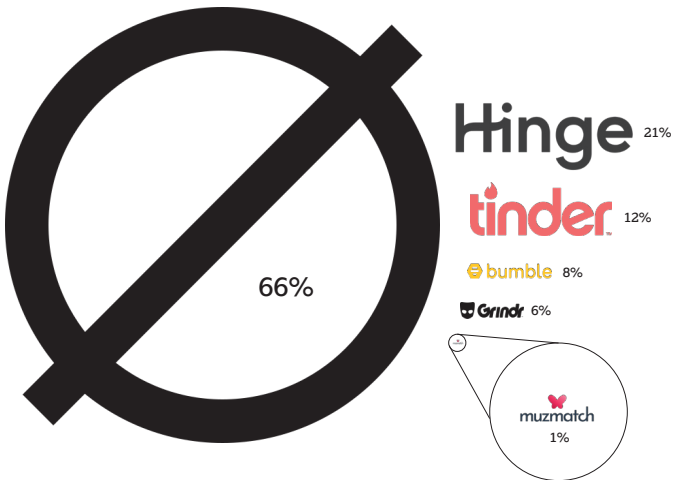
Where did you meet your partner?

Number of Reponses: 720(83%)



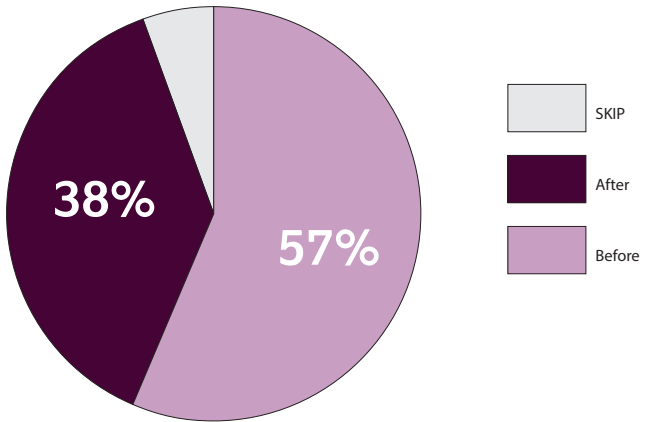
Which dating apps do you use?

Number of Reponses: 866(100%)



Do you have sex before or after you make things official??

Number of Reponses: 866(100%)



first year was a great idea and realised it was an even better idea once they had neighboring rooms. Lastly, sex before starting a relationship is very popular. It does not hurt to try and see before jumping into a relationship, but that is different for each individual. Overall, the most common answer was Relationship (32%), followed by Acquaintance (21%), Situationship (13%), Friend (11%), Close Friend (8%), Married (6%) and Engaged (1%). Of course, things can change...

PREFERENCES

Which are the most attractive body parts ?

Number of Responses: 866 (100%)



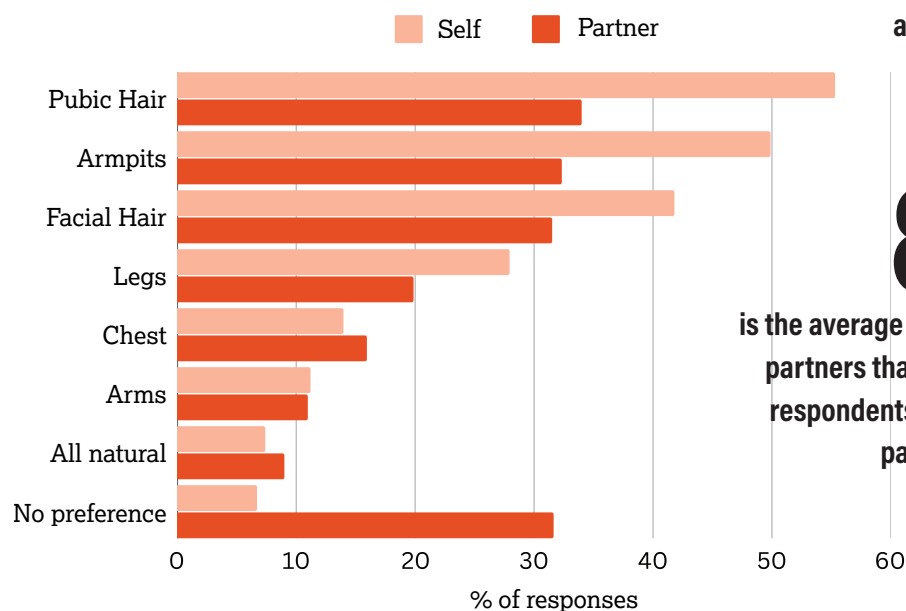
Which are non-sexual like-able habits ?

Number of Responses: 866 (100%)



I prefer if I or my partner shaves...

Number of Responses: 811 (93%)



45%

of respondents would be turned away if their partner had slept with a certain number of people

8

is the average number of sexual partners that would turn off respondents from a sexual partner

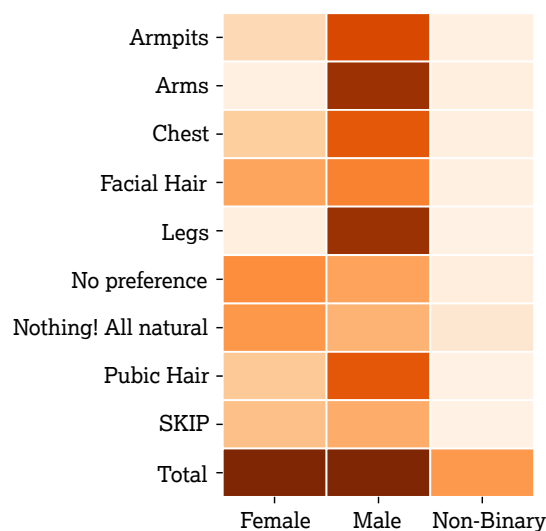
Which are the least liked habits?

Number of Responses: 811 (93%)



I prefer if my partner shaves... and my gender is...

Number of Responses: 866 (100%)



12%

of non-binary people voted “All natural”, compared to 8% of females, and 2% of males.

35%

of females voted "No preference" or "All natural", compared to 33% of non-binary people and 13% of males

To shave, or not to shave? That may be the question many of us ask. Or, what is it that people find attractive?

In our preference section, we like to share what the people at Imperial like and dislike, rather what is a turn-on and a turn-off. Previous years did not consider that some students simply do not get turned on or off by something, a valid point made to include asexual peers.

If there is one thing females, males and non-binary people can agree on, they find eyes and faces as their favourite body parts, boobs falling in third most for males and non-binary people.

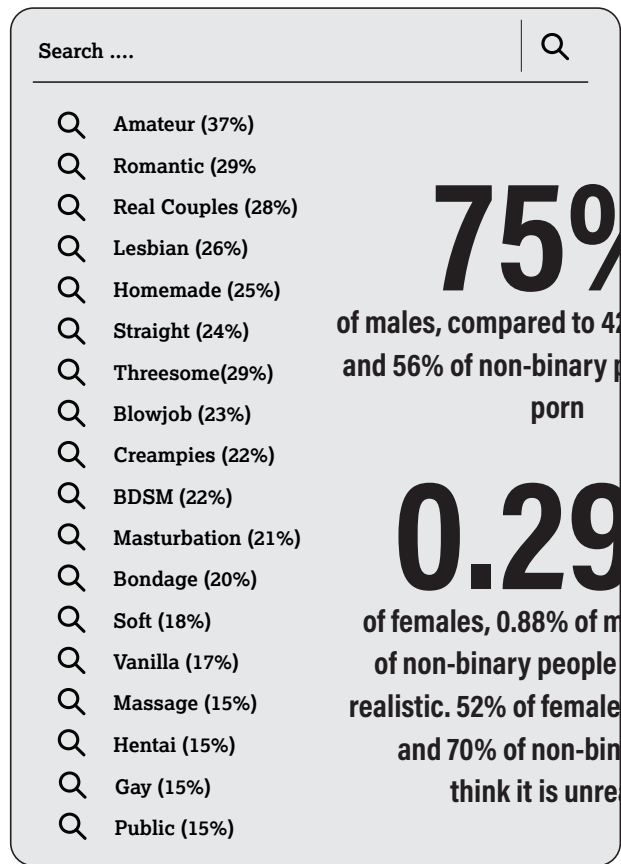
I admit, I was surprised to learn that males were more picky about their partners shaving habits than woman, though I am not surprised as to what they prefer shaved. Those who kiss men want to avoid a Beard Burn, a form of contact dermatitis that leads to itchy skin and a rash. So beard-owners, please, for the sake of your partner, wash and groom your beards.

Males overall prefer shaven legs, pubic hair and armpits, females prefer facial hair and pubic hair – though most had no preference – and non-binary people prefer facial hair and armpits, yet similarly to females, predominantly had no preference.

THE DEED

Which porn genre do you watch?

Number of Reponses: 499 (58%)



75% of males, compared to 42% of females and 56% of non-binary people watch porn

0.29% of females, 0.88% of males and 7.7% of non-binary people think porn is realistic. 52% of females, 51% of males and 70% of non-binary people think it is unrealistic.

17% of respondents think porn should be banned, 53% disagree, and 25% are undecided.

54%

of respondents consider themselves kinky, 34% do not. 79% of non-binary people, 56% of males and 50% of female consider themselves kinky.

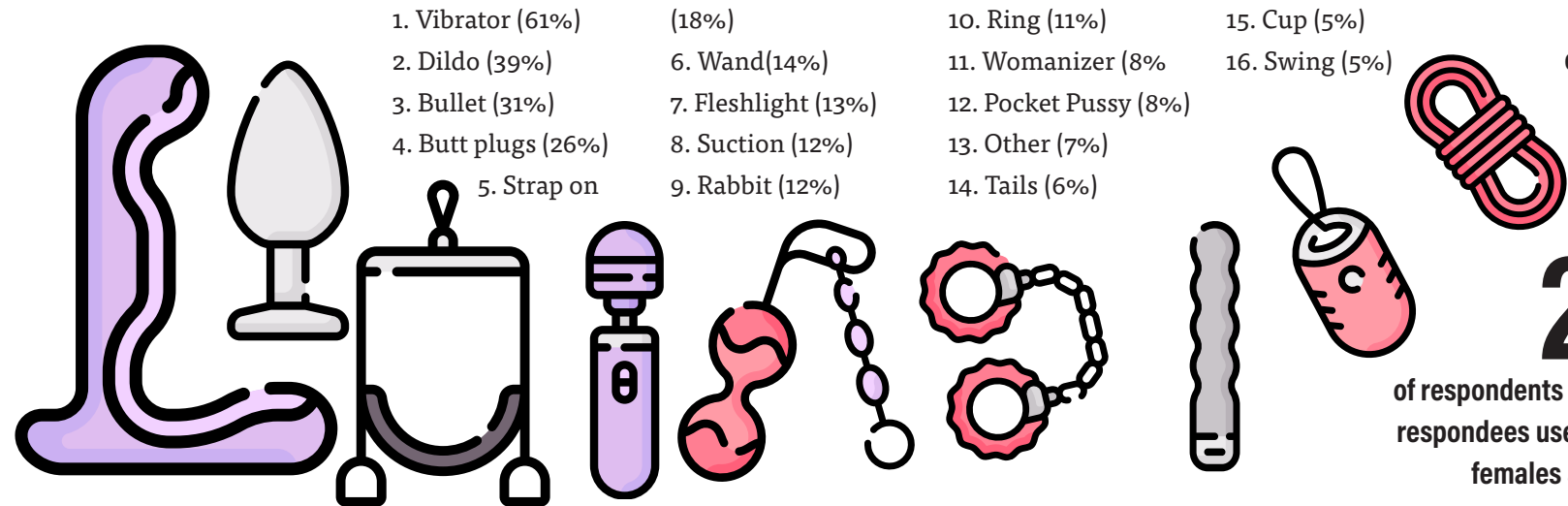
Which kinks are you into?

Number of Reponses: 468 (54%)



Which sex toys do you use yourself?

Number of Reponses: 246 (28%)

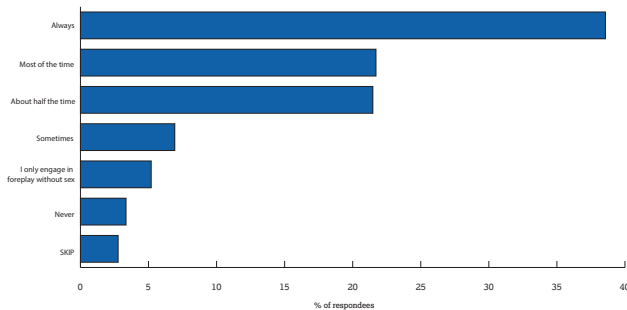


31% of respondents use sex toys. Non-binary people mostly use them as 69% said they use them. In comparison 41% of females and only 22% of males use sex toys.

26% of respondents use sex toys. 59% of non-binary respondees use sex toys with a partner. 27% of females and 23% of males do too.

How often do you foreplay?

Number of Reponses: 678 (78%)



What percentage of the time do you reach an orgasm when you masturbate?

Number of Reponses: 730 (85%)

86 ± 25 %

What percentage of the time during sexual activity, does your partner successfully make you orgasm?

Number of Reponses: 594 (69%)

69 ± 33 %

On average, who makes you orgasm more, you or your partner(s)?

Number of Reponses: 604 (70%)

Me: 34%, Equally both: 21%
My partner(s): 15%

How do you feel if you do not orgasm, but your partner does?

Number of Reponses: 691 (80%)

I do not mind: 34%, I support it: 24%
I'm partially OK with it: 16%, Not OK: 8%

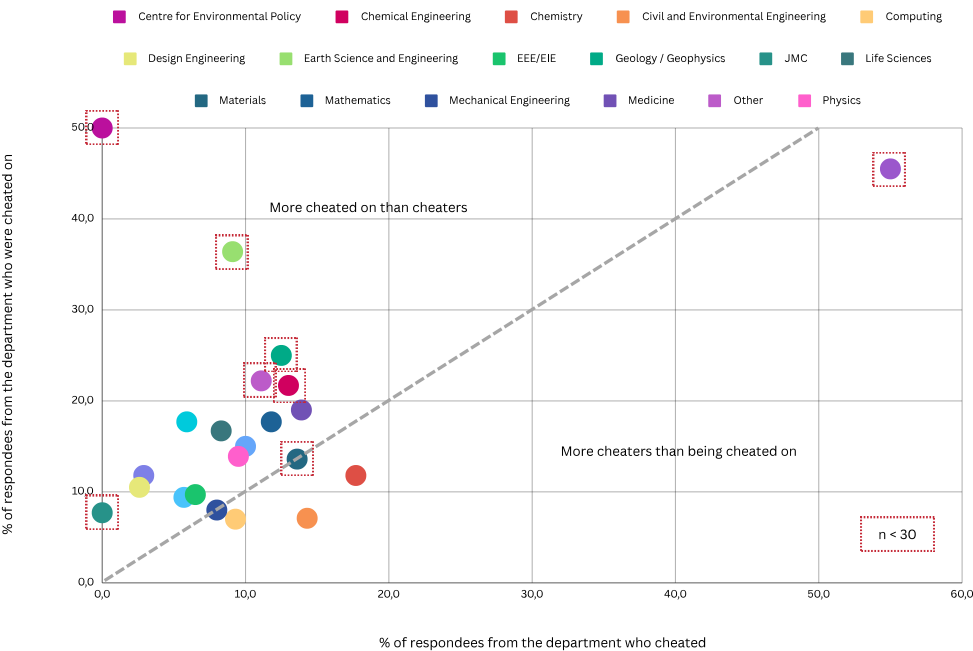
CHEATING

Respondents
cheated with or
were cheated on
with ...

I have cheated...

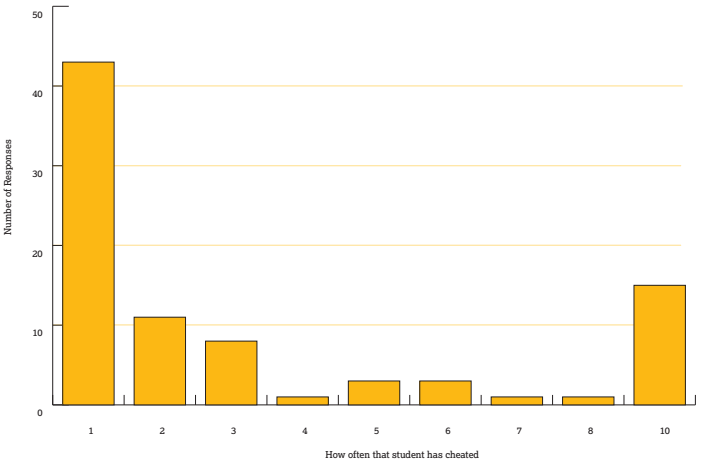
Respondents who have
cheated and were cheated on...

Number of Reponses: 89 cheaters (10%) and 127 cheated on (15%)



Number of Reponses:
89 cheated (10%) and 127 cheated on (15%)

1. A person I/they told them/me “not to worry about” (17%)
2. A stranger (16%)
3. A friend (13%)
4. A classmate (13%)
5. A close friend (12%)
6. An acquaintance (8%)
7. An ex (7%)
8. Other (6%)
9. A coworker (5%)



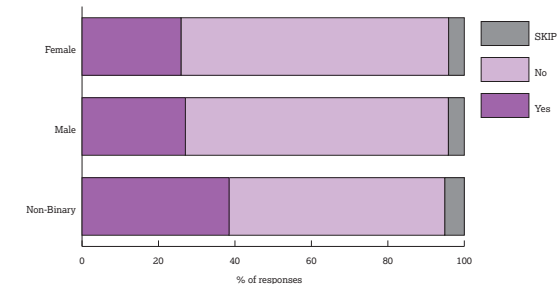
If you have cheated, then on average, you may have cheated three times, as reported by the 87 respondees that have actually cheated.

10% of females and 9% of males have cheated, which is not as much as the 28% of non-binary respondentss who decided to dip into another pool. On the flip-side, 17% of feamles, 13% of males and 21% of non-binary respondentss were cheated on. The department which cheated the most was Chemistry, and the department that was cheated on the most was Medicine.

FRIENDS WITH BENEFITS

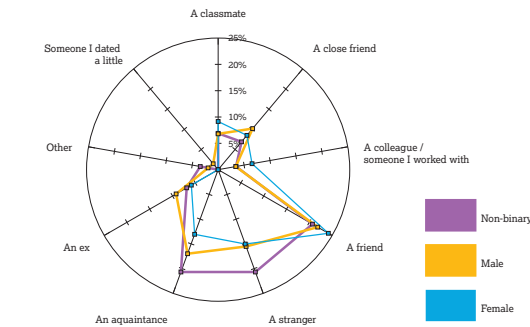
Have you ever been in a purely
physical relationship?

Number of Reponses: 820 (95%)



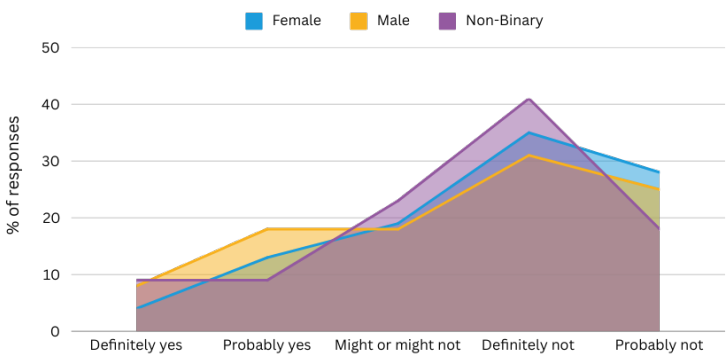
Who were they to you?

Number of Reponses: 820 (95%)



Would you ever consider entering a
purely physical relationship?

Number of Reponses: 820 (95%)



Why did you want a physical relationship?

Number of Reponses: 820 (95%)

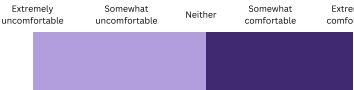
1. For shear fun (73%)
2. Stress release (31%)
3. Practice (26%)
4. They did not want to be in an emotional relationship but could not admit it (13%)
5. I really liked the other person (13%)
6. Other (9%)

Why people want a physical relationship is an interesting insight into what sex can be. It can be fun, a form of stress release or most interestingly, for practice. As Imperial students, we know that practice makes perfect. Unfortunately, many of the respondees entered an agreement with emotion, which FWB is definitely not designed for.

SO
CI
ETY

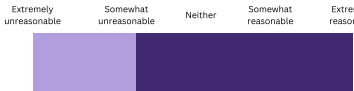
How comfortable are you with the topic of sex?

Number of Reponses: 824 (95%)



Do you feel society's expectations regarding sex
are reasonable?

Number of Reponses: 784 (91%)



Imperial College is a safe / respectful place to
discuss sex and consent.

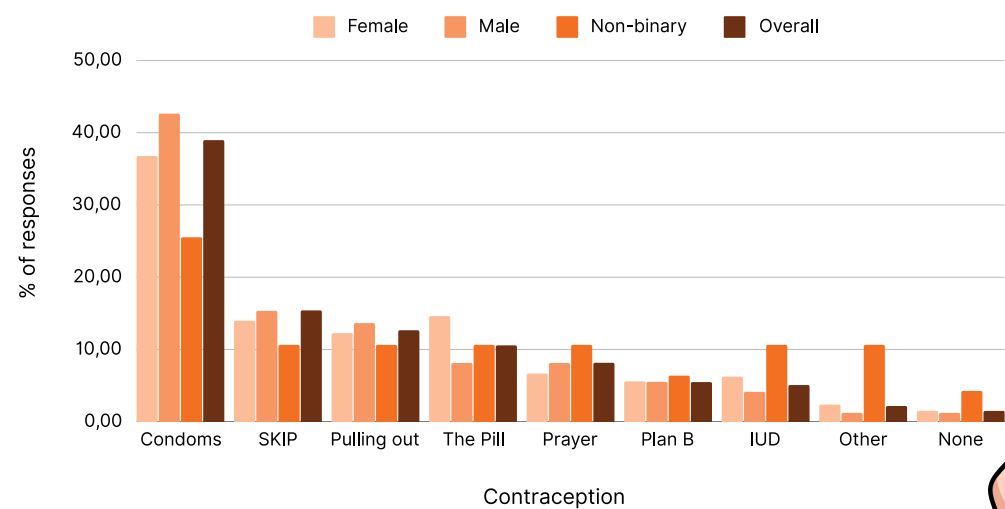
Number of Reponses: 86 (10%)



HEALTH

What type of **contraception** do you use?

Number of Reponses: 632 (73%)



Condoms are 98% effective in preventing pregnancy and the only contraception listed to protect from sexually transmitted infections (STIs) if used correctly. This means the condom was put on before penetrative intercourse and it does not split nor finds itself slipped off from the start to the end of its use.

Pulling out on the other hand is **NOT** in any way protective from pregnancy and even less protective from STIs, hence the fact that roughly 13% of respondents rely

How often do you **test for STIs**?

Number of Reponses: 647 (75%)

Note: This counts only respondees who have lost their virginity

Never
Between partners
When I am scared
Once a month
Yearly
Quarterly

42%
of non-virgins
have never
tested for an
STI.

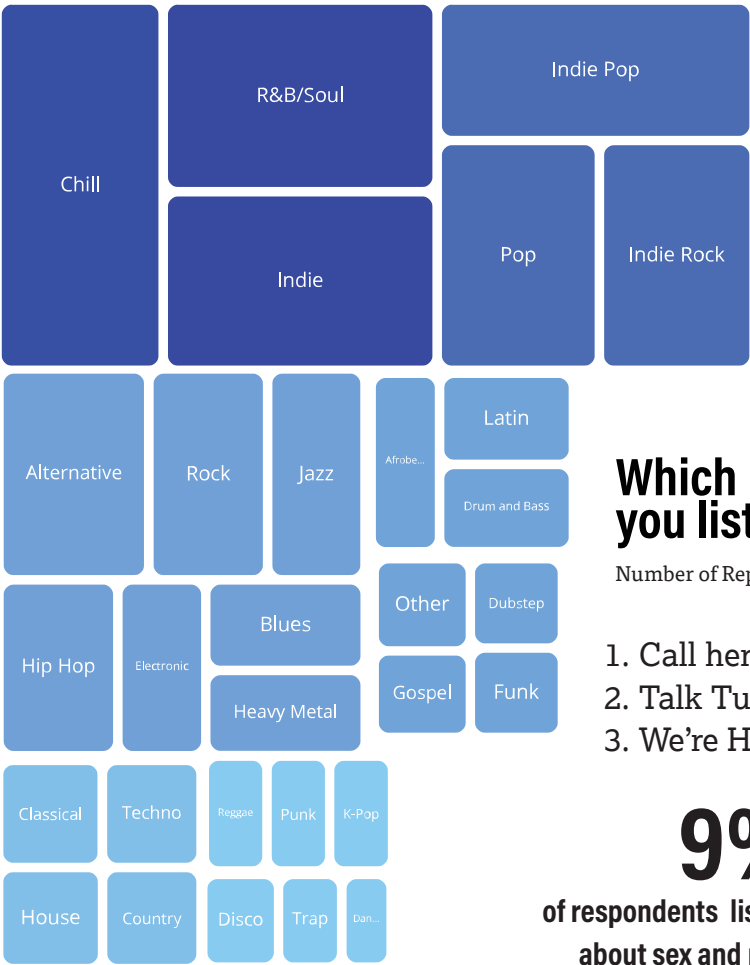
15%
of non-virgins
test between
partners

on pulling out and 8% on prayer, is only shocking. Plan B is a morning after pill taken to prevent pregnancy, similar to the daily pill, should be taken as soon as possible after sex and can be found in most pharmacies and GPs.

THE AUX

Which **genre** do you listen to?

Number of Reponses: 341 (39%)



Which **podcast** do you listen to?

Number of Reponses: 55 (6%)

1. Call her Daddy by Alex Cooper
2. Talk Tuah by Haliey Welch
3. We're Having Gay Sex by Ashley Gavin

9%
of respondents listen to podcasts
about sex and relationships

37%
of respondents do
not listen to music
during sex

31%
of respondents sometimes
listen to music during sex

Which **artist** do you listen to?

Number of Reponses: 142 (16%)

1. The Weeknd (17%)
2. Lana Del Rey (6%)
3. Cigarettes after Sex (6%)
4. Deftones (3%)
5. Kali Uchis (3%)
6. Taylor Swift (2%)



Felix Film&TV review:

THE BRUTALIST

UPI Media

Film Writer

DAVID LATIMER

Hot off the tails of nearly a dozen Oscar nominations, Brady Corbet's third cinematic directorial work *The Brutalist* is quickly cementing itself as one of the largest cinematic achievements of the 2020s. It battled through a difficult pre-production during the COVID-19 pandemic but has finally been realised on screen after its conception eight years ago. Adrien Brody, Felicity Jones, and Guy Pearce have all received acting Academy nominations for their stellar performances which must be seen, but, as is common in the current cinematic climate, films seem to leave cinemas as quickly as they enter. The movie is a celebration of architecture and it's clear that all involved deify the craft and were eager to share that love with the rest of the world.

Overview

Following the Second World War, Jewish Hungarian architect László Tóth immigrates to the United States following his internment in a German concentration camp. Isolated and without work, Tóth is unable to see his wife and niece, who are stuck in Europe because of health is-

ues. The first half of the film shows Tóth finding his footing in America, trying to secure a job whilst still being the victim of persecution even after the end of the war. With his passion for architecture, Tóth finds small work in a remodelling business but is quickly dismissed and ends up as a construction worker, on the sites that he is so desperate to design, yet miles from a drawing board. By some miracle, Tóth is approached by a wealthy gentleman who commissions him, with nearly full creative freedom, on a years-long brutalist memorial building. For the next two and a half hours, the audience are subjected to the monomaniac Tóth as he becomes so singly focused on the idea of the project, seemingly for very little reason. The work compels him entirely and, even when he is able to escape its gravity, Tóth is pulled back one last time.



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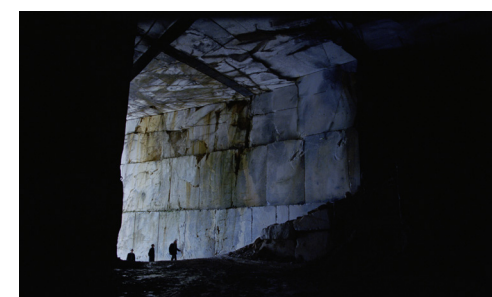
In many ways, it reminds me of *The Godfather* where the weight of such a commitment crushes a person and keeps drawing

them in again and again. The film explores Tóth's relationship to the work but also importantly explores the miasmic relationship between Tóth and his client. The wealthy businessman Harrison Lee Van Buren treats Tóth like a toxic partner, alternating between treating him like a messianic sculptor of form and discarding him for little reason. This relationship is as addicting to Tóth as the heroin habit he picked up due to the pain medication he took during his imprisonment.

Building

The building itself is central to the film and at times feels itself like a character, despite not being fully constructed for a majority of the narrative. The Van Buren Community Centre, a memorial to Harrison's late mother, hangs over the narrative, looming over Tóth as a Damoclean reminder of how precarious his position as chief architect for Harrison is. The building is nominally a tribute to Harrison's mother, but the project is just a way for Harrison to feel like he is doing a good deed, both in the tribute and in the benefits it would supposedly provide for the nearby town, while all he needs contribute to the project is money. His real character is evident in how callously he treats Tóth and the other workers under his employ.

While in Hungary, Tóth built several brutalist buildings and we're shown scenes of them being very dear to him. This project however, his first in America, is targeted on all sides by requirements from both Harrison and the local mayoral board.



UPI Media

Tóth is forced to include a Catholic chapel inside the structure despite his Jewish faith. Harrison demands the building balloon in scale until the project is bloated and a second architect is brought on to cut costs, at the expense of some of Tóth's details. All of this is a metaphor for the fact that, even now, Tóth is not welcome and must conform to the norms of the "free" American dream, lest they be beaten into him. Tóth has many enigmatic requests for the specifics of the structure which are as arbitrary as they are distressing for him when they get adjusted. As the audience, it is natural to assume that this is another expression of Tóth's growing mania, but the significance is eventually revealed, at



Adrien Brody plays László Tóth UPI Media

the point where it no longer matters. He's already been through all that struggle. We have already judged him for his neuroticism.

Length

The film clocks in at a total of 3 hours and 35 minutes which is gargantuan, although that does include a fifteen-minute intermission integrated into the film itself, which was appreciated. The intermission separates the film cleanly into its two acts, which do feel distinct enough to justify the cut. In the past, the intermission was a fairly common occurrence that allowed the projectionist to change over the reels of film, but has since been phased out with the advent of digital technology. I, for one, thought that *The Brutalist's* decision to include an interval was a good idea. It can't be understated how cathartic it is to haul yourself out of that chair and to walk around for a short time, stretching your legs and allowing yourself to mull over

what you've just watched. And then you sit down again and there's more film! Truly splendid.

With this all being said, *The Brutalist's* length was never felt on me for a moment – I was taken aback when the interval signalled the halfway mark so soon. A film like *Killers of the Flower Moon*, while undeniably great, wore on me near the end in a way that this film just didn't. I think to make a film with such a monumental length, there is an agreement for all those working on it that this is a colossal piece of art, and that it must be treated as such. It would be a disservice to the concept of art itself to produce something boring. It's a commitment to an immense human effort to produce something beautiful – not unlike Tóth's own.

Direction

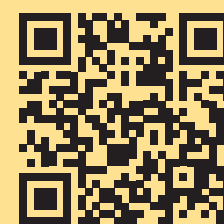
When writing a long-form piece of text, it can be very easy to slip into a spiral of putting less and less effort in as you become

more consumed by the desire to be done with it all. Likewise, one might expect that a film of this length would lead to an inconsistent, tapering quality in direction. This wasn't present and I was regularly blown away by the sheer magnificence of shots present in the film. One challenge for Corbet must have been finding novel ways to shoot the building, which so much of the film hinges on. This was aided by the fascinating design of the Van Buren Institute, likely a result of Judy Becker's production design. The building is a product of inspiration from decades of real-life brutalist architecture, with its concrete spires and liminal, water-filled lower chambers, with the barren chapel undoubtedly the centrepiece. Despite the film's brutalist namesake, the film is not afraid to have stunningly beautiful, colourful sequences. One of real standout nature to me was the trip Tóth and Harrison take to Italy to inspect the marble for the altarpiece. The ultrawide, epic shot of the quarry hangs on the screen for twenty seconds at least, which still wasn't enough for me to absorb the magnitude of the setting. When the film shifts its focus to the single block of marble being chosen for the project, it takes the opposite approach and moves in close. The otherworldly, internal beauty of the slab and all of its prismatic colours take your breath away, all accompanied by soft, howling winds. When the characters describe themselves as having a spiritual experience with the marble, it's more than a line. Corbet has truly imprinted God into your soul in that moment.

Production and Budget

One of the most impressive things about the film is the fact the whole production was independently financed and cost less than \$10 million in all. It might cost a person more to build the Van Buren Institute in real life than it did to make this film. The low budget is not evident: the film has an all-star cast, a monumental length (on VistaVision film!), an incredible score, and there's never a scene in which I noticed an obvious budget restriction. Having such a low budget is truly refreshing, especially in the current landscape of blockbusters that can only break even if the film is successful beyond their wildest dreams. The model has some rare stand-out successes like James Cameron's sequel to *Avatar*, but it is not a sustainable model. *The Marvels* cost \$270 million, with a large proportion of that lending to a reliance on post-production and rampant abuse of VFX workers. Even a niche, "artsy" film like *The Brutalist* can turn a \$15 million profit because of the impressive budgeting. This allows films like this to be made, and allows art to be created for its own sake.

Want to read the rest of this article? Scan the QR code:



Nosferatu: a symphony of sexuality

The gothic, the unknown, and why you should want to get freaky with Count Orlok

Film Writer

GEORGE PASTONS

Robert Eggers has done it again. *Nosferatu* is amazing. The film, the second remake of the legendary 1922 production, offers one of the best additions to vampire and gothic cinema in a while. It is essential viewing: not just for the movie itself, but for its deep explorations of the themes of female desire and agency, more prescient than ever as we enter a second Trump term.

Following Thomas and Ellen Hutter, a

newlywed couple living in Wisburg, the plot details their encounter with the malevolent "vampyr" Count Orlok. Based on Bram Stoker's epistolary novel *Dracula* the plot deviates to its benefit – the character of Herr Knock (Renfield in the novel) works much better when there is a direct link between Thomas and Knock, rather than portraying him as a random maniac. The removal of the entire Lucy subplot works in streamlining a somewhat bloated novel: I read this novel for the first time when I was 11, and my constant critique has been that the ini-



Focus Features

tial horror and terrifying atmosphere built by protagonist Jonathan Harker dissipates in the middle. Not so with *Nosferatu* – its entire run time is tense. Every moment means something. Like every Eggers film, everything is carefully thought out. It's a film made with deep love and respect.

Robert Eggers' origins as a set designer shine through. The sets are perfect – the locations used are perfect and fully capture the atmosphere he wishes for the film. It draws upon the original's German Expressionist roots well. The scenes with Count Orlok's hand shadows are pure kino. The shot over the streets of Wisburg is beautiful beyond words, and purely intentional as the plague overtakes the city. The scene of Hutter walking through the snowing forest, with its dreamy, painting-like backdrop, into the carriage is the most beautiful shot of the film, harkening back to the best part of the novel – the journey to Dracula's castle amongst the snowy fountains, as well as capturing its German expressionism. On my first viewing, some of the shots felt unimaginative, or even contrived, particularly due to the reliance on centre shots, but on second watch, it elevated the experience. Everything felt much more dramatic. Eggers has said that his influences are Tarkovsky and Bergman, and it works to his benefit – in character-centred scenes, the blocking is organic and human, but at times exudes a quirkiness that just works. The grading, described by some as being too bland, works. There is always an atmosphere of bleakness. The blue hues used throughout accentuate the

coldness, the terrible miasma gripping Ellen Hutter's existence, the existential threat of Count Orlok, and make the film larger than life.

Lily-Rose Depp steals the show with her phenomenal acting as the main character Ellen. The sensuality she is able to portray whilst undergoing a seizure is haunting, as Count Orlok and she interact in some shadowy realm. Her chemistry with both Nicholas Hoult as Thomas, and Alexander Skarsgård as Orlok I found electric. Skarsgård is unrecognisable and seems to have morphed into Orlok. There is again, a sense of sensuality to his performance, as he imposes over the rest of the cast. Orlok feels unbeatable, he feels

primordial, like a force of nature. My favourite shot of the movie is when we get a glimpse into Orlok's eyes, as Hutter cuts his finger with a knife. There, wide-eyed, Skarsgård displays a range of emotions in a matter of seconds, going from surprise, to lust, to restraint, and with some faint rumblings of cunning, before it cuts to Nicholas Hoult again. His blood sucking is sexy. The scene where he straddles Hutter's lifeless body, and the sound design of him gulping down blood is deeply erotic. I can't believe I find a rotting corpse sexy, but Orlok makes it work.



Orlok feels unbeatable, primordial, like a force of nature

Ostensibly, *Nosferatu* is about sexual assault. It's about how the shadow of abuse and abusers can take over our lives and impact our relationships, particularly in a female context, where social expectations and norms reduce Ellen to an outsider. It's an acceptable reading, but I believe the film goes further than that. Orlok isn't shame, rather he is desire – he is the appetite, the fantasy, the need for companionship Ellen wants. It's not

necessarily that women's sexual needs were viewed as non-existent, or taboo, as commonly assumed, rather that they were not viewed with the same depth as the sexual desires of men. Throughout *Nosferatu* we see couples having relatively healthy sexual relationships (spoiler: bar the necrophilia scene), but we never hear of their desires: Anna, the only other major female character in the film is only there for her husband's desires for children and the enjoyment of the male, much more typical of Victorian couples. Ellen, and Count Orlok subvert this: there is a whole world, beyond science, beyond the contemporary medical ideas of the doctors of the era, that is unknown, spiritual, "celestial" insofar in that it is an essential part of the human identity, but sexual intercourse as a form of pleasure for the female subject, and for sustenance and to provide purpose for the male. Orlok needs Ellen's blood – he is awoken by her, inverting the Victorian ideal that women needed sex to fulfil the purpose of the "maternal" life – a woman needs a man to have children, Orlok needs Ellen to fulfil his destiny. Of course, women's desires are still taboo to this day, and *Nosferatu* acts as a beacon, without being overtly didactic, reflecting this, its depth as deep as the sky at night.



Focus Features

BUSINESS

Institutions, technology, and inequality

The role institutions will play in determining whether AI creates a digital democracy or a Silicon Valley oligarchy.

Business Editor
ALIA FRIEDMAN

Any think-piece, podcast, or McKinsey report will tell you that technological innovation is transforming the world. What is less remarked upon is the idea that technology is essentially a hammer. Hammers are just as good at building things as they are at hitting people – to which ends depends on who is wielding it. It is within this framework that technology makes its impact on the economy.

Continuing the metaphor, it is institutions that wield the hammer. In their seminal work, *Why Nations Fail*, Daron Acemoglu and James A. Robinson present the framework of inclusive vs. extractive institutions to explain why some countries, defined as “poor” per their GDP (though blessed with the same abundance of natural resources as “rich” countries), are unable to provide a high standard of living for their citizens.

Inclusive institutions are defined as those which encourage widespread participation in the economy, while extractive institutions concentrate power in the hands of a small elite, preventing the full participation of others.

If technology can be considered as a resource similar to oil, the application of this framework predicts similar results. Inclusive institutions help mitigate the effects of inequality from technological change. Take, for example, the concept of inclusive growth which aims to distribute the benefits of economic growth more equally across a population. However, there is a lack policy and clear vision to address this problem resulting from



Computer server room rawpixel.com

technological change. Especially within countries which tout the inclusivity of their institutions, such as the UK, Germany, or the US.

Extractive institutions are characterised by preventing the allocation of resources to their most productive ends at the expense of the wider citizenry, to benefit of a central elite. The best example of interaction between technological innovation and extractive institutions can perhaps be seen in North Korea. Its technological development is so unequal that the country simultaneously possesses nuclear weapons and advanced cyberattack abilities whilst only 10% of its population own a cell phone and 97% of the roads are unpaved. These dynamics of technological concentration, though extreme in North Korea's case, may no longer become unique to overtly extractive systems.

The continuing AI revolution will challenge inclusive societies to confront technological concentration within

themselves. In countries with traditionally inclusive institutions, due the high training and maintainance costs of large language models (LLMs), only couple of ‘Big Tech’ companies will be able wield the hammer; creating a de facto extractive system masked by nominally inclusive institutions. Although, the release of DeepSeek may fundamentally challenge this set up.

Critics may argue despite consolidation of LLMs, the productivity unlocked by AI will be democratic and inclusive. They are correct in the observation that AI has the potential to increase productivity, but there are no guarantees productivity gains will be evenly distributed. Additionally, the current state of things creates a possibility we will all be at the mercy of mercurial tech gods controlling an AI faucet, in order to maintain continued access. This is an uncertain proposition, especially with the recent increasing foray into politics by Silicon Valley elite.

The intent of this analysis is not

to scaremonger, but rather to apply the valuable institutional framework developed by Acemoglu and Robinson in *Why Nations Fail* to our current technological moment. The UK has inherited and developed robust inclusive institutions over centuries – a significant advantage that many nations still struggle to achieve. But, as new technologies present themselves, rapidly reshaping economies, we must examine whether our current institutional structures are evolving to preserve and protect their inclusive nature, or whether we risk inadvertently allowing extractive elements to take root and rot.

Imperial win UCL Consulting Summit 2025!

Imperial's team, Fleming & Company, placed first against 25 teams across 16 UK universities, at the UCL Consulting Summit on the 1st of February.

Tackling the problem of Santander Cycle's recent decrease in ridership, Fleming & Co. strategised a solution to expand Santander Cycle's market share, alongside a 'crisis case' regrading a hypothetical cybersecurity attack.

Congratulations to the team for their victory and hard work!



Left to right: three judges, Aditi Mehta, Sebastian Tan, Valentin Bruhl, Leon Dou, Fama Matel, Adam Bencsik (Project Leader) Oscar Chong



THE ICONIC **5K RELAY**

8 MARCH 25

**WOMEN'S, MEN'S
AND MIXED**

TIMINGS

9 - 10:30 am

Meet at metric bar for race registration. Located in Imperial College Union (Prince Consort Rd, South Kensington, London SW7 2BB)

11 am

Race start time

1:30 pm

Awards ceremony

MORE DETAILS

When?

Hyde park relays is on the 8th March 2025.

Cost?

The relay entry fee is £60 per team.

Included?

1. Professional chip timing
2. Race photos free of charge!
3. Free t-shirt *for first 350 entries

Teams?

Teams are made up of 4 people each who run a 5km leg of the race.

Who?

Anyone! The relay is organised by Imperial College Union Cross Country and Athletics.

CONTACT US

hpr@ic.ac.uk

ENTER HERE



PHOTOGRAPHY

Natural Harmony

A Valentine's Day date with nature

Photography Editor
ROLANDO CHARLES

Tough grass," they say, and boy, how I would love to do just that. Unfortunately, having spent dozens of hours in front of the computer already, and my many unsubmitted coursework assignments beg to differ. It's sometimes hard for us engineers and scientists and all other kinds of students, to remember to take a deep breath in, have a peaceful stroll in the park and take in the beautiful colours, shapes, sounds and smells of nature.

As a complete departure from the rather stale photographic landscape that emerged from "Game Theory," this week I present four variegated interpretations of "Natural Harmony" since it was a truly impossible task to narrow down the several submissions to a single winner. Rather than doing so, I tried to identify a different hue of meaning in each of the photographs and select those that I believe showcase the creativity, imagination, and of course technical ability, of Imperial photographers. Let me tell you, it was a daunting task to compare and judge.

But before getting to the pictures, I would like to discuss a book I've been reading titled *Ethics* by Benedict de Spinoza, possibly the first Western philosopher to discuss and propose God to be a natural, all-encompassing, necessary, and sort of moral-lacking substance. Through a series of unrigorous propositions, Spinoza sets out to prove that God, or Nature as he also calls it, is everything and permeates existence, as existence itself is simply an effect of God. This is perhaps the first form of Western modern pantheism, where all is one and all is connected. The first spiritualist, you may say. And while we can discuss the validity and moral implications, just as Spinoza

does in the later chapters of his book, I prefer to simply let this notion sink in and inspire something artistic to emerge from inside of us, or better yet, to flow from our natural surroundings into our mind and, of course, into our cameras.

Dopamine by Charlotte Probstel is a celebration of the more common, but not less important, harmony in our lives: our pets. This photo strikes me as an example of human tranquillity, as an animal completely capable of sharing its space, life and resources with others, even if linguistic communication is limited. Understanding each other, as pet and owner, often has very little to do with oneself, but rather with sharing a few joyful moments together, as one. As Charlotte writes in the comment to her picture, "Natural Harmony means to coexist within a world large enough for two."

A different interpretation of harmony is offered by Cyrus Chen with the photo titled *Whispers of Nara*, which I think offers an interpretation of the harmony between a living being and a human environment. I adore the picture's composition, and the deer appears completely at peace with the surrounding manmade structures – stone lanterns often found at shrines and temples in Japan. We are led to reflect on the role that we have in nature as builders, engineers, and architects, and the objects we leave behind for other animals and plants to find.

Interestingly, one more iteration of natural harmony can be found in the interaction between natural elements and manufactured structures and vehicles. *Stories of Ice I* by Yizi Guo shows a fishing boat on a very still body of water, perhaps the ocean. From the lighting



Whispers of Nara Cyrus Chen



Stories of Ice I Yizi Guo

conditions, I would guess this was taken at dawn, and while the sun slowly rises from its slumber, the world is calm and nature appears friendly with its feisty inhabitants. This picture reminds me of the fragility of humanity compared to the strength and sometimes the violence of nature. Earthquakes and hurricanes may be able to completely annihilate us, but *Stories of Ice I* shows the harmonious side, the gentle sun, the tingling breeze.

Dopamine, Whispers of Nara, and Stories of Ice I all demonstrate some sort of human interaction with nature, and while it is true that these fully encapsulate the idea of this theme, there is one final permutation left: the harmony of nature with itself.

Sometimes photography doesn't require patience, framing, portraiture, or expensive equipment, it simply insists on us existing and being in the moment. Because when we let things



Birds flying high Yiheng Siow

happen, that's when we can capture the natural harmony around us, without making those entities a means towards our selfish ends. That's what's so incredibly simple and yet supremely stunning about exhibitions such as the National History Museum's *Wildlife Photographer of The Year*: location, luck, and some technical knowledge can immortalise natural harmony in a way that just couldn't ever happen artificially. A beautiful wildlife picture is a one-in-a-billion occurrence, of which we see hundreds every day, that truly satisfies and tickles our humanity. I'm not timid in saying that Yiheng Siow might have captured one of such rare moments. *Birds flying high* truly communicates the feeling of awe in such a potent way that it is hard not to be immediately entranced by the picture. There is a sort of tranquillity that floods my mind when looking at the photo, something that has only happened to me in the middle of nowhere, up in the mountains. For a second, I'm lost in the beautiful sky and I feel as though I am one with nature. The epitome of natural harmony, and nothing more.

A final warning, as also Spinoza adamantly reminds us, is not to confuse the natural order, or in this case, the natural harmony of these pictures with proposing some sort of intrinsic morality – there is no judgment on “good”, “bad”, “righteous”, or “evil” in nature – because what is shown is simply the pure essence of things: existence as the state of being alive and in the world. Once again, as photographers, we find ourselves in a position of omniscient record-keeping, and with our cameras we can eternalise the harmony of nature by simply pressing the shutter.

Scan the QR code to
submit for the next
theme **“Primitive”**:



Dopamine Charlotte Probstel

CATNIP

Your letters, our love

Agony Aunt
AUNTY FELICIA

Dear Aunty Fel,

I hope you're well. I'm a confused newspaper editor in need of some help with a curious predicament I have found myself in. I planned to recover my ex-wife with an amazing plan. I was going to visit her flat and serenade her, as well as drop off a lorry full of flowers, on Valentines Day, and show her how I really feel. I was going to sing "La Vie en Rose" and had practised perfecting my French accent to make it extra sexy. However, last week I received a letter from the court: it was a restraining order. Is there any way I can still do this because I don't want to lose her forever. Also, the flowers cost a bomb, and I already put down a deposit. Not to mention learning the guitar.

Help, fingers-bleeding and desperate,

M

I miss you baby

Dear Aunty Felicia,

I am open to all kinds of functions, so when a co-worker invited me to their swingers' party, I was a bit apprehensive at first but then agreed. I just find it slightly weird that instead of sexual acts, all of my co-workers' partners have me sitting in a room solving mazes against a monkey, while they dress in lab coats and write on their little clipboards. Every time I ask if I should take my clothes off, they zap me with a taser. What type of sexual pleasure do they get from this? Also why do the monkeys get pineapple slices, but I don't?

EF

XOXO

Dear Aunty Felicia,

I am rather confused. When I scroll through short-form videos I see people showing off their outfits, I recognise this what seems to be compulsion to hold your shoes up by the heel. Sambas, Gazelles, Doc Martens, New Balance, slingback heels, Mary Janes. But when I ask my friends what they are wearing, they don't do it. Moreover, Clairo doesn't start playing. I'm confused? why don't we show our outfits to each other like I see non-stop on Instagram? What does the art of the heel hold mean?

Regards,

Nervous Coquette

Aunty Felicia

Dear M,

I have only included one of your 11 letters this week in the paper as my inbox is getting very clogged up.

Regarding the flowers, I would advise you either donate the flowers to an old people's home or lose your deposit. What flowers are they? They could be suitable for a funeral, too. It sounds like you need some hobbies, and copyediting does not count, so maybe flower pressing is your calling. I would not save these all for your ex-wife though. I think a gift you could give her this Valentines is personal space. You could even start seeing someone else to make her jealous. This is the oldest trick in the book and I'm sure she would love it.

Worst case, try a TikTok "solo date" to a bookshop and an afternoon flat white.

Always,
Aunty Felicia

I ♥ Catnip

Dear EF,

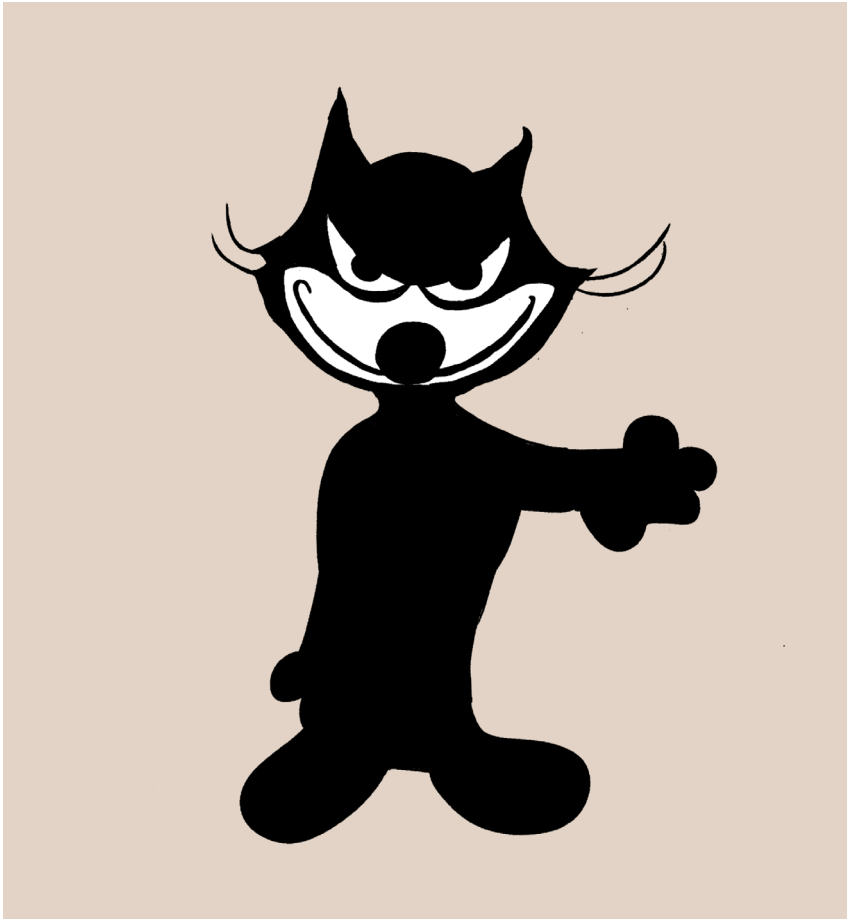
I think you should be mindful of your friends and kink-shaming them. We all like to get up to a bit of monkey business sometimes. You should try and participate without criticising the terms to full enjoy this new experience. If you fully engage in the study I am certain you will get your pineapple slices. West Basement Studios is a very accommodating space and I am sure if you contact the Human Resources Department at *Felix*, one of the monkeys working in admin will contact you and refer you to CBT for a six week course to help you reconnect with your sex life and your relationships with the other writers.

See you in the week,
Aunty Felicia

o o o o o

Dear NC,

I hate those stupid outfit tour videos with the stupid heel holding shoe reveal even though we could already see your new adidas gazelles because you show them in every single video on your profile and you've done an unboxing video. I feel the same about the leg pop to show the shoe. You don't look cool and you aren't avant-garde because you're wearing a skirt wwith trousers underneath it, it just looks ugly, no one is going to scout you in central London to be a model when you are a woman under 175cm just because you have tailored Uniqlo trousers, Onitsuka Tigers peaking out underneath, with a thrifted pleated knee length skirt and wear Clinique Black Honey Almost lipstick. Miu Miu do not want you on the runway, or a Replica perfume editorial, because you're 5ft 6 and thin and carrying around The Bell Jar in your wide leg jean back pocket. Being an Instagram fashion influencer will not make you Anok Yai. Timothee Chalamet does not think you're better than Kylie Jenner.



Single?

In a course where the gender ratio is non-existent?

Spent too much time learning how to code to speak to women?

Or are you simply a misogynist?

felix offers the perfect solution:

gay sex



ARIES

This week the Sex Survey makes you realise that you are functionally an incel.



TAURUS

This week your gambling addict friend informs that you that 90% of engineers quit revision before they make it big.



GEMINI

This week you submit mitigating circumstances for bereavement after the Duolingo Owl dies.



CANCER

This week you publicly declare you are quitting drinking only to be caught in the act seven days later.



LEO

This week you discover your dream jeans while Kendrick accuses Drake of being less than legal.



VIRGO

This week you cry because Beyonce robs your of your spot on the Dean's List.



LIBRA

This week you cancel your flight home for Easter in fear.



SCORPIO

This week you hope that both you and the University Challenge team have an academic comeback.



SAGITTARIUS

This week you ask your mechanics lecturer to "explain in pop terms".



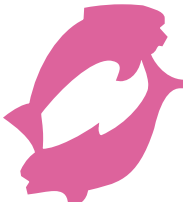
CAPRICORN

This week you get honoured with the "Absence Award" at the Billboard Women in Group Projects.



AQUARIUS

This week you reheat your SSRIs.







PISCES

This week you try a Kanye West style approach as publicity officer and get your society dissolved.



UNION & SOCIETIES

Announcements

February

15 TH Saturday	Cheerleading Competition IC Cheerleading	In the Legacy Cheerleading Competition, our level 2 and level 3 team will be competing against other university cheerleading teams!	Time: 09:00 – 15:00 Where: OVO Wembley Arena, London Tickets: £26	 TICKETS
16 TH Sunday	Social Sailing IC Sailing	At social sailing, you'll learn key sailing theory, such as the points of sail and how to sail around a course. All ability levels are welcome.	Time: 09:30 – 15:30 Where: Queen Mary Sailing Club, TW15 1UA Tickets: £15 (Members Only) (Few tickets left)	 TICKETS
21 ST Friday	Take me out x LSE IC RAG	Over the Imperial dating pool? Come to our dating event in collab with LSE! Sign up to participate or just come enjoy the fun :)	Time: 19:00 – 21:30 Where: LSE Saw Swee Hock Centre, WC2A 2AP Tickets: £4 Early Bird, £6 General	 INSTAGRAM
26 TH Wednesday	Clue: The Play ICSM Drama	Come to ICSM Drama's main play, Clue, for an exciting night of mystery and murder on stage! Show runs for 4 nights: Wednesday to Saturday.	Time: 19:00 – 22:30, 14:30 – 18:00 (Saturday) Where: Union Concert Hall, Beit Quad Tickets: £9 (Wed, Thu, Sat) and £11 (Fri)	 TICKETS

March

1 ST Saturday	Cheerleading Showcase IC Cheerleading	A series of cool dance classes taught by our dance team + random play dance with prizes!	Time: 18:00 – 22:00 Where: King's College London Guy's Campus Tickets: Early bird tickets at £8.	 INSTAGRAM
2 ND Sunday	Major Event IC Singapore	Our annual musical with a live orchestra, singing and acting. This is a story of Elizabeth Choy, one of Singapore's World War II heroes.	Time: 18:30 – 22:15 Where: Great Hall Tickets: Tickets not yet released	 INSTAGRAM

Submit your event here

Scan QR code and fill out form by 17th February 2025

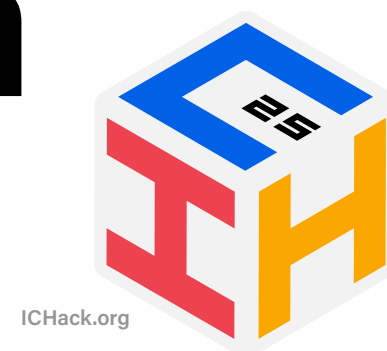




and view all the events here

IC Hack: Europe's largest student-run hackathon

Back for the 13th time, ICHack welcomed students Europe-wide for a weekend of problem solving.



SCR packed with teams. Inset: The ICHack Badge for Sponsors Charlotte Probstel

Editor-in-Chief MOHAMMAD MAJLISI

Over 700 students, 100 volunteers, and at least a metric tonne of drinks, snacks, and food. 15 sponsors. Students from Imperial, Cambridge, Oxford, and more, all competed in five challenges, each set by the gold-tier sponsor for the chance to win bragging rights – and some nice merchandise – at Europe's largest student-led hackathon. Running for thirteen years, *Felix* went to cover ICHack and see what the “hype” was all about.

Guided by DoCSOC treasurer Aditya, eating a quick lunch in between helping run the spectacle, we walked through the Queen's Tower Rooms, the SCR, and JCR where groups of up to five students were huddled around laptops, monitors, and even PCs they had brought in from home. Lined against the peripheries were rows upon rows of snacks, drinks, and surprisingly fruit – a cornucopia of goods – and tables where sponsors who had bought the appropriate tier could speak to students and entice them to work for them post-Imperial, if they showed the mettle.

The tickets were “sold out in minutes,” said Aditya, and reselling was a common occurrence. Speaking to

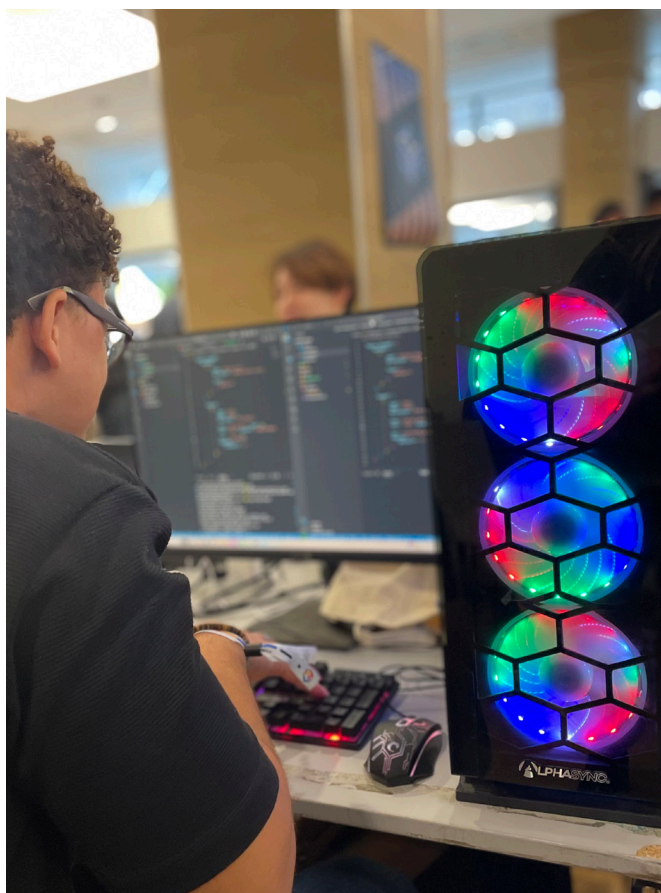
students, they all said the experience was “exciting,” and that they enjoyed being at the event. Some warned that one day of coverage was enough as tomorrow the room would “stink”: some students stayed overnight in a bid to get the edge over their peers, hoping to win in any of the five competitions. A team comprised of Cambridge and KCL students had come to compete because IC Hack was the big event for prospective software engineers. Whilst other universities did host their own events, it was Imperial's event that had the biggest chance to network, the highest production value, and the coolest sponsors. This year the lanyard badges were made of plastic circuit boards and had a D-pad built in. Inputting

certain commands, in the same way one could input a secret code on an old games console, allowed one to play Tetris.

Punctuating the time periods were a plethora of talks and workshops held by the sponsors. Frequent breaks were also set up officially, giving students a chance to unglue themselves from their seats and computer desks. In the evening, “fun events” would take place, part of the experience when you put 600 university students in one room. This year, Marshall Wace, the title sponsor of IC Hack, had organised a treasure hunt. One veteran, who was competing in their third

during the intense weekend. Countless numbers of t-shirt and software engineerstyle three-quarter zip-ups emblazoned with IC Hack branding worked around the scenes, speaking intermittently by walkie-talkies. At the doors, a team of “security” would check if possible, entrants had the wristbands required to enter the stuffy hacking rooms, making it very hard for eager onlookers to lift a few crates of drinks, as they are prone to do. Outside on Dangoor Plaza, a waffle stand gave out free waffles to competitors, with a line stretching across the length of Queen’s Lawn. The atmosphere was abuzz with some frenetic energy. It felt Monster-energy

of merch, lanyards, designed in-house, and other items scattered across tables. On the projector, a timetable so detailed it looked like an image of a yellow Lego brick wall was on display. Students with any issues were told to arrive here, and given all the help they could. In the ten minutes we spoke to DoCSOC volunteers we saw at least two or three competitors come in and ask for help. In the other room, in a mass of bags, t-shirts, and coats sat ten volunteers. Some volunteers slept heads facing down on desks; others watched videos on their phones, and some talked amongst themselves. Speaking to a few of them, they were scheduled breaks. Typically, they



One attendee brought their PC to IC Hack Charlotte Probstel



One team stationed in the JCR, making plans and bouncing off ideas Charlotte Probstel



IC Hack supplied snacks including fresh fruit and nuts Charlotte Probstel

year told *Felix* that they would only have their picture taken if they won the karaoke competition, an event traditionally held at 2am on Sunday morning – they had won it last year and were hoping to retain their title this year. Other students, in their fourth year of competing told *Felix* that this year they would probably go home and sleep.

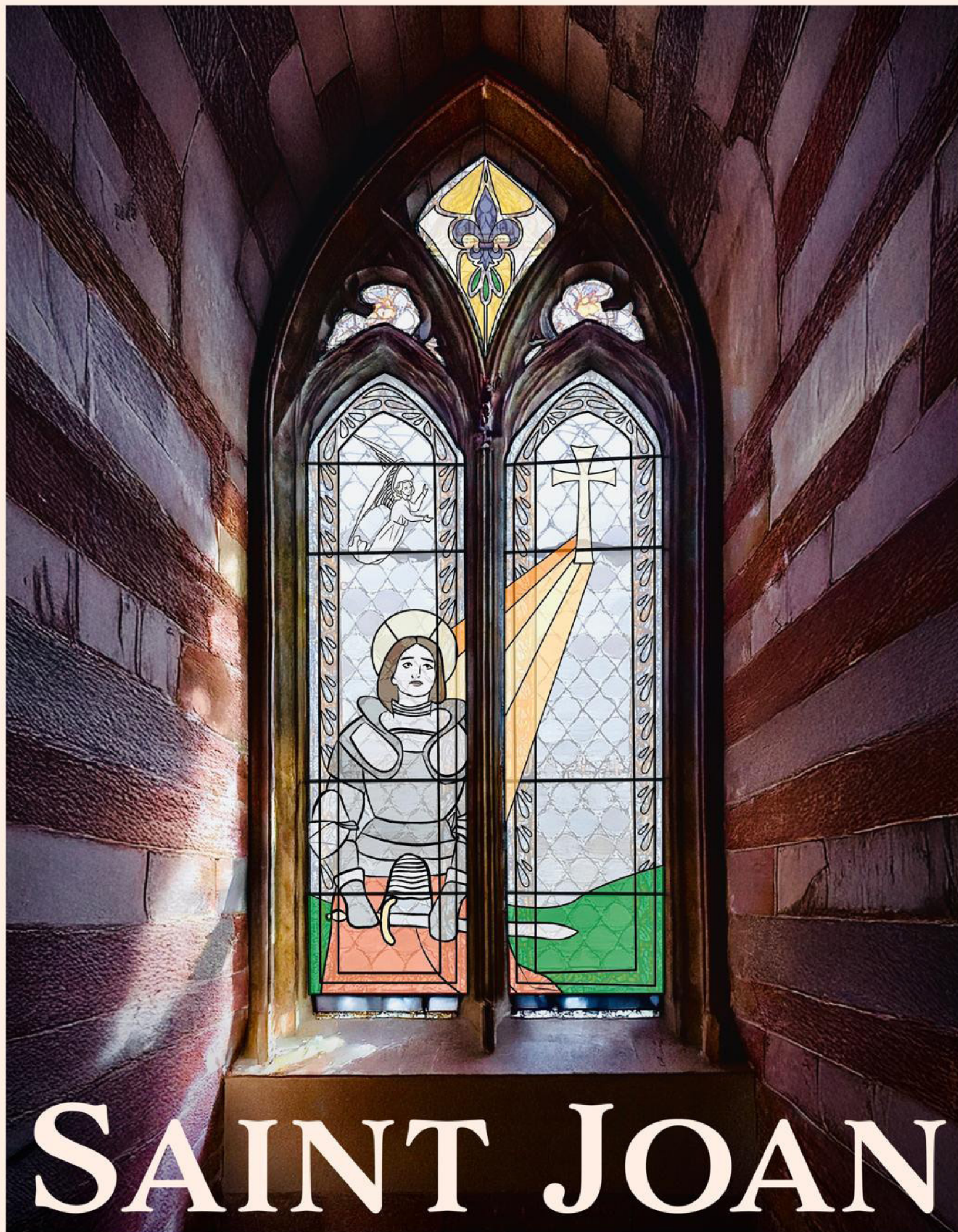
Volunteers worked to ensure that nothing ran amiss

induced, and driven by the same mix of determination and desperation one gets when they wander through Huxley. It felt locked in. Everyone was locked in. There was a role for everyone to play and they were playing it with full sincerity.

We were able to enter the control room: two rooms in the Sherfield building that had been commandeered by the army of volunteers. Inside, the first room were boxes

worked in blocks of a few hours, and then got a chance to eat and rest.

Seeing this energy, the enthusiasm of the students, and the overall nonchalance was refreshing. When most career based events are full of intensity, the ability for IC Hack, to the credit of DoCSOC, to have an event that is inclusive of all but doesn’t require one to put on the false airs of a regular corporate event.



SAINT JOAN

A play by George Bernard Shaw

**DRAM
SOC**

19th Feb - 22nd Feb
Union Concert Hall
Doors open 7pm



dramsoc.org/tickets

£6 for Members
£8 for Students
£12 for General

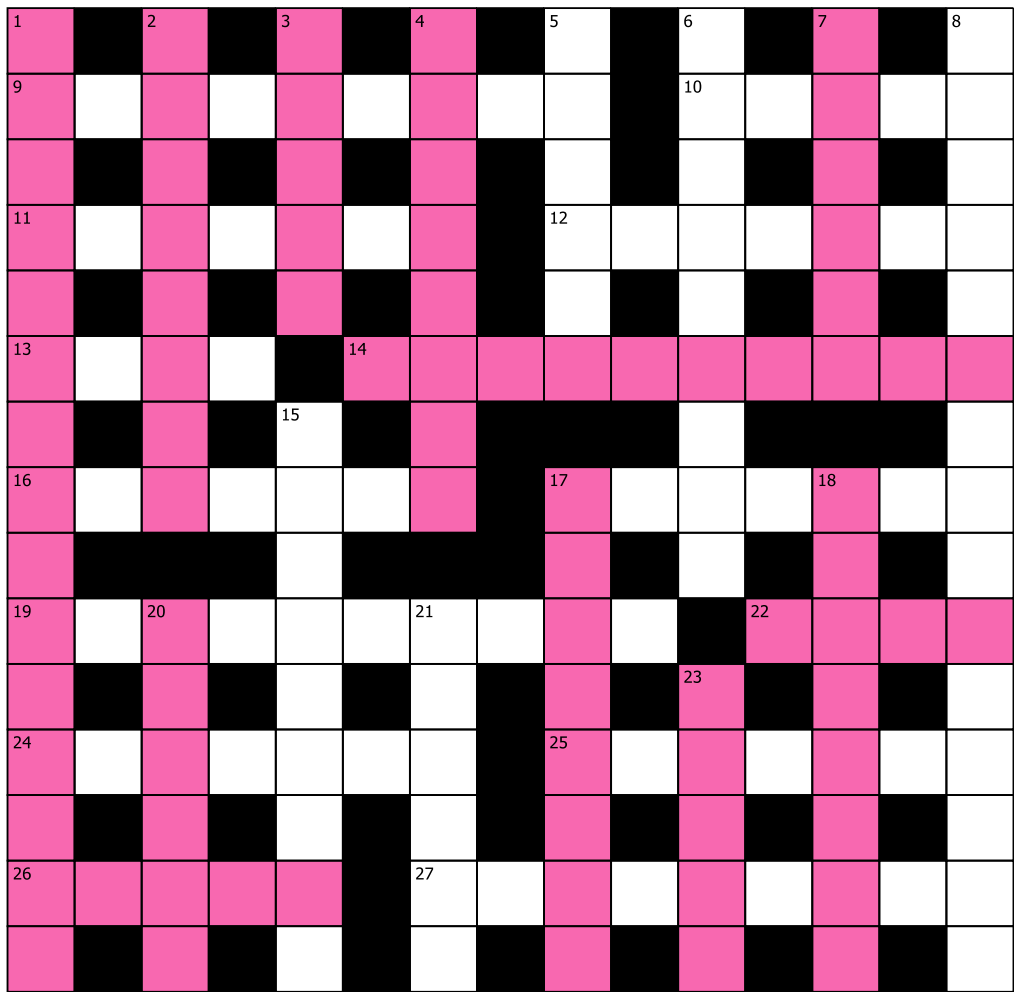
**imperial
college
union**

PUZZLES

Puzzles Editor
IVIN JOSE

CROSSWORD

"Dear Valentine" (5 pts.)



Across

1. Waking up in an endless job - America! [7]
4. I come after ripped scout outfit. [7]
8. Twirls plait after recent discussion of marriage. [7]
9. Wanted character with natural education. [5]
10. Source of judgement was allowed? [2,3]
11. Relationship from Tinder consumed by drivel has a bitter ending. [7]
12. Like admirer with heart cut from candy. [5]
14. Hid from international in shack. [5]
17. Corny park picnic has starters in sauce. [5]
18. Run away from bar, look back egghead! [5]
21. Left late without a consuming yearning. [7]
22. Tell lie before one's charged is just gold. [7]
24. Difficult but we're having a shot... [6]
25. Seeing her again had me ending

- without finishing coffee, you hear? [4,2]
26. New bottom for man with crazy love. [5]
27. Instrument use essential with backward stalking. [6]
28. Messy bitches drop bad standards. [6]

Down

2. Queen of demure, gin, and boxing. [6]
3. Several star alongside witty type. [6]
5. Goes Dutch and then leaves. [6]
6. Lady is angry dame lost her head. [6]
7. Stages darling up on board boat. [5]
12. In unit, scruffy man has fruit - you've got to start somewhere! [5,5]
13. Boss given coin with cup but spilled drink. [10]
15. Accommodation centre items haul, back with top Jäger - it went well! [10]
16. Manners of French (rude) abnormally sour. [10]
19. Pretends to give out heart in ferns, I guess. [6]
20. Fondle breasts in actual bed oddly. [6]
23. In courting, it means nothing. [4]

Across

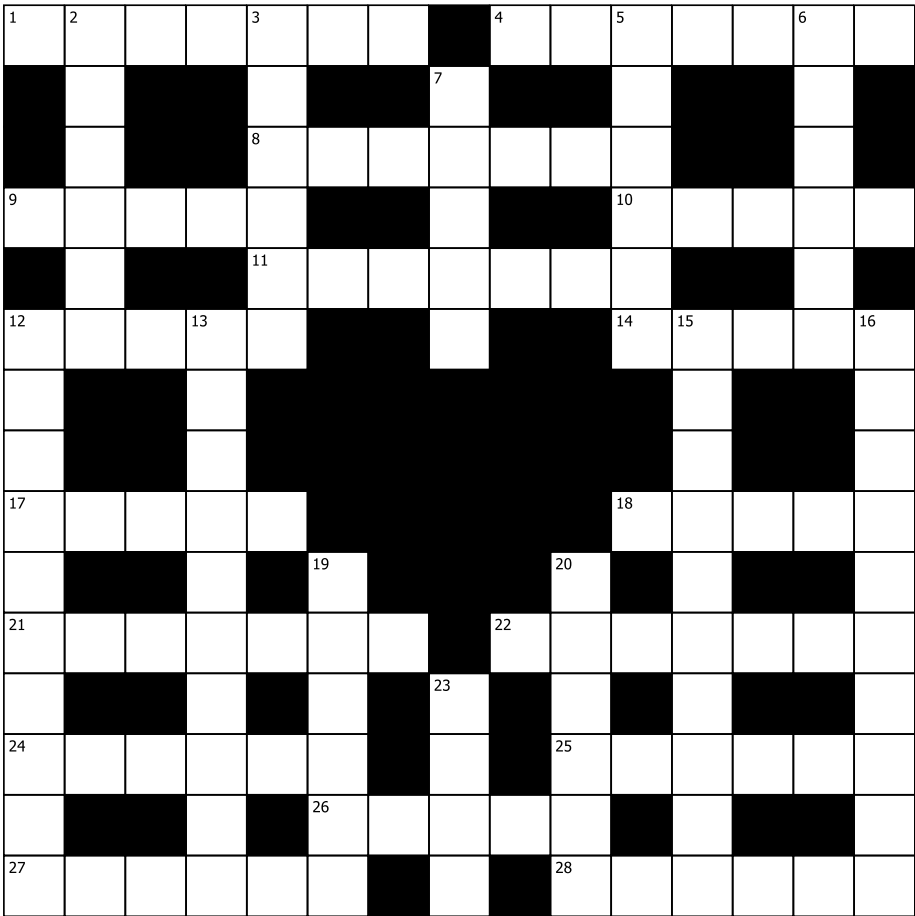
9. CFCs caused this gap. [5,4]
10. Where grand gestures and battles unfold. [5]
11. Love isn't always easy, sometimes it requires this. [7]
12. Essential for a long-lasting love. [7]
13. Chocolates and candlelit dinners involve this. [4]
14. A deeply emotional, intense love. [10]
16. To have a tendency or preference for. [7]
17. A logical fallacy in which a premise is assumed to be true without warrant. [7]
19. A type of knowledge that's more about insight than intellect. [10]
22. An unconditional, innocent, uncomplicated love. [4]
24. You might need this to keep your relationship going. [7]
25. There is often lots of these between you and those you love. [7]
26. You might paint one of these of your loved one. [5]
27. River that flows from Pittsburgh, Pennsylvania to Cairo, Illinois where it meets the Mississippi River. [4,5]

Down

1. 2017 Mac DeMarco song about the hardships of being in a distance relationship. [3,3,5,4]
2. The kind of love you save for your girlfriend, boyfriend, partner or significant other. [8]
3. Scattered for romance, soft and fragrant. [5]
4. Your other half, the one you're destined for, your perfect match. [8]
5. Love can make all 5 tingle. [6]
6. Italian operatic tenor most well known for his performance of "Nessun Dorma", an opera about a prince who falls in love at first sight with a beautiful but cold princess. [9]
7. Name fit for a queen. [6]
8. They'll help add some extra spice to your love life. [8,7]
15. How you'll feel when they're gone. [9]
17. The closest, purest and truest form of connection. [8]
18. The love of fairy tales. [4,4]
20. One might write this to express their love. [6]
21. She was in the movie Valentines Day and sang "Today was a Fairytale". [6]
23. Symbol of purity, fertility and wisdom in love. [5]

CRYPTIC CROSSWORD

Submitted by David Latimer (10 pts.)



SUDOKU

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

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

Medium (2 pt. each)

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

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

Hard (3 pts. each)

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

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

Extra hard (4 pts. each)

GROUPING GRIDS

Submitted by William West & Vittoria Dessi

Nada	Button	Volt	Velcro
Sever	Clip	Agape	Nil
Zip	Eros	Safety Pin	Pragma
Love	Do	Tames	Ludus

Medium (4 pts.)

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.

Cereal	Crush	Wink	Squash
Peach	Pancake	Bang	Egg
Oats	Pound	Press	Bonk
Toast	Aubergine	Splash	Bone

Hard (5 pts.)

1.

2.

3.

4.

Connections

1.

2.

3.

4.

Connections

CRYPTOGRAM

Clue: *Hearse Speak (anagram, 1 word)*

How-to:

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!

H C W G G S C P S W D C P Z C W Y C

P J Q X C G O R C Q X R C R G S W G E J Y

J N Y E X Y P G C K C Y P S J H H C

H J N A R Z C Y E J Y B W P C A C Q G X J I

J E P Q C I C P Y W G S C Y G S W I

T N P G J I C Z A W O W A A J E

G S C P C P Q C I C P W Y C X I J I C

H W O J Y W I J G S C Y W L J N G A J K C

-

L N G H C A C W K C X G N Z G J

O J N G J X I G C Y Z Y C G H S W G

P J Y G J E A J K C G S C P C P Q C I C P

W Y C R C Z X Q G X I V Z N Y C G J M X Q

Y J B W I G X Q Z A W G J I X Q H C

H W I G C R G J C M Z A J Y C W A A

(3 pts.)

(1 pt.)

(1 pt.)

LEADERBOARD

Pos.	Puzzlers	Points (Last week)	
1.	Team GuineaPig	467	423
2.	The Menu	288	288
3.	Team Experial	264	236
4.	Tactless Tony	116	116
5.	Bobby Tales	97	97
6.	Team Doors Doors	85	85
7.	The Northeners of Acton	41	41
8.	Team Jasmine&Hursh	33	33

Send a picture of your solved puzzles to puzzles.felix@ic.ac.uk by Thursday to get yourself or your team on the leaderboard! Partially completed Puzzles can still get you points! Send them in by Tuesday if you want to see your points for this week in next week's issue.

COMIC

Submitted by Tengyu Zhao



Puzzle Editor's Note

Dearest Puzzlers,
Happy Valentine's Day!
We're back! A huge thank you for your patience and kind words while your humble Puzzles Editor and Team battled through coursework deadlines. But we've made it through, and we're returning with a lovingly crafted Valentine-themed special!
So grab your box of chocolates, your bouquet of roses, and your favorite people, and dive into our love-filled puzzles! And don't worry – we celebrate all kinds of love here at Felix, so no one will feel left out.
Now, onto the leaderboard! It's been a while since our last update, but things at the top remain steady: Team Guineapig still reigns supreme, with The Menu in second place and Team Experial inching ever closer. Meanwhile, our newest contenders – Bobby Tales, The Northerners of Acton, and Team Doors Doorsare making impressive progress!
We're aiming to keep you puzzlers well-fed with our usual number of challenges (fingers crossed!), so keep those submissions coming and rack up those all-important points!
I'd like to give a huge thanks to David Latimer for the Cryptic Crossword, William and Vittoria for the Connections, and Tengyu for the Comic.
That leaves me with nothing more to say, other than have a fantastic week of crossing, connecting, completing, code-cracking, comic-consuming and competing!

- Ivin

Previous Puzzles' solutions

J	E	L	L	Y	F	I	S	H		S	E	R	I	F
A				O		C		O		T		E		L
C	U	R	R	Y	F	A	V	O	U	R		Q		Y
K				O		R		L		I		U		I
O	A	T	H		J	U	B	I	L	A	T	I	O	N
F		E		V		S		G		T		R		G
A	R	C	T	I	C		W	A	X	I	N	E	S	S
L	H		S		E		N	O		M		Q		
L	A	N	G	U	A	G	E		I	N	G	E	N	U
T		I		A		G		P		S		N		I
R	E	C	K	L	E	S	S	L	Y		S	T	I	R
A		O		I		H		U		I				R
D	L		S	T	E	A	M	E	N	G	I	N	E	
E		O		E		L		P		K				L
S	O	R	E	R		L	O	S	T	S	O	U	L	S

Cryptic

Olaf	Frosty	Abominable	Jack Frost	Famous Snowmen
Grease	Whales	Hungry	Chilly	Homonyms for countries
Cool	Detached	Unsympathetic	Distant	Meaning "cold"
Francois	Giorgia	Pedro	Donald	First names of European prime ministers

Medium grouping grid

Stock	Ice	Sugar	Magic	__ Cube
Supply	Store	Reserve	Cache	Stock
Sand	Tissue	Wrapping	Baking	Types of Paper
Wax	Gas	Wood	Tobacco	Things you might burn/ set alight

Hard grouping grid

“Oh, you think darkness is your ally. But you merely adopted the dark; I was born in it, molded by it. I didn't see the light until I was already a man, by then it was nothing to me but blinding! The shadows betray you, because they belong to me!”

Anagram: Anchor Person Hilt = Nightmares
Quote from: From the Dark Knight Rises by Chistopher Nolan

Cryptogram

SPORT

Top transfers of the January window

Sport Editor
LILA HARRISON

As the January transfer window draws to a close, numerous clubs have made strategic moves to bolster their squads for the second half of the season. Here's a closer look at the most significant transfers across the league:

Donyell Malen (Borussia Dortmund to Aston Villa, £20m)

Malen, known for his pace and technical ability, has been a consistent presence for Dortmund since joining from PSV Eindhoven. The move represents an opportunity for him to step up to a new competitive environment, bringing valuable attacking depth to his new club. Emery is clearly an attractive prospect.

Marcus Rashford (Manchester United to Aston Villa, loan)

Rashford, an almost historic figure at Manchester United at this stage, has had a temporary move away from Old Trafford to gain more minutes. The loan switch may provides him with a chance to re-establish himself under Amorim, who has seemingly not given him a look in at all. His next destination will be crucial for his confidence and future at United and for the England squad.

Jhon Dura (Aston Villa to Al Nassr, £64m)

One of the marquee transfers of the January window, Colombian striker Duran made a high-profile £64m move to Saudi Arabia's Al Nassr. A powerful, versatile forward with a natural goal-scoring instinct, Duran has been a standout off the bench this season. His move to Al Nassr signals the league's ever-present growing ambitions of competing on the innernational stage, with Duran expected to play alongside Ronaldo. It speaks volumes of the high salaries these young players can be persuaded by to leave big career potential behind.

Evan Ferguson (Brighton to West Ham, loan)

The young Irish forward has joined West Ham on loan from his parent club, looking to make an impact in the Premier League. Ferguson has shown promise with his strong finishing and intelligent movement. His loan spell is an opportunity to gain more first-team experience despite injuries hampering his recent appearances.

Patrick Dorgu (Lecce to Manchester United, £30m)

Young defender Patrick Dorgu has moved from Serie A side Lecce Man United for £30 m. Some are saying they underpaid, others saying over. The move marks a significant step in the left-backs career, as he looks to continue his development with more first-team experience in England's top flight, with Luke Shaw out with constant injuries.

Mathys Tel (Bayern Munich to Tottenham Hotspur, loan)

Teenage sensation Mathys Tel has been loaned to Spurs for the rest of the season. The highly rated French forward has shown great promise but will benefit from more game time, continuing his development in one of Europe's top leagues. Manager Ange was clear his move will be made permanent. Someone should probably Tel him the forward hasn't made that clear. He was of hot interest this window, with Arsenal, Chelsea and United also interested.

Manchester City Transfers

Manchester City has been one of the most active clubs this window, making several big-money signings aimed at strengthening their squad for future success. Who knows if it is indicative of their case vs the Premier League or not!

Abdukodir Khusanov (Lens, £33.5m)

The Uzbekistani defender has joined City from French club Lens for a £33.5m fee. Khusanov is an all-around

defender with excellent passing range, ball control, and defensive qualities. His versatility will allow him to adapt to City's possession-heavy style, and he's expected to provide depth and partnership alongside Ruben Dias. An early mistake led to a goal five minutes into his City career versus Chelsea, however.

Vitor Reis (Palmeiras, £29.6m)

Defender Vitor Reis arrives from Palmeiras in Brazil for £29.6m. Reis is known for his leadership and aerial presence, and was under the supervision of Brighton at one stage this window. It seems City are preparing for many defensive exits this summer.

Omar Marmoush (Eintracht Frankfurt, £59m)

Egyptian forward Omar Marmoush has completed a £59m move from Eintracht Frankfurt to Manchester City. Marmoush

is an exciting, direct winger with great pace and flair, and his addition brings further competition to City's attacking options. He had some of the highest rates of G/A in Europe so far this season while at Frankfurt.

Nico Gonzalez (Porto, £50m)

Argentinian midfielder Nico Gonzalez arrives from Porto for a deadline day £50m fee. It seems as if Guardiola is beginning to replace his aging, previously reliable midfield.

Kyle Walker (to AC Milan, loan)

Kyle Walker, one of City's veteran defenders, has joined AC Milan on loan for the remainder of the season. The experienced English right-back has been a key figure for City, but after some disastrous defending this season, he needed to move. It may end up permanent, with Walker's leadership being an asset to Milan.

One to watch this season Alexander Isak (Newcastle United)

As the season enters its crucial stages, one player to keep an eye on is Alexander Isak, the 25 year-old striker currently making waves at Newcastle United.

Isak, who joined Newcastle from Real Sociedad, has developed into one of the Premier League's most exciting attacking talents.

Known for his pace, technical ability, and particularly clinical finishing, Isak has proven to be a handful for defenders, most recently William Saliba of Arsenal, in the second leg of the Carabao Cup semi-final. Isak has this wonderful talent of turning low chance, low volume attacks into high-chance, high-volume attacks simply by using his body expertly and

having some of the best finishing in the league.

He is currently the best striker in the world this season. In total he has 19 goals and 5 assists in 27 appearances this season, averaging at least 1 goal contributing per game.

transfermarkt.com currently has him valued at £75m, but this will move into three figures as we enter the summer window. Arsenal, Liverpool and Man United will be watching. Real Madrid may also, too, considering they have three wingers across their front line. He has already said he would not leave Newcastle unless he is guaranteed Champions League football each season.

Imperial Archers triumph at BUCS Indoors 2025

Archery Society Equipment Officer SAFIYYA AHMED

Huge wins were achieved by the Club on Saturday 8th February in BUCS 2025 Indoor Archery Competition hosted at Bristol University, including 3 medals and a 6th place finish for the newly entered Experienced Women's Recurve team.

The Imperial College Archery Club (ICAC) competitors left bright and early at 12pm on Saturday for BUCS. Heaving their bags into the Coombe Dingle Sports Complex after a two-hour-plus drive from London to Bristol, our archers were both excited and nervous for the shoot. For many it was their first BUCS, yet they faced the challenge and shot valiantly despite the pressure of competition and

freezing cold of a February evening.

60 arrows were shot per archer at a 60cm target face from 20 yards away, three at a time. Each arrow could score up to 10 points, achieved by hitting the six-centimetre-wide centre. This makes it all the more impressive to see competitors today reach 580+ points. Six



For many, it was their first BUCS, yet they faced the challenge and shot valiantly despite the pressure.

arrows were allowed at the beginning of the shoot as "sighters", practice arrows to adjust your aim, and each round was timed.

The Club's novices, having only shot for four months thus far, did

impressively well. Frank Chong won 6th place in Novice Men's Recurve, Katie Lee won 8th in Novice Women's Recurve, and Sze Yuen Luk won 3rd place and a shiny bronze medal in Novice Women's Barebow. Congratulations to them for the huge progress they've made since October.

Further congratulations to Isabella Bruguier for achieving 2nd place in Experienced Women's Compound, and to Yin Chan for 2nd place in Experienced Men's Recurve. They, along with the other Imperial archers who qualified

this weekend, will progress to the BUCS Indoor Finals in March. Best of luck to them. Following the BUCS competition, ICAC members are looking to train and improve their shooting ready for the BUCS Outdoors, and next year's Indoors.

In terms of team rankings, Imperial came 3rd in Men's Non-compound and 6th in Women's Non-compound. This is the first time in years that ICAC have been able to enter an experienced women's team, and the captain Simeng Li hopes there are many more years of the team to come.

BUCS team 2025: Safiyya Ahmed, Sze Yuen Luk, Yin Chan, Alan Bannon, Chaoyi Jing, Toby Lam, Simeng Li, Isabella Bruguier, Catherine Saat, Johnny Chan, Freddy Liang, Katie Lee, Natalie Ho, Harrison Moss (not shooting), Frank Chong, and Lauren Rutherford.



BUCS Team 2025 Safiyya Ahmed



An Imperial Archer in action Safiyya Ahmed

Redefining success: Women's Medics Football

IMWFC Club Captain TOMI OLOKE

Inspired by the 2022 Women's European Championship, I was adamant that when I started at Imperial I would play football again. After having played mostly netball during my high school days, I reflected on my times playing football in primary school. Being one of two girls on the boy's football team, I learned from a young age to not let my gender limit what I could do – it also helped we were all the same height! Fast forward to the present, when I decided to run for club captain of IMWFC, I kept this same mentality. There were many areas the club could improve. And I wanted to make a change.

This year, I wanted to ensure that our small club of dedicated members grew, we had a better connection with our coach, and looked more like a team. I don't think we have ever lacked chemistry as a group of individuals, but we all collectively agree we struggled to translate that energy onto the pitch



We no longer fear our opponents because we have faith in each other. We have community.

at times. I often remind myself of the saying 'Rome wasn't built in a day'. Each defeat we have faced this season felt very personal to me. I felt disheartened; that the stubborn mentality of 'I can do anything' I held as a child wasn't true.

But, after thinking that I could transform this club into a team that wins, I soon realised there was more to the club than results. It is a community.

Bias aside, the bond between members at IWMFC is second to none. The freshers; the external intercalating students – everyone who has joined us this year

others for fun. We play with a new sense of confidence; we communicate to each other constructively on the pitch, we defend as a solid unit, and we overwhelm defences with our attack. We no longer fear our opponents because we have faith in each other. We have community.

Since I was a fresher, this club was slandered by others, and it has insidiously seeped into our club's culture. Now, we no longer listen to the naysayers; we focus on how we can continue to reclaim IMWFC's mentality as our own and redefine who are as a club.

I believe this club has a new identity and we can't wait to show other teams who we are. In March, we take on Imperial College Women's Football in our annual Varsity fixture. We look forward to seeing you there!

have slotted right in.

And now, slowly but surely, the results are coming. After a series of defeats, we have turned a page in the second half of this season, starting with a seven all draw to a team that had been smashing



Tomi, captain of IMWFC, with her teammates Tomi Oloke



IMWFC celebrate after match Tomi Oloke



Ruby Lydford (b. 2003)
***Amor Vincit Omnia*, 2025**

Procreate