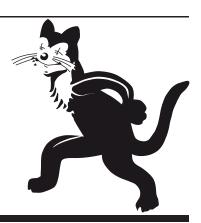
"Keep the Cat Free"

03/05/13 Issue 1545 felixonline.co.uk



The cost of cheap clothes | Start-ups

The tragedy at the factory in Bangladesh, and why students are raising money. Page 5

The VCC and why to start a start-up Pages 6-7

Postgraduate anger at **Health Centre** access being removed

Tim Arbabzadah Editor-in-Chief

Imperial College Health Centre will no longer be letting postgraduate students use their services if they live outside of the registration area. Imperial College Union informed the postgraduate students of the change via email, which prompted over 200 replies mostly stating anger and upset at the situation.

The Health Care Centre communicated the change on their website with a note, as well as signs on the door of the Health Centre itself. The reason given in the statement read as follows: "Unfortunately there is no NHS funding for such students and in the past the funding came from Imperial College. However this year there is a shortfall in this funding, which the College has advised us it is unable to make up". There is some confusion as the Dean of Students told Becky Lane, Deputy President (Welfare), that the College didn't decrease but actually slightly increased the funding from last year. However, the reduced funds were actually due to a decrease in the number of students who registered.

Despite this decision the Health Centre still allows both undergraduate and postgraduate students from the Royal College of Music to use it regardless of where they live.

For now, postgrads must register with their local GPs for health care. There have even been reports of people being turned away at the Health Care Centre as they are no longer able to use the services.

If a student lives within a list of 20 post codes they are allowed to register for the Health Centre. The Health Centre previously agreed to >> 4

Alleged animal abuse

- Undercover investigation on standard of animal care at Imperial
- Researchers alleged to not understand terms and abuse animals
- Allegations to be investigated by Imperial
- Letter calling for independent inquiry delivered to Home Office

Joe Letts

Editor-in-Prowling

During the Easter break Imperial came under national scrutiny after a seven month undercover investigation by the British Union for the Abolition of Vivisection (BUAV) alleges that there is a poor standard of professional conduct by Imperial scientists. Researchers from Imperial, one of the signatories of the Declaration of Openness on Animal Research, were apparently filmed experimenting on animals in a way that the BUAV claim are inhumane; this includes operating on animals that the BUAV say were improperly anaesthetised and culling animals that were not needed by researchers. The BUAV sent an undercover veterinary nurse to Imperial, who over the course of her stay alleges that some researchers not only showed callous disregard for the animals under their care but she also claims that others acknowledged that they were untrained and some >>3



Inside...>> COMMENT

Sex + exams: lethal combination



Bioshockingly few spoilers

Not shaken, not stirred

Tim Arbabzadah Editor-in-Chief

Departmental Cocktail Parties being held on campus may have to change their format from now on. This emerges after the Chemistry Cocktail Party, which is due to be held near the end of this academic year, has been forced to have a format change due to licensing laws and incidents at previous parties from other Departments

on campus.

The party was originally planned to be held in the Chemistry Café, as it was last year, with students from ChemSoc making the drinks and giving them out. Before, a ticket would get the attendee as much alcohol as they wanted, until it ran out.

However, due to licensing laws, it could not exist in its current format. Imperial College London and Imperial College Union hold licences >> 4



SPORT



Skiing through the Easter break

NEWS



SCIENCE

>> 11

Easter science

What has been going on in the science world over summer? Felix Science looks into the biology, chemistry, physics, and penis drawing going on.



ARTS

>>13

Bowie is back

David Bowie has had a long career that's even worthy of its own exhibition at the V&A. Does Ziggy still leave them in his Stardust?



FILM

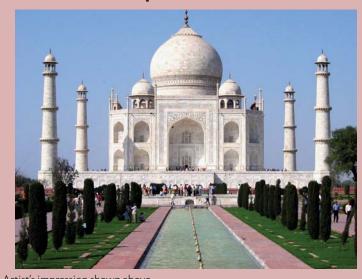
A Stark Return

He's back, and this time, well, it's the same as the last, but come on Robert Downey Jr is worth it... Even if he is essentially playing himself.



MARQUEE WATCH

There is a Marquee on Queen's Lawn...



Artist's impression shown above

Election results announced

Next year's sabbatical team will be...

Tim Arbabzadah Editor-in-Chief

The results for the Big Elections 2013 were announced at the end of last term. The turnout was the second highest that Imperial College Union has ever received.

David Goldsmith, this year's RAG Chair, will be Union President, after being elected with 2395 votes in the 4th Round. Yasmin Edwards will be the Deputy President (Clubs & Societies) after being elected in the third round with 1897 votes. Deputy President (Welfare) will be Marissa Lewis, who was elected in the 4th Round with 1806 votes. Deputy President (Education) will be Jonathan London, who received 3384 votes, and the Deputy President (Finance & Services) will be Kieron Creagh, who was elected with 2914 votes. The closest race by far was for Felix Edi-



tor. In the first round of voting, Joe Letts received 1793 votes and Will Prince received 1780 votes. When the votes were transfered from other candidates Joe Letts eventually won with 1848 votes to Will Prince's 1822. This meant that

Joe Letts was elected as next year's Felix Editor. Will Prince was banned from campaigning and told to take all material used for the campaigning down for a period towards the end of elections. This was because of an email sent to thousands of students reminding them to vote and signed off as his campaign team. Will Prince maintains that he did not want the email to be sent.

There were also many other positions, such as the Student Trustees, who sit on the Trustee Board. This year's Council Chair Michael Foster was elected to one of the positions. The other went to Bukki Adedapo.

The ISCMSU President was between Steve Tran and Dariush Hassanzadeh-Baboli. In the first round Steve Tran was elected with 698 votes. The other Constituent Union Presidents were also elected. Lejon Chau is next year's CGCU President and Plabon Saha is next year's RCSU President.

LOLCAT OF TEH WEEK: Finding these is a perk of the job



Union awards open

Tim Arbabzadah Editor-in-Chief

Union Award nominations for this year have opened. Any student can nominate another student for their contributions to the Union. This can be with their contributions to a club or society or other work. There are four levels of recognition, which from Fellowship with Distinction to Un-

ion Colours. The nominations will be open until Friday 31 May through eActivities. After this the Awards Committee will have to decide on who deserves what.



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Secret filming

>> continued from the front page

were clearly in breach of their licences.

The use of live animals in scientific experimentation is regulated by the 1986 Animals (Scientific Procedures) Act. The act (which has recently been revised to accommodate the European Directive 2010/63/EU on the Protection of Animals Used for Scientific Purposes) declares that an individual cannot use a regulated procedure on an animal unless they have a personal license, a project license and are carrying out their experiment in a licensed institution. The licences are provided by the Home Office, which enforces the act and sets the limits of each project according to its categorised severity. However, the BUAV are claiming that the video footage shows Imperial researchers who do not understand the limits of the licence and that others wilfully disregard their licence, causing further pain and suffering to their test subjects.

Imperial is not the first university that has been investigated by the BUAV, in 1998 a ten-month undercover investigation into the use of marmosets was filmed and released publicly in 2002. At the time the university in question (which was not Imperial) was not legally charged with any misdeeds however it was noted that at least one project licence had been exceeded and a later court found that the Home Secretary had miscategorised the severity of the experiment licence.

Regardless of the allegations of neglect and abuse of the animals under their care, the video footage does raise questions concerning how College approaches the training of new researchers experimenting on animals and how active College's animal welfare officers are in spotting and reporting dangers to animal safety. This media coverage



has also increased student awareness, many of whom may not have realised that animal testing occurs in College or what it entails. A glance at College social media pages also demonstrates the fury of some of the public who have fully supported the BUAV campaign against Imperial and sport anti-animal testing banners.

Imperial has released an official re-

sponse to the allegations: "...Only a small $\,$ percentage of medical and biological research involves the use of animals. That part remains vital, however, to further the development of treatments or cures for medical conditions that blight or destroy the lives of humans - and animals. Imperial College's policy on the use of animals in research is that animals may only be used in research programmes where their use is shown to be essential. Scientists and staff at Imperial work hard to ensure that animals are kept and cared for using the highest standards of husbandry, thereby causing least pain or distress." College has also commissioned an independent investigation into the allegations chaired by Professor Steve Brown, Director of the MRC Mammalian Genetics Unit, Harwell which describes itself as "An international centre for mouse genetics". The BUAV have claimed that the MRC fund research at Imperial and that this could affect the independence of the review. Professor Brown is an advocate for the use of mice in medical research and sees mouse as a way of discovering the connection between genetics and disease in humans, with whom mice have 99% of DNA in common. Imperial has also alerted the Home Office to the BUAV allegations and has contacted all College staff with personal or project licences and reminded them of Imperial's policies on animal welfare in laboratories.

While Imperial has responded to the allegations the BUAV is still petitioning for the removal of College's establishment licence for the use of live animals in research. Frustrated with College's decision to ask Professor Brown to head an investigation the BUAV and their supporters (including Imperial graduate Brian May) are also petitioning for a 'wholly independent' inquiry into the allegations and possibly the wider implications of the animal testing licensing system in place. The BUAV have delivered a letter to the Home Office, which was signed by MPs from all parties, calling for an enquiry that is independent of Imperial, the Home Office, and any institution funding or supporting research there.

How Imperial's teaching and research will be affected by the upcoming investigation is yet to be understood however the allegations have certainly brought ideas concerning animal testing back into the mainstream community.

Project Nepal run the London Marathon



Miresh Mistry

Reporter

Summer is approaching and at Imperial this means internships, work and UROP... but not for the Project Nepal team. The team of 18 will be heading to the Tanahun District conveniently during monsoon season to build an extension onto an existing school in dire need of extra space. Living on local food and water, sleeping on the floor and manual labour would deter

most, however the group is passionate about helping the poverty stricken children in this rural part of Nepal. I'm sure the spectacular Himalayan backdrop won't hurt either. Throughout this academic year they have raised nearly all their fundraising target including collecting £246 at this month's London marathon in Saris, elephant and teletubby costumes!

If you would like to get involved in Project Nepal next year, find us at the Fresher's Fair.

Sponsored Editorial

More student cuts

Discount haircuts for Imperial students at Fresh Hairdressers near South Kensington

Men's cuts £22 (normally £35)
Women's cut and rough dry £28
Women's cut and salon finish
blow-dry £38 (normally £55)

FRESH Hairdressers has been offering high quality, fashionable haircuts for over 20 years. All of our haircuts are by highly experienced stylists, NOT trainees.

TO GET A GREAT HAIRCUT

- 1) You don't have to spend a lot of money at expensive trendy salons 2) You don't have to spend hours as a Guinea pig at a training school 3) You don't have to be butchered at some cheap Barbers
- 4) You don't have to wait till you go back home

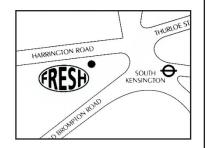
Come to **FRESH**, ask for a student

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To book an appointment call **0207 823 8968**.

Tuesday to Saturdays 9.30 to 5.30 We are only 70 metres from South Kensington tube station. www.freshhairdressers.co.uk



Imperial Fourth in Complete University League Table

Tim Arbabzadah Editor-in-Chief

Imperial College London have come fourth in the 2014 Complete University Guide league table. This is the same spot that Imperial occupied last year. Cambridge (pictured) came top, with Oxford second and LSE third.

In the subject tables, Imperial was also near the top; every subject was at very least in the top 10. There were five subjects that were second in their respective tables (Aero, Chem. Eng, Computing, EEE, Mech Eng), two subjects in third (Biology and Civil Engineering), three subjects in fourth (General Engineering – a course not offered at Imperial but

it could have been an amalgamation of subjects, Materials, Physics), and finally two subjects that came sixth (Chemistry and Medicine).

It was compiled by using nine metrics, which were similar to what other league tables use. These included student satisfaction, research, entry standards, staff to student ratios, spending on academic services, spending on facilities, good honours degrees, graduate prospects, completion data, and how green the university is.

Imperial was second for Graduate Prospects, with LSE at the top spot. Although for green issues, on the other hand, Imperial were much further down the table: Imperial were close to the bottom in this parameter.



FRIDAY 03 MAY

NEWS





Aislinn Hayes Station Manager

Sick of revising? Counting down the days until you can lounge around a marque-less Queen's Lawn with a drink in hand? Would you like IC Radio to give you a free bottle of tequila to keep you motivated for that happy day of freedom? Should I stop asking rhetorical questions?

Jose Cuervo Tequila and Spotify are looking for the best University playlist across all Universities in the UK. The playlist with the most votes will win the ultimate night out on campus on Thursday 16th May 2013, and IC Radio has made a playlist to win you that gig! With DJ sets by Alexis Taylor from Hot Chip and The Maccabees it promises to be a legend-(wait for it)-dary night out. But a free gig isn't the only reason to vote: here at IC Radio we have suddenly come into a plentiful supply of ice cold Jose Cuervo, and we want to share the joy with everyone who votes for our

Head online to www.voteforourplaylist.com to vote for IC Radio's playlist, and tweet us @IC_Radio with #Imin, or Facebook us at facebook.com/icradio to be in for a chance to win a bottle of Jose Cuervo tequila on Sunday 5th of May. If you're boycotting the social media from your carefully guarded seat in the library, then you can also email us at studio@icradio.com once you've voted.

Other prizes you could win include Microsoft Surface tablets, ASOS vouchers, and festival tickets. So vote vote vote and let us know when you have, and this Sunday IC Radio will pick some lucky voters to win a bottle of ice cold tequila!

More facts about alcohol for the curious can be found online at www.drinkaware. co.uk. For those who can't tear themselves away from 'dem digits, check out the drinks calculator online at www.askdave.com."

Imperial rises in student satisfaction table

Shooting up the table, but still only coming in at 41.

Workload highlighted as major problem

Imperial College London have placed 41 in the Times Higher Education Student Experience Survey. This is up from a position of 71 last year. University of East Anglia came top of the table, with Oxford in second and Sheffield in third.

The area that Imperial seemed to stand out most in was the "Fair Workload" category. Imperial came bottom of the table for this category.

The table, which is now in its eighth year, was produced using responses from students who were polled between September 2011 and September 2012. The table takes into account 21 aspects of university life. These parameters range from the academic side of life to the social.

Tim Arbabzadah

Imperial given women in science award

Tim Arbabzadah Editor-in-Chief

Imperial College London has won an award recognising support for the careers of women in science, technology, engineering, maths and medicine. The Athena Swan silver status has only been granted to three universities, with Queen's University Belfast and University of Nottingham being the other two. It is a university wide recognition. Athena Swan say that it "recognises a significant record of activity and achievement by the university in promoting gender equality and in addressing challenges across their STEMM departments". Multiple Departments at Imperial also currently hold Silver status.

When the award was conferred the panel noted various initiatives in Departments and College wide. These included dinners, lectures, networking events, and the Imperial women's portrait series.

Sir Keith O'Nions, President & Rector, released a statement saying: "Imperial is proud to be recognised with institution-wide silver status. This is the result of a serious long-term commitment to gender equality at every level in the College." O'Nions said that for Imperial to remain a world class institution they must "continue to eliminate obstacles to career progression and create new opportunities for women." He went on to stress the point about remaining a world leader, saying: "First and foremost, gender equality matters because it is the right thing to do. But we also need to attract, promote and develop outstanding female scientists if we are to maintain our place as one of the world's great universities." Professor Dorothy Griffiths,



Chair of Imperial College London's Academic Opportunities Committee, said: ""Gender equality requires hard work on a day-to-day basis. We intend to keep this up and build on Imperial's significant progress."

The Athena Swan awards were created in 2005 with Imperial a founding member. Their Charter was launched in June 2005 with three beliefs underpinning it. The beliefs include the importance of women being represented in a traditionally maile-dominated area, and that "science cannot reach its full potential unless it can benefit from the talents of the whole population". Any higher education institution is able to apply for membership.

Health Centre advising postgraduate students to register with local GPs instead

>> continued from the front page

allow any Imperial student (undergraduate or postgraduate) use their services during opening hours only. Imperial College gives money to the Health Centre, as well as the NHS, which comes from the number of students registering.

Education and Student strategy up for review

Imperial College London have created a paper on the future Education and Student Experience strategy. Between now and Friday 10 May staff, students, and alumni are asked to give their views on the outcome. Views are being sought for actions proposed and on what to prioritise. To contribute online, go to the following website: http:// www3.imperial.ac.uk/educationoffice/ strategy. There will also be two open meetings on 17 April from 13.00 -14.00 in the Read Lecture Theatre, Sherfield Building and on 25 April from 17.00-18.00 in the Clore Lecture Theatre, Huxley Building.

Professor Debra Humphris, who is heading up the strategy, said: "Your responses will inform a paper outlining the Education and Student Strategy and implementation plan which will be considered by Management Board in June and received by Council in July." The Management Board is one of the highest Boards in College, and is chaired by the President & Rector. The College Council is ultimately responsible for College policy.

Humphris said: "I'm very grateful to those who contributed their time and ideas in the initial consultation. We received a wide range of responses from staff, students and alumni, not only through our online consultation but also at the open meetings and in discussion with student reps and sab-

Empty computer room in Library kept locked for days



Computer room 204 in the Library was recently locked as their was training scheduled. The door has a sign saying it is booked. This meant that students were unable to use the computers inside. However, there are days when nobody has been seen in the room. A student complained to the Library staff about this and was told that it belongs to ICT, who have recently started locking it.

Tim Arbabzadah

Cocktail party changed

to serve alcohol. Any alcohol served on campus must be served in according to the licence or there is a risk of losing it. The Chemistry Cocktail Party had to change the format and is now being moved to Metric, with staff at Metric serving the drinks instead. There will also be a cap on the number of cocktails that attendees can have as each student may be given four tokens and no more. This is due to licensing as irresponsible drinking can not be promoted.

The Chemistry Cocktail Party, like many other departmental events, is organised and run by students. It is usually one of the highlights of the year for chemists. It has been held in various locations around College in the past, from the Physics common room in Blackett to the Chemistry common room. Alcohol is served by students on the ChemSoc Committee and/or volunteers with various different cocktails being devised (mostly based on chemistry related jokes). The alcohol is usually readily available and most attendees take full advantage; the event often ends up providing a lot of memories and lapses in memories for those who attend. At the end of the party many students would move onto the Union. It has been running in a similar fashion for a few years. In previous years there have been varying degrees of incidents at the party, although all of these incidents have been resolved



Features Editors: Stephen Smith, Caroline Wood felix@imperial.ac.uk

FEATURES

The real cost of our cheap clothing

Plabon Saha and Imogen Smith on the recent disaster in Bangladesh

s a new term dawns we know we won't be the only ones indulging in a little online shopping procrastination. We are often reminded to think about where the various elements of our life come from, our food, our energy, but what about our clothes? At a time when your moral and ethical values are seriously questioned if you are seen buying anything other than free range, organic super eggs we very rarely question shopping at chains like Primark of H&M. Well, who can blame us when we can buy all our shoes for under a tenner, right? Maybe not.

Due to all of us being such diligent students who barely have time to leave the library let alone pick up a newspaper, many may not be aware of a disaster that took place over the course of last week. On Wednesday 24th April, a building containing three garment factories collapsed near the centre of the Dhaka the capital city of Bangladesh. The building, which has been undergoing renovation, had been told to close after large cracks appeared the day before the disaster. Despite this, the garment factories opened as normal with employees being told they would lose their jobs unless they arrived at work as usual. Due to this, some 377 people, of the 3000 people inside the building at the time of the collapse, are known to have died and hundreds are still missing.

As shocking and awful as this tragedy is, the more shocking thing to learn is that this is just another event in a series of catastrophes that mar the Bangladeshi textile industry. Just 6 months ago another factory caught fire killing 123 people and leaving another 150 injured.

The growth of the textile industry has sometimes been compared to the Industrial revolution and it is true that it has provided jobs, especially for Bangladeshi women, but at what cost?

An online Bangladeshi news source bdnews24.com published an article last week titled "Despite disasters, Bangladesh works for retailers". It details that despite industrial disasters in the garment industry, there were few signs that safety issues and other questionable labour conditions are having any effect on major Western retailers, their shareholders and the consumers. Ready-made garments make up 80% of Bangladesh's total exports, which makes it harder for the country to take a stand against Western exploits.

About 18 months before the previous big tragedy in Bangladesh - a fire in November in a textile factory that killed 112 people - shareholders at Wal-Mart Stores Inc had the opportunity to weigh in on the safety question. By a nearly 50-to-1 margin, they rejected a proposal to require suppliers to report annually on safety issues at their factories. In arguing against the proposal, Wal-Mart's management made its reasoning clear: Having suppliers compile such reports "could ultimately lead to higher costs for Walmart and higher prices for our customers. This would not be in the best interests of Walmart's shareholders and customers and would place Walmart at a competitive disadvantage," the company said in proxy materials. (Source: bdnews24.com)

This sends a clear message from these companies. End of the day, it's a simply calculation that has hardly been swayed by industrial disasters.



Cheaper products appeal to shoppers and the taints from these incidents are manageable through PR stunts. Take Primark for example. After it was revealed that Rana Plaza contained one of its suppliers, the company was quick to take a PR stand and "review its commitments constantly to ensure they met the needs of the victims as the tragedy continues to unfold". Their move to pay compensation to some of the victims only came after several protests outside its store on Oxford Street.

The share prices for these companies stay perfectly intact as news of these kinds of disasters fade away from people's minds. The world's court system stands idly on the sidelines as well. In 2005, a lawsuit filed in California state court on behalf of factory workers in Bangladesh, China, Indonesia and other countries accusing Wal-Mart of failing to address substandard working conditions in suppliers' factories. The case was ultimately dismissed and no US lawsuits have been filed against Wal-Mart since then on similar matters.

There have been pressures from ac-

tivists regarding working conditions in garment factories but it has simply been a case of the little person trying to stand up to big companies. Companies often resist efforts to force a deeper discussion about the tradeoffs between worker safety and product costs.

Before Wal-Mart invited shareholders to this year's annual meeting, to take place June 7, the board of directors rebuffed another effort to force a shareholder vote on workplace safety issues. According to documents filed with the US Securities and Exchange Commission, a shareholder presented a proposal to require the company to report on its progress for assessing risks to human rights in its operations and supply chain. But Wal-Mart said the proposal was so similar to the one that failed in 2011, and that it already addresses the request through its standards for suppliers, that it did not merit reconsideration. The SEC approved its decision to reject the request for a shareholder vote.

A common thought to most people buying the clothes produced in these factories is what can I do? Being

students it may be difficult to always consider where and how our clothes are being produced. It is even harder, towards the end of a long term when the student loan has run out and the laundry pile is building up. One can't surely be blamed for running to Primark to stock up on essentials like socks. It is not always feasible to avoid the high street bargains. But until it is, you could donate at least something to RCSU RAG's fund for the victims of the Bangladesh textile factory collapse, even if it's just the cost of a Primark t-shirt. All the money raised is going towards Save the Children's Emergency fund and will be used to support children who were either injured in the collapse or who lost their parents. This will allow some help to the victims and raise awareness of the conditions that most of our clothes are produced in.

We know it is not possible to always shop ethically produced clothing, but hopefully being a little more informed will help you know when you can.

It only takes 2 minutes to donate. Donate at www.rcsu.org.uk/donate

Food Co-op launching at Imperial

Thomas Lim

Write

Imperial's first food co-operative is starting next week! If you are looking for affordable food that benefits the producers and the planet then look no further! The aim of the co-op is to provide the Imperial College community with a one-stop shop for ethically sourced goods. We all know, and particularly during exam times, that eating well can be difficult; even Sainsbury's on Cromwell Road seems like a trek to another land. We aim to give you a more ethical, and more conveni-

ent alternative. Our goods, sourced through a co-operative supplier, are all Fairtrade, grown in Britain or organic (if not a combination of all three)!

If you think all of this ethical goodness comes at a premium, think again. The beauty of the co-op model is that we don't make a profit; we keep prices low for you. We sell goods at cost price, which makes our prices similar to regular supermarket lines (but our products are much better for the environment and the people who have produced the food).

Our ordering system is regular and flexible, so you can order specific

products directly from us, including: wholefoods, gluten free foods and products that cater for vegetarians and vegans.

Our launch event is on Thursday 9th May in the Sherfield Foyer all day long, so come and see the range of products we have! The community sets to benefit from this scheme, so please do get involved if you want to help make positive change to our shopping and eating habits. Join our Facebook group, and promote the coop to your friends! If you're interested in volunteering with us then please do email coop@imperial.ac.uk.



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FEATURES



Venture Catalyst Challenge '1

Caroline Wood and Pedro Silva Pereira on Imperial's start-up scene

ave you ever looked at the entrepreneurial activities offered by universities such as Harvard (The Harvard innovation Lab), MIT

(\$100K Entrepreneurship Competition) and Stanford (The BASES \$150K challenge) and wondered why Imperial doesn't have more of this kind of stuff going on?

America has historically been ahead of the game when it comes to embedding enterprise into their academic institutions. However with start-ups currently the talk of London town, that looks set to change.

Over the past year Google Campus has roared to life and Old Street roundout is now more commonly refered to as 'Silicon Roundabout'. And despite East London getting the biggest slice of the entrprenurship cake at the moment, Imperial seems to be jumping on the enterprise bandwaggon by putting commercial innovation at the heart of the new Imperial West campus. Could it be that Tech

City sprawls from East to West in time for Imperial's new campus to open in 2016?

Last year a group of forward thinking students at Imperial noticed this growing trend and decided to do something about it. Throughout the summer break, a group of people passionate about entrepreneurship were hatching plans to transform the enterprise scene at Imperial.

ICStartup – a collaboration between Imperial Entrepreneurs, Imperial Innovations and Imperial Hub – was formed, bringing together expertise, experience and passion from all corners of campus. Combining the student enthusiasm of the Imperial Entreprenurs society, the experience, network and resources of Imperial Innovations, and social enterprise expertese of Imperial Hub the foundations were laid in place for student start-up activities at Imperial to flourish.

During this past academic year ICStarup has created a shared working space in the Union for students

to work on start-up projects, put on talks, run workshops, and even a hackathon.

The culmination of this collaboration led to the biggest start-up challenge that Imperial has ever held. With $\pounds 30,000$ of funding up for grabs and the chance to access free expert advice, the competition attracted over 200 students, staff and alumni wanting to turn their academic knowledge into a commercial reality. Pedro Silva Pereira reports on the competition (see next page.)





Meditating through exam stress

Andrew Willson College Chaplain

"I'm an atheist and I'm interested in meditation." Last year I had a number of conversations with people who all began with this comment. It is too small a sample from which to interpret the changing nature of atheism or if there is an increasing interest in meditation. (And anyway all of these comments may have arisen from the realisation 'OMG, it's the vicar, quick what can I talk about?")

But these conversations did get me thinking. Meditation is part of my religious experience. But I know that Buddhists and some Quakers practice meditation but describe themselves as atheists. I had learnt about Buddhist meditation from sharing a weekly time of silence at the Royal College of Art with a Buddhist monk. From him I had learnt of 'mindfulness'. He used it to describe the practice of paying conscious attention to sensory, cognitive and emotional experience. The technique was to become aware, or 'mindful', of sensations or feelings but without getting caught up in them.

With all this 'in mind' I came across the work of Jon Kabat-Zinn, Profesor of Medicine Emeritus at the University of Massachusetts Medical School. Kabat-Zinn had noticed positive results in clinical trials using mindfulness meditation with patients suffering from depression. Professor Mark Williams, a psychiatrist at Oxford University, used this research to develop a mindfulness meditation for stress reduction and to improve mental wellbeing.

This seemed to be the kind of meditation that has an evidence base and does not require a religious belief. It also promoted emotional health. Recent research in psychology has demonstrated the two-way links between our emotions and our bodies. For example, if we feel sad our bodies will reflect that sadness in the way we walk and sit. Conversely, if we are not feeling sad but adopt a sad, slumped, posture we will then very quickly start to feel sad.

Kabat-Zinn and others also used MRI scans to show that upsetting emotions can be seen clearly in the right pre-frontal cortex. Positive emo-

tions on the other hand show up more clearly in the left pre-frontal cortex. The ratio of electrical activity between one side of the pre-frontal cortex gives a picture of a person's emotional state. Kabat-Zinn explored this in relation to mindfulness meditation. He taught a group of bio-tech workers the meditation practice. After eight weeks of meditation practice the participants became more energised and less prone to low mood. It was also found that this state was maintained even when participants were reminded of memories and music that were linked to sad personal memories. It appeared that with meditation training people were able to accept the negative personal memories but without being overwhelmed by them. The other outcome was that the participants also developed measurably stronger immune systems.

This evidence based approach to meditation seemed like a good response to those who wanted to learn meditation but who did not want a religious practice. Using Mark Williams' book as a basis the Chaplaincy started offering mindfulness medita-

tion in October. Over two terms we have found that this is something that people find helpful in the realities of daily life. This includes those with philosophical world view (atheism, humanism, materialism) and those with a traditional or personal religious world view.

The simplest way to describe mindfulness is through a simple exercise. Raise one arm above your head. Close your eyes. Slowly lower your arm. As your arm descends track the different sensations that occur. You might be able to notice what you are thinking, or the emotions you are feeling. So a short 3-5 minute mediation lets us notice the range of our personal sensory, cognitive and emotional data. So you might notice 'eves feeling tired from a day in front a screen, niggling anxiety about unfinished tasks, trying to remember if there is anything in the fridge for dinner, and an anticipation about...'). It is important not to judge the data - it is just what is being thought, sense and felt at this moment. There is a positive element of self-acceptance that comes with practice. And there is the sense of calm.

This is the season in the university for increased stress and anxiety. Small amounts of meditation practice can make a difference – and by this I mean 5-10 minutes daily. It is described as a practice – for good reason. But it does not take long to start showing

Whatever your worldview 'Mindfulness Meditation' takes place in the Chaplaincy Centre in Beit Quad every Tuesday 1-1:45pm. For those wanting a particular religious framework for meditation we have Buddhist and Christian meditation each week, and we can link you up with someone to talk about Hindu meditation.

On Thursday 9th May join us for 'How to be Mindful in a Digital Age' a talk by the Venerable Narayan Prasad Rijal, a Buddhist teacher who is also a lecturer in Physics at Tribhuvan University, Nepal. This event is being hosted by students from the Buddhist meditation group and by the Chaplaincy from 7-8pm in the Pippard Lecture Theatre, followed by discussion and refreshments. More details of all events www.imperial.ac.uk/chaplain-



FEATURES

3 & ICStartup: just the start

Be 'stupid' again!

Pedro Silva Pereira

Nrite:

reativity. When you enter school, the ultimate price you are paying is not the tuition fees, but your unique experiences, revolutionary ideas and well "stupid thoughts". By providing standard education, our world is able to put us in nice boxes, good to manage and move around. However, we should not forget man did not create a wheel because he went to the school of wheels or harness electricity because he was the best student of physics. Man did what he did because of its creative inventiveness, rebellious ideas and imagination.

At the beginning of the year Imperial Innovations launched the Venture Catalyst Challenge '13 (VCC)

as part of the student business accelerator ICStartup. Over 100 successful applicants spent the next two months developing their very early stage ideas into viable businesses via a series of sessions focused around the Business Model Canvas.

ICStartup decided to challenge Imperial students to put their best ideas to down to practice in its Venture Catalyst Challenge '13. The format was simple: write an idea, develop a business model, pitch it to a panel of known entrepreneurs and business people and get the chance of winning from £500 to £30.000 pounds to develop a working prototype. From the initial period of registration in early January to the big finale on the 14th of March, 200 teams of students put their brains to work coming up with ideas as elaborate as a satellite vehicle and as simple as...oh wait, this is Imperial -

none of the ideas were simple.

During the 6 week period ICStarup provided free business Masterclasses from Lean expert Rob Fitzpatrick, who advised students how to turn an initial idea into a feasible business model. Rob Fitzpatrick also brought in thought leaders and founders including Devin Hunt, Tom Samadol, Daniel Tenner and Jordan Schlipf. In addition, optional sessions ranged from finding appropriate financing to delivering the perfect pitch to idea generation sessions, startup weekends, hackathons and inspirational talks from start-up CEOs.

The event reached its peak at the Grand Finale, where 7 finalist teams gave their *Dragon's Den* style pitch to an audience of over 150 people, including investors from Index Ventures, Hoxton Ventures, Opus Corporate Finance, Arts Alliance and Bethnal Green Ventures, as well rep-

resentatives from the department for Business Innovation and Skills and the Dean of the faculty of Engineering at Imperial.

Entries in the Innovate category ranged from a consumer device for filtering lactose from milk (62% of the global population is lactose intolerant) to safe nuclear powered batteries that can last for years. Entries in the Prove category included lab equipment that can remotely alert the scientist at specific stages of experiments, style deliveries for men, an API to allow developers to add real world rewards to their apps, cloud based practice management software for dentists and the overall winner ClickMechanic which takes the stress out of car repairs with upfront quotes and mobile mechanics.

ClickMechanic received £30,000 in the form of a convertible loan, office space and a mentor to guide them through the summer. Winners in the Innovate category received between $\pounds 500$ and $\pounds 1000$ to test the market or build an initial prototype with more available upon positive traction.

The awards ceronomy was followed by the usual "disruptive" and independent debates of some satisfied, drowsy and slightly alcoholised last surviving participants and friends.

As Rob Fitzpatrick so eloquently put it in is final speech, most of the times people will not have all the skills to put their ideas to practice. However, that doesn't matter. You can learn hat you need to know along the way. Getting out there and just making a start on something is all you really need to make it happen! His suggestion: host a "burger night" for people who are interested in enterprise! Meet people, share ideas and make it happen!

What's next for ICStartup?

ICStartup is planning to build upon the success of the Venture Catalyst Challenge '13 and deliver bigger, better and more exciting events next year. It's clear that this is a great time to get involved in the start-up community but if you still need a little more convincing about why to give it a go then read on for our "top 10 reasons to throw your books on the floor, storm out of the library and start your own buisness."



10 great reasons to throw your books on the floor, storm out of the library and start your own business

- 1. You'll get to hangout in Shoreditch and switch the library cafe for cute independent coffee shops
- 2. Bill Gates did it
- 3. When people ask you what you do you can legitimately say "I'm my own boss" And that's swag
- 4. Suddenly your geeky technical skills will become sexy
- 5. NO. MORE. INTERNSHIP. APPLICATIONS.
- 6. You'll meet cool people and make great new friends
- 7. You'll learn something more relavent to real life than the half-life of thorium-232 or the momentum of particle z
- 8. You can work on something you love. All day. Every day.
- 9. You won't need to feel guilty for going to the pub. Sociallising = networking = contacts = opportunities!
- 10. It will be fun.





COMMENT





Sex: a direct approach

Whether you're in a committed relationship or having a one night stand, you shouldn't be too afraid to ask for what you want

Anonymous

How do you break it to someone that no, three minutes of missionary did not rock your world?

an I come on your tits?" - I thought this was a somewhat forward request for our first night together but personally I'm quite sexually liberated and as a result didn't think much to it. Well not until later when he asked to come on my face. Don't get me wrong It's not that I have anything against experimental ejaculation per se, hell I think it's kind of hot. However, it did strike me as pretty unorthodox coming from someone I'd only met a couple of times. What if I'd been a demure, reserved kind of girl, who only enjoyed missionary and spooning? And whilst I think it's fair to assume that I don't exactly exude timid wallflower, the question remains: what made this guy think it was okay to make such a request?

Fast forward a couple of weeks later, I met up with a guy from my past – I wasn't sure what to expect; there had always been flirtation between us but it had never led anywhere. However, plied with wine and nostalgia and having missed the last tube home, we both knew what was going to go down. The sex itself was a combination of the non-committalness of a one night stand with comforting familiarity of long standing affection -It wasn't mind blowing but pleasant enough all the same. From a purely clinical standpoint, it was a pretty standard shag, no crazy karma-sutra

inspired moves or kinky add-ons but again as he reached climax the same request was made!

Now the object of this article is not to describe the pros and cons of cumming-on-tits. Whilst I realise some women (maybe even most women) would consider an act of this nature degrading or humiliating, I liked it. The bottom line is I loved the fact they both had the balls to ask for what they wanted, it was a massive turn on. And this lead me to thinking, generally, why aren't we more vocal about our sexual desires?

Come on ladies, let's be honest we've all faked an orgasm or at the very least feigned more enthusiasm than we felt. Personally, I don't have enough digits to count the number of times I thought to myself – 'I wish he would just...' but then decided to bite my tongue. The worst has to be when you're faced with inevitable post-coital 'was that good for you?' – How do you break it to someone that no, three minutes of missionary did not rock your world?

Sex (or at least good sex) tends to fall into two categories; emotional sex and hedonistic sex. Emotional sex is when the act is underpinned by emotional attachment – what some people chose to call making love (vom). Conversely, hedonistic sex is sex for sex's sake and is largely confined to physical gratification and immediate sensory pleasures.



However in both cases it seems absurd not to be direct about what you enjoy. If it's emotional sex, you should feel close enough to the person to be candid about your sexual desires. If it's hedonistic sex, ultimately you should both be out to maximise pleasure and as a result be equally vocal. So why is it that so many of us feel too ashamed or shy to ask for what we want?

In light of these recent musings, I've pledged to be transparent about my

sexual likes and dislikes. I now make a point of asking what my partner likes and then make some suggestions as to what might enjoy. So far this approach yielded highly satisfying results. Like so many things in life, it seems sex is very much a matter of 'if you don't ask you don't get'

Having said that, maybe it's just something about the way I act that makes guys think I want them to jizz all over me. Not sure.

My favourite things about exams

Anonymous

t's that time of year again: with the joy of the excessive chocolate consumption that is Easter comes The Fear. Exams are just round the corner and you suddenly realise you haven't been to an entire week of lectures since October.

However, I was once told that every cloud has a silver lining. And here is that lining for exam season:

1) Money Saving Opportunity: I mean, between the days you spend forming an intense relationship with the view of Queen's Tower from the 4th floor of Central Library and the nights having panic-attacks and contests with your flatmates about who's done the least work, when do you physically have any time to spend

money? You'll only spend money on comfort food from the Library café and unnecessary stationary from the Union Shop, and in no time you'll resent both of those places so much you won't be able to pull your money from your pocket (because your fists are clenched with revision rage).

2) Reduction of Embarrassing Encounters: During exams, alcohol consumption either plummets or escalates. If it plummets, I find myself exponentially less likely to wake up beside someone and having to sheepishly smile whilst I gather my clothing and mutter something about how *cough* great a time I had. And if it escalates, well, the revision-induced misery means I'll be a guilt-ridden, crying wreck by half past ten and

that's never attractive. No one wants to go home with that person, so job done: I will wake up in my own bed, similarly sheepish as I recall my breakdown but free to enjoy the embarrassment alone.

3) New Hobbies and Discoveries: Since the dawn of education, one of the best things about revision are the new things you end up discovering whilst you frantically procrastinate and avoid the stacks of notes in front of you (your very own mini-Everest, courtesy of our darling Imperial). These things range from your new secret talent, or simply a fantastic internet-revelation. For instance, yesterday I spent an hour and a half with my fluid mechanics open in front of me but watching a documentary on Beyonce

– it was the best hour and half of my life. I also caught three M&Ms and one Malteser in my mouth by throwing them in the air – this is unprecedented and all thanks to my exams. So whether you discover Maru the Cat on YouTube, create a Twitter account or simply find that you can cross all of your fingers and toes at once, don't forget: none of this would have been made possible without serious denial. THANK YOU EXAMS.





10 | FRIDAY 03 MAY | FELI

SCIENCE

Science Editors: Philip Kent, Laurence Pope, Philippa Skett science.felix@imperial.ac.uk



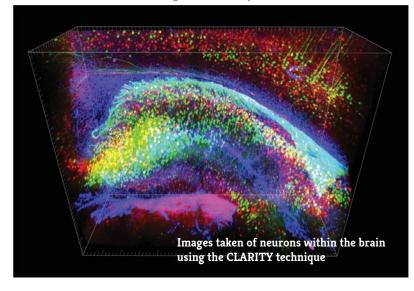
Need to clear your head?

Philippa Skett on the new imaging technique that is sweaping labs nationwide

www.nature.com/news/see-through-brains-clarify-connections-1.12768

o you ever find your-self walking along the street, daydreaming away, and then suddenly wonder what if people around you could hear what you were thinking? What if complete strangers could see into your head, listen to your thoughts and leave no stone of your conscience unturned? With the recent advances in tissue imaging, your brain can now be as transparent as a gold fish bowl, but relaxyour secrets will still remain safe for the foreseeable future.

A new technique developed by a team in Stanford University in America, known as CLARITY, holds the key to giving us the clearest insight yet into the structure of the brain. It is centred on the application of a detergent known as SDS to tissue to make both transparent and chemically permeable. SDS removes lipid molecules that usually make tissue opaque by stopping light passing through, leaving tissues clearer than ever seen be-



fore and ready for further treatment.

With previous attempts at stripping away lipid molecules resulting in protein damage, CLARITY smoothly overcame this by also infusing the tissue with acrylamide, the same plastic used to make false nails. The acryla-

mide is heated and is transformed into a type of brain scaffolding, holding all the important proteins and other biomolecules in place as the lipids are then stripped away.

This leaves an immaculately transparent organ, which can be stained

or treated with molecular markers to show different cell types and their functions. Whole signalling pathways can be visually mapped – useful for identifying possible structural causes for neurological malfunctions.

CLARITY is not suitable for living tissue but for deceased samples, and will be useful for preserving delicate specimens such as organs suffering from rare or particularly damaging diseases. Whole libraries of preserved brains could be made to display various progressions of neurodevelopment or model rare or incurable diseases. Instead of books you could borrow these transparent brains, study them then bring them back. As grisly as that may sound, it could infinitely aid neurological research and bring us one step closer to figuring out crucial cures for disorders.

The brain has always been a mystery to humans both biologically and philosophically – although it was Descartes who identified thought as synonymous with existence with his

famous quote "I think, therefore I am," little else has been agreed on since. The translation between experience, memory storage, and recall is still not understood; computers may code their memory in binary digits but the brain's coding of our thoughts is still a mystery. Until this crucial code is cracked, even the most intricate map of our mind on a cellular level will still not reveal those secrets we don't want to share. We may be able to see the circuit board, but we will still be unable to decipher the files.

So unless the blueprint of our brain can be fully understood and not just mapped in a whirl of rainbow colours, those daydreams will still remain yours. Strangers in the street need not ever know just what you are thinking, unless you are inclined to go up to them and tell them so yourself. No amount of transparent tissue is going to change that – at least, not for a while yet.

DOI:10.1038/496151a

The slimy world of Hagfish Haute Couture

Lucy Hagger

Science Writer

Clothes are important to anyone; whether you're an avid fashionista or more of the practical sort, we all need clothes. However, the materials making up our clothes may be straying from the ordinary to the extraordinary in the not so distant future. The new source of the fabric for your brand new dress or coat could be swimming at the deep, dark depths of our ocean floor

The majority of the fabrics we rely on today are oil-based polymers, which basically means that the materials are petroleum based. With our ever decreasing supplies of petroleum the demand for alternatives to these products is high... enter the hagfish.

Research led by Atsuko Negishi at the University of Guelph in Canada has suggested that hagfish slime could be used to create a super stretchy, lycra-like fabric.

The team managed to collect this slime from the hagfish and realised that it could be treated and then spun into threads much like silk.

This does seem a bit odd and gruesome, but it really is very logical to put these materials that nature provides to good use.

Hagfish are ancient, bottom-dwell-

http://bouncingideas.wordpress.com



ing animals that have been around for over 300 million years. If you've done some evolutionary biology in your time, you should definitely remember these weird and slimey creatures. It has been known for some time that when these strange, eel-like animals are approached or attacked they release copious amounts of sticky slime as a deterrent.

The slime contains mucous and huge amounts of certain protein fibers belonging to the family intermediate filaments. These filaments are great for making fabrics as they can be deformed and stretched to shapes and sizes very different to their original form.

But don't go rushing out to the nearest high street for the latest fashion in hagfish slime. The researchers aren't quite ready to produce full on items of clothing, but they intend to pursue this concept further to hopefully create the basis for more environmentally friendly fabrics of the future.

Intelligent Robots to take over the operating theatre?

Sophie Shina

Science Writer

Would you trust a robot to operate on your brain? Why not? Robotic neurosurgery can provide a less painful, less dangerous and less invasive alternative to traditional open methods.

Under the guidance of Professor Lord Darzi and Professor Yang at the Hamlyn Centre for Robotic Surgery here at Imperial College London, academics are pioneering a truly revolutionary approach to neurosurgery using keyhole techniques.

Keyhole surgery is performed through unconventionally small incisions using a light source, a camera and a television monitor and is at the moment used to carry out surgical procedures in the abdomen or the pelvis

However, Imperial academics have recognised the potential for this concept to be applied to the brain, and are in the midst of developing a robotic platform for keyhole neurosurgery. This approach is extremely promising, with advantages including reducing the length of the incision, reducing the size of the bone flap and reducing exposure and manipulation of healthy

brain tissue.

The ultimate goal of the robotic platform is to "integrate advances in endoscopy, image guidance and articulated instruments to enhance the feasibility, safety and effectiveness of operations", says Hani Marcus, a Clinical Fellow in the Hamlyn Centre.

The use of robots to perform surgery has its roots in the use of a modified Puma 560 industrial robot in 1985 to guide a brain biopsy.

More recently the da Vinci robot, a telesurgical system whereby the surgeon remotely controls the robots actions, has allowed surgeons to perform operations that were previously considered too difficult to safely perform through keyhole approaches, such as the treatment of prostate cancer.

Other developments include the isnake, a snake-like device which can wiggle its way through to inaccessible areas and Acrobot's robot for hip replacement surgery.

Dr Brittain of the UK Medicines and Healthcare Products Regulatory Authority says "it is inevitable that within the next 10 years, we won't be putting the surgeons hand in a patient's body anymore." Are intelligent robotics really the future for surgery?

SCIENCE

What you missed in Science

Felix Science recaps what went on in the world outside revision and the library

Biology

Viruses have been getting out of hand this Easter, with the H7N9 outbreak reaching 104 in humans throughout China and 21 lives being claimed by this strain of avian influenza virus. Although there is no evidence of sustained human-to-human spread so far, with China being the epicentre of both the outbreaks and a busy hub for airline traffic, it may be only a matter of time before this bird flu takes to the skies - literally, it could be coming to

an airport near you.

In more positive news, new protein on the scene, CD33, a littleknown regulator protein, has been found to prevent support cells clearing toxic plaques that result in Alzheimer's disease.

Suppression of such a protein may contribute to future treatments for the disease. Not only that: a new liver hormone called betatrophin has been discovered that encourages growth of insulin-secreting cells, which could be manipulated for future diabetes treatment development. High-fives all round for the immunologists out



And lastly, we celebrated the 60th anniversary of the Double Helix, with the original paper describing the DNA structure being published in Nature on the 25th of April, 1953. If any molecule deserves a birthday party, DNA is it. mRNA, the smaller, more active yet unloved sibling of DNA celebrates its birthday sometime in October, but it seemed that no-one even cared enough to record the date properly, so this was probably the only biomolecule birthday worth watching out for

DOI: 10.1016/j.neuron.2013.04.014

Physic

NASA have had a busy Easter breakin the past month, their probe on NASA's Cassini spacecraft spotted a hurricane on Saturn two thousand kilometres wide, alongside capturing photos for the first time of meteoroids crashing into Saturn's rings. A top month for NASA; not so much for

Theoretical physicists got busy measuring antigravity, leaving us pondering if anti-matter atoms fall up, whilst pesky pyrrole molecules were also seen to be making the rules up as they go along.

The impact of quantum laws of physics has been seen to now exert effects at a molecular level, with pyrroles moving over metal surfaces in a manner contradictory to classical physics. It was initially thought that

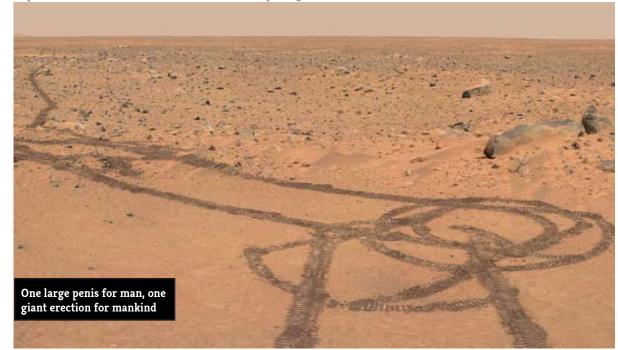
zero-point energy - residual, undetectable energy in the quantum world that means nothing is perfectly still did not apply to whole molecules, but pyrroles defied this in recent tests in the Cavendish Laboratory in Cambridge. Back to the drawing board

And finally, someone spotted what looked like a penis drawn by the Mars exploration rovers Spirit and Opportunity whilst looking for water on the red planet.

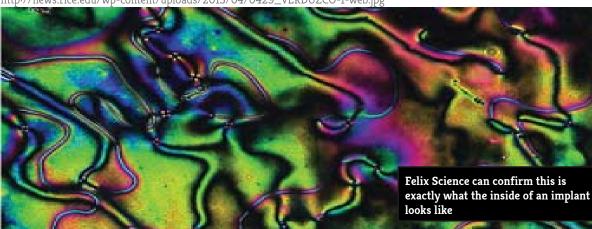
Although this was claimed to be a complete accident, anyone who has ever come within a mile radius of Imperial knows that scientists never really grow up. We are all kids at heart, just with access to lasers, chemicals and the odd bio-hazardous bacterial

Somewhere out there, an astrophysicist is quietly chuckling to himself, after completing the ultimate doodle in this solar system.





http://news.rice.edu/wp-content/uploads/2013/04/0429_VERDUZCO-1-web.jpg



Chemis

Chemists have been taking imagery to a new level this Easter, with them deciding that there is no such thing as "too small," when it comes to viewing scale, if nothing else.

X-ray single-crystal diffraction, that molecular structure determination method that we all know and love, saw a revamp at the beginning of April.

Scientists from both Japan and Finland established a new protocol for the method to no longer require crystallisation of the target molecule before analysis. Molecules can now be as small as 80ng for studying by this diffraction method, so if you have that speck you have been dying to identify handy, now is your chance.

STAM, or Saturated Transient Absorption Microscopy, also hit the chemical scene towards the end of last

month. This new imaging system, using three laser beams, allows for super-resolution opti-

cal microscopy, and overcomes the issue of the diffraction limit that hinders usual light microscopy.

Images are generated using STAM by comparing the contrast between excited and ground state electrons in molecules when excited upon illumination instead, making it possible to study nanomaterials, again if nothing else, in much greater detail.

Rice University also found out this month that when squeezing the liquid phase of silicone, it gets surprisingly stiff when repeatedly and gently compressed, although polymer scientist Rafael Verduzco declined to comment on whether or not such research was inspired by more intimate moments he has had outside the lab.

In conventional silicones, polymer chains are usually randomly orientated that allow for a return to their usual state after compression. In liquid phase silicone, it was found that the chains are organised in rod shaped coils and are initially randomly orientated. Repeated compression leads to them rotating and pointing in the same direction however, contributing to the stiffness.

With silicone being a biocompatible material, incorporating this new information back into the bedroom may occur within the foreseeable future, if some adventurous biologists fancy

getting on board too.

I don't want to specifically suggest penis-related ideas, but if the selfstiffening silicone glove fits...

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DOI: 10.1038/nphoton.2013.97

DOI: 10.1038/ncomms2772

12 FRIDAY 03 MAY FELI

ARTS



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DOODLE OF THE WEEK



Why work? Instead, doodle all lecture long and then send us your drawings to arts.felix@ic.ac.uk. This popped up in the Physics common room. Who else has been working hard on revision?

TIRED OF LIFE?

Our pick of what's on in London

Spin London @ The Old Truman Brewery - For the irredeemable hipsters among you. This weekend boast the even of year. The world fist 'urban centred' bicycle show features emerging cycle fashion brands & creative talent, talks, screenings, demonstrations, Cycle-Art Installations, and live music. May 03

Souzou @ Wellcome Collection - This show feature `outsider art' from Japan. This genre of art is often produced by self-taught artist on the fringes of society, in mental institutions on social welfare support. The show promises to question assumptions about the form and the very nature of art. 28 March - 30 June

Intersections @ The Studio Building - Alexander James' extraordinary photography featured beautifully composed still lives. Remarkably each picture is shot with the subject submerged in water tanks. The delicate watery beauty he captures lends a similar sense to classical oil paintings. 23rd April - 24th May

Me you or the other person @ GV Art - The exhibition feature sculptural reflection on the figure by three contomporary, female artists. In keeping with GV Arts' enduring ethos the works all feature refrences to medical and scientific themes. Works by Eleanor Crook, Katharine Dowson and Pascale Pollier are on disply. Now - May 18



Designer genes

Lily Le

Writer

We all fucking love science, but it has to be admitted that, frankly, it can get achingly dull. How many times have you heard the words, "after a month and a half of protocol optimisation, my experiment has failed again! Isn't this so FUN?" That's right, never.

Despite this, you don't have to look too far to rediscover the lighter side of science. At Imperial an initiative, *Artifact*, has been set up by students to encourage the creation of artistic works inspired by science and technology. At a recent meeting, I met Raphael Kim, a design interaction student at the Royal College of Arts. Ever since, I have been probing him with questions about his work.

Just as science proposes questions about the world, Raphael has taken this notion and added the twist of asking scientific questions through the medium of design.

A BSc in biotechnology and a year spent scrutinising proteins in Switzerland are not circumstances unfamiliar to many Imperial students. How about taking scientific questions out of a research setting and answering them in a context unrestricted by commercial profiteering or the pressure of saving lives?

Partly inspired by the *Citizen Science* concept resulting from his previous lab project and some DIY aspects of synthetic biology, Raphael explores the less obvious links between science and design.

Take a glass of water, extract microscopic organisms called rotifers, and design. The *Gene Hunting Device* exploits the phenomenon of horizontal gene transfer, which allows rotifers to incorporate pieces of DNA from their environment into their genome. Introducing a gene encoding a fluorescent protein and when it encounters a gene being hunted for (sort of like a switch), the rotifer glows (much like a LED bulb) to indicate that the target DNA is in the environment.

As Raphael's work is based on scientific phenomena, I wondered whether the design aspect set him free from the scientific laws which make research so frustratingly exact.

"I guess starting a project with a scientific hypothesis is something ingrained in me." He says, "but you also need to think about visual and aesthetic aspects to communicate scientific elements. Microbes are not usually visible to the naked eye - but if you are undertaking a design project, it may force you to focus on the visual language of how microbes could be depicted. How do you show something that is normally invisible to us in a way that is thought-provoking?"

If the biosensing principles of the Gene Hunting Device are slightly too





scientific for your design liking try *Space Bacteria* based on a scientifically unlimited 'what if' concept.

We already exploit micro-organisms naturally found in extreme conditions, but earthly extremes are no match for those found in space. Generated with the help of designer Jae Yeop Kim, the next idea involves genetically modify bacteria taken from human bodies using synthetic biology techniques before farming them on Mars. The result is to see how they would evolve and survive, and how useful they could be back here on Earth.

"You have to forget about the limitations when you start a project, and keep an open mind" says Raphael.

"Science dictates that it is unlikely for bacteria to grow in large colonies on Mars. We explored this with an assumption that we may find a way around the problem of harsh Martian conditions. Once we were unchained from these restrictions, it was really about designing for a possible future and allowing the audience to finish our story. For what purpose do we want to send bacteria to Mars, and what are the potential social and cultural implications of creating agriculture beyond our planet?"

As we hear about scientific and arts funding cuts, I wondered how difficult it was for a designer to carry out such pro-

jects. It turns out the creativity moulding his work extends further than just shaping it's substance and style.

"Petri dishes were bought from a school supplier, a cheap oven (incubator) from Argos, and agar powder from a Chinese restaurant in Soho. Once transferred to liquid medium, bacteria were collected using a DIY centrifuge. I had made several variations of these – some from salad spinners, egg whisks and a small electric drill," he explains of his project *Tangible*, which uses the bacteria to form the shapes of objects resembling those found in daily life.

By giving the usually invisible bacteria an unavoidable physical presence, the viewer is made to think about how we interact with them and how different this is when we remember that bacteria are living organisms capable of modifying designs we interact with everyday.

I was glad to hear that working with science from a different perspective didn't completely exclude Raphael from the world of research.

"I think it is fair to say that the scientific community consists of a variety of characters who are and are not open to integrating with artists and designers. You can always drop a polite email to a researcher you are interested in. You may not get an immediate response, but it is mostly a matter of perseverance."







Time to tie up Bowie

Jemma Pilcher visits the shrine of a pop deity

avid Bowie is more than just pop star. He is a multi-instrumentalist, artist, mime artist, actor, lyricist, poet and record producer. Drawing on all sectors of the art world and modern life for inspiration, his intellectual songs and flamboyant image combine the familiar and the alien and have become stitched into the fabric of contemporary culture. He is not just one man, but at least five; from Major Tom to the Thin White Duke, Bowie has continuously reinvented himself with glorious eccentricity. His sensational career is currently being celebrated at the V&A by exhibiting the first David Bowie retrospective.

The exhibition has the appearance of a labyrinth, with walls adorned with sketches, hand-written lyrics, photographs and other artefacts from Bowie's career. As a Brixton art student, David Robert Jones aspired to be a pop star, yet felt restricted by the lack of ambition from the members of his various jazz bands. He toiled with the idea that it would be easier to pretend to be someone else, and influenced by the mine artist Lindsay Kemp, one of the most theatrical pop stars the world has ever seen came into existence. His first hit Space Oddity is a fine example of Bowie's ability to tap into a cultural fascination, intuitively releasing this single in 1969, before the moonlanding.

Back in the exhibition, around the corner, the stage is set for the illustrious glam rocker from Mars, Ziggy Stardust, Bowie's most recognizable alter ego. A mannequin wears one of his gorgeous quilted jumpsuits by Freddie Burretti. This suit is inspired by the 'ready for action' look of the droogs' uniforms from Stanley Kubrick's A Clockwork Orange. Yet, to distance this costume from ultraviolence of the gang members, it is made from colourful and heavily patterned, floral fabric. Wearing this bizarre suit, with his red hair, red boots and mismatched eves, Bowie really did look like he was not from this planet. The backdrop shows footage of his first appearance on Top of the Pops, as Ziggy Stardust And The Spiders From Mars who debut with the eponymous Starman.

In addition to music and image, his over-confident persona was unprecedented. During the same performance he put his arm around his guitarist Mick Ronson. At a time, when homosexuality had only recently been legalized, this was a very daring move and abides with his ideology of 'be whoever you want to be'.





The exhibit encompasses sixty of the most flamboyant costumes I have ever seen. Image and persona are of the upmost importance to Bowie, so he was heavily involved in the design of each outfit, aswell as album artwork and stage sets. The avantgarde and vibrant style of Japanese designer Kansai Yamamoto perfectly complemented Bowie's theatrical persona. He created the lavish ensembles for the 1973 Aladdin Sane tour; a cape adorned with the kanji letters for "one who spits out words in a fiery manner", a knitted asymmetric bodysuit, and the most eccentric 'Rites of Spring' costume of black and white striped vinyl, which opens the exhibition.

Other key costumes on display include the wonderful Union Jacket coat by Alexander McQueen, Thin White Duke ensembles by Ola Hudson and a number of skinny suits with boxy shoulders to accentuate his tiny figure.

Truth be told, Bowie is as wonderful at acting as he is at singing and song-writing. To commemorate some of the fascinating characters he has played, a miniature cinema is in place, projecting clips of him in action. The diversity of his roles is impressive; from the antagonistic Jareth the Goblin King in Labyrinth (1986), to the inventor Nikola Telsa in The Prestige (2006). In 1980-81, he also starred in the Broadway production of The Elephant Man, in which he used his ability to mimic voices to portray Joseph Merrick's facial deformity simply through his manner of speech.

Within the depths of the V&A, the labyrinth opens up into a huge exhibition space, with projections of Bowie's live shows against the walls. The most magical of these shows was the final song *Rock 'N' Roll Suicide* of the *Aladdin Sane* tour at the Hammersmith Apollo. When he announces that 'this is final show we'll ever do', before killing off Ziggy Stardust. Bowie seems more like an omniscient deity, than a man, calling down: "Gimme your hand cause you're wonderful."

Evidence of Bowie's immense influence can be seen everywhere in the music, fashion, theatre and art world. His love of the bizarre and encouragement to express yourself freely is so universaly appealing. It is not difficult to comprehend how he has risen to a god-like status within our contemporary culture.

David Bowie is run at the V&A until August 2013. Tickets: £14 (concessions available)

Berlin walls have years

Meredith Thomas

Arts Editor

Berlin is a city that weeps with history. Decades after unification it has a skyline like a broken jaw. Buildings conspicuous by their absence are found next to bullet riddled vestiges of the Wiemar years. Soviet space-age architectural excesses and grim utilitarian atrocities now sit alongside shining glass temples to modern capitalism.

The city boasts a gunmetal solid art heritage, or be it a timeline with gaping holes; resulting from the creative repression of National Socialism and later soviet communism. Yet, the years after unification saw a catastrophic explosion of creative activities. Graffiti became permanently associated with the fall of the Berlin wall and the subsequent character of the city.

This rich and terrible past drew LeoSoc's annual tour to the city over Easter. Berlin did not disappoint. The group found the city smothered in a thick blanket of snow lending a frigid, oppressive atmosphere our explorations.

The city and its troubled past and present were reflected again and again. A graffiti artist explained the contemporary battles between Turkish immigrants and skinhead gangs, between the relentless march of gentrification and anarchist squatters, all played out on walls through slogan and counterslogan.

Das Berlinische Galerie featured the tortured attempts of censored artists in the 30s to protest. Das Neues Museum rebuild from a bombed out shell displayed the Egyptian antiquities acquired during Germany's colonial past.

We saw bulldozers poised to puncture a preserved section of the Berlin wall (Eastside Gallery) to allow road access for a media company's new offices. As we left the protests failed and the caterpillar tracks were crunching over snow, history still being made.



14 FRIDAY 03 MAY FELIX

BOOKS





The Fault in Our Stars

Alejandro Torrado Pacheco Writer

Freud was the first to identify the dualistic principle of Love and Death, personified in the Greek gods Eros and Thanatos, as a key component of the human psyche. In his description, the first is the drive for reproduction, the positive instinct of preservation and creation of life; but human beings also display an opposed destructive instinct towards others and sometimes themselves. Attempting to explain our every actions in these terms may be reductive: but in John Green's fourth novel. The Fault In Our Stars, love and death become real forces, and their painful clash is the central theme of the book.

The story is told by Hazel Grace Lancaster, who is sixteen years old and has lung cancer, or in her words, "lungs that suck at being lungs". She carries around with her a little steel cart with an oxygen tank and is not very good at going up stairs. Hazel knows she is going to die. At Cancer Support Group, among a crowd of other teenagers, she meets Augustus Waters, a charismatic ex-basketball player who has lost a leg to osteosarcoma and is now NEC (No Evidence of Cancer), and likes to indulge in metaphorically charged behaviour such as holding an unlit cigarette in his mouth.

Hazel and Augustus' story begins here and is told masterfully by Green. His witty, genuine humour is alternated to sad, tragic moments in an articulate counterpoint. The prose is never predictable or descending into cheap sentimentalism, a testimony to the author's skill as a writer; to his insight and understanding as a human being. Perhaps the characters are unrealistically smart and well-spoken; but this novel is truly a pleasure to read through.

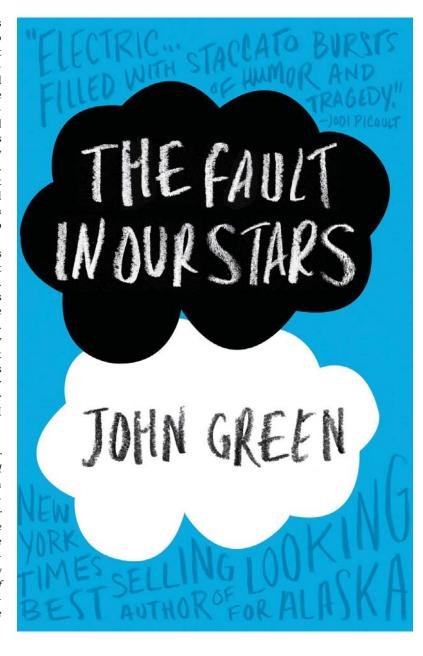
Hazel lends her favourite book, by Dutch author Peter Van Houten, to Augustus and he becomes fascinated by it as well. It is about a young girl dying of cancer, and ends abruptly in the middle of a sentence. The unknown fate of all the story's characters is Hazel's obsession, so Augustus decides to get in touch with the author who agrees to speak about the book, provided it is in person. Augustus then uses the "wish" that a foundation for terminally ill children offers him, to fly to Holland with Hazel to meet him.

The two protagonists arrive in Amsterdam where Van Houten turns out to be an odd, embittered man, who rudely sends them away. We are left to follow Hazel and Augustus in Amsterdam. In Anne Frank's house, they kiss to the sound of applause from the crowd. Here as in the rest of the novel, we are all the time exposed to their reflections upon illness and life, death and remembrance, spoken in a manner that is real and raw, with true, dry sentiment. At the end of the trip, Augustus reveals to Hazel that his cancer is back and has spread through his body: "The lining of my chest, my left hip, my liver, everywhere. Everywhere. That word hung in the air awhile. We both knew what it meant."

The complex relationship between love and death emerges continuously throughout the book and particularly after Augustus' revelation. As the two teenagers fall in love the ephemeral quality of their respective lives forces them to dedicate a lot of thought to things that most of us (let alone most of us at the age of sixteen) light-heartedly ignore: how hard it is to love and be loved knowing that all that will be left are scars; how inadvertently ridiculous we are in acting as immortal beings allowing ourselves to use words such as "forever" and "always"; yet how inevitable and necessary it is to do so. The sentence: "That's the thing about pain: it demands to be felt." is quoted several times; in the same way, death demands for its towering presence to be acknowledged.

The confident Augustus is shown is his last days in all his fragility amidst the flatly grotesque ugliness of illness. Green depicts him dazed by narcotics and lying in a pool of his own urine in his bed, or vomiting on himself. The sincerity of the storyteller only strengthens the romance, in its almost painful humanity. Death accelerates time and in the end what's left is for Hazel is the gratitude for "a forever within the numbered days". A read I recommend, powerful and touching.

John Green is an American writer of young fiction. He has won several prizes for his books, and The Fault In Our Stars has received much critical appraisal. Green and his brother Hank, have an entertaining YouTube channel called Vlogbrothers, where they exchange their geeky video correspondence and through which they have amassed an impressive horde of followers – the Nerdfighters (nerdfighters.ning.com). You can find out more about the brothers at hankgreen.com.



Herman Hesse's Siddhartha

Matt Allinson

Writer

Coming in at 114 pages long, Siddhartha is by far the easiest book to read by a Nobel Prize winning author. The guy I borrowed my copy off managed to read the whole thing in a particularly slow flight back from Jordan. I had only vaguely heard of either the book or the author before having the paper-back thrust into my hands, but it bore the trusted sign of being a "Penguin Modern Classic," with its tasteful but artsy cover; so I figured I'd give it a go.

Intensely spiritual throughout, *Siddhartha* tells the story of the eponymous character on his journey from being an irritating stuck-up brat to being a sage and wise old man in India at the time of the Buddha. The son of

a Brahmin, Siddhartha feels that as a teen he has already learnt all that the Brahmins of his town can teach him, and with his long suffering buddy Govinda in tow; sets out to discover the world by hanging out with various spiritual groups. He gets bored of them, decides to trade it all in for a life of luxury, realises that such a life has corrupted him, and then finds peace living a simple life as an old man.

Befitting of a book about a pretentious, irritating kid; the narrative style can at times be dense and overly poetic. The characters refer to themselves in the third person with an alarming frequency and the florid otherworldly dialogue was a source of occasionally intense frustration.

Upon overcoming the initial annoyance of the writing style, the effect of it is to set the reader up as a dispas-

sionate observer; I found myself going along with Siddhartha in his journey but not becoming overly involved in each scenario individually. As a result the overall feeling one takes away from the book is that it is a lesson being taught to you, as opposed to the reader learning themselves directly from the shared experience between the protagonists and the reader. The downside of this is that moments that are extremely emotional for Siddhartha feel passive and detached – there is a passage in the final third where, as



an old man, he experiences deep loss and abandonment, yet when reading it I felt disturbingly little. The overall result of this is in keeping with the main aim of the book – once Siddhartha recovers, we learn how these events have affected his view on the world, and helped him come closer to achieving Nirvana; which is all fair and good, but I still prefer my novels to have a bit more emotional bite.

This isn't saying that Siddhartha isn't the classic that the well-qualified editors at Penguin seem to think it is. Despite lacking grit and realism that makes you feel 'there' and in the story, the combination of emotional distance from the story teller and the ridiculously poetic, but ultimately beautiful language instead give the reader the experience of looking at a great work of art, whilst the meaning

of the painting is explained to you by a friendly expert.

And what meaning: perhaps the greatest success of this book is that its message is how to live a simple life and find happiness and reward in vour own existence. If a short book is hard to read and ultimately has an unpleasant story (Conrad's Heart of Darkness springs immediately to mind) then by the end of it the reader is left wondering why they bothered. Siddhartha, for all its petty annoyances, leaves the reader feeling that their life has been affirmed, and in awe of the skill of the author for getting so much content crammed into such a short book.

If you have a long flight soon, or want a pocket sized paperback to carry with you on commutes, you can't go far wrong with *Siddhartha*.



Friday 3 May 20:00 - 01:00 Metric £2.50







MUSIC





Iceage thaw out Elektrowerkz

Mark England enters the world of Danish punk

ceage's second album *You're*Nothing is getting critics
frothing at the mouth, and for
good reason. It keeps the raw,
visceral vitality of their debut
album, New Brigade, and marries it

Band: Iceage

Nationality: Danish

Music: Punk

Label: Matador

Shit Fact: Iceage once played a gig with a dead fox.

to a more intricate post-punk undercurrent. In fact, whisper it, new track 'Morals' seems to be an attempt at a pop song. The band have managed to ride the initial wave of hype and are now proving themselves to be a thrilling live proposition.

Although Electrowerkz, located a few minutes from Angel tube station,

looks like a small dive venue from the outside, once you get inside it turns

out to be a somecavernous stretching back for miles. And Iceage manage to fill it tonight; as close to a sell-out that you are every likely to see. It takes me an absolute age to scramble through bodies to buy myself a Red Stripe (oh how stereotypical). Electrowerkz used to be a metal factory and it makes an intriguing, if not bewildering,

Iceage arrive on stage late, rude and raucous, a manner most befitting the scary yoof of today, or so the *Daily Mail* would have you believe. Underneath the howls of new single 'Ecstasy' and old favourite 'Collapse',

however, lies an intelligent band who share a certain something with **Joy**

Division. Some of the standout tracks from the new album are 'Coalition' and 'Wounded Hearts' and they rouse the moshpit into action. The hardcore fans at the front go wild 'White Rune' 'Remember' and but 'You're Nothing' proves to be an unexpected high point. Half of the time you cannot tell what lead singer, Elias Bender Rønnenfelt, is singing but that is not the point of the night. It is the en-

ergy and viciousness of the set which comes through; Elias spent more time swinging from overhead pipes, thrashing in the crowd and screaming at the front row then standing by the microphone.

You cannot write a review nowadays



about Iceage without mentioning the controversy which they have courted; the fascist ideology employed and the fact that they sold branded switch-blades at recent shows. The cynic inside me says that is a gimmick used to startle the mainstream media into giving them column inches, and boy oh boy is it successful. Let us not forget that this is a band who offered fans the chance to buy locks of their hair so

they know how to get attention.

After tonight it is clear that the attention, however, should be firmly focussed on the epic gothic-tinged hardcore bursts that Iceage are so good at. The energy which they played with shook the foundations of Electrowkerkz and left me feeling a very very old twenty two year old indeed. I cannot keep up with the youth of today! But it is fun to try.

Imperial College Band 'James And The Rabbit Hole' through to the finals of Uni Music league

Uni Music League is a unique project that has hit the UK with a bang. Acting as a support system for upand-coming student musicians and bridging the gap between the unsigned world and the professional music industry, Uni Music League is the UK's biggest student-based music competition. The immense prize package which James and the Rabbit Hole from Imperial College are hoping to win is an EP recording deal with Metropolis Studios, the opportunity



to perform at the Wilderness Festival, support slots at KOKO, full PR cam-

paign and professional photography shoots. Yes, it really is a dream prize for any up and coming musician...

James and the Rabbit Hole consist of five members: James Burrows, Francis Clegg, Dan Day, Tim Plummer and Conor Nelson. Music has always been a huge part of all their lives from a very young age with inspira-

tions drawn from Marvin Gaye to the Red Hot Chilli Peppers to Aretha Franklin. The result? An accomplished old-school sound with lyrics akin to country story telling.

Despite only being together for a



short while, James and The Rabbit Hole have already achieved so much. Moulding their own version of rock and roll out of solid funk beats and a classic gritty tone, they have barrelled their way through Uni Music League in a way that only a true rock and roll band can

– through roaring guitar driven
tunes that have
moved crowds
across the capital.

In this day and age, it is rare to meet a group of young musicians with such genuine talent but James and The Rabbit Hole really do have it all. Live, they represent and capture an electric atmosphere,

transporting listeners and fans to a time when guitar music represented the perfect blend of art and human interaction. Through blood on their fingers, sweat on their brows and a sound that will mesmerise and inspire, James and The Rabbit Hole are sure to stamp their mark on this city and Uni Music League. Stripping the arguably bloated genre of rock and roll to its bare bones and laying before the world the true essence of what being in a band is about; talent, dedication and the ability to infiltrate the souls and minds of those present.

Show James and The Rabbit Hole your support by heading down to the 02 Academy, Islington on the 9th May for the Uni Music League finals.

Tickets are £5 from studentcom.co.uk

How to be Mindful in a Digital Age

Thu 9th May 2013 7:00pm - 8:00pm

Speaker

Venerable Narayan Prasad Rijal (Byoma Kusuma Buddha Dharma Sangha) Lecturer in Physics, Tribhuvan University, Nepal

Pippard Lecture Theatre Sheffield Building (Level 5) Imperial College SW7 2AZ

Join us for a time of discussion over refreshments after the event



The Chaplaincy Centre
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20 FRIDAY 03 MAY FELIX

FILM

Film Editors: Katy Bettany, John Park, Lucy Wiles film.felix@imperial.ac.uk



The old man and the machine

Robot & Frank

Director: Jake Schreier **Screenwriter:** Christopher D. Ford **Starring:** Frank Langella, Peter Sarsgaard, Liv Tyler, James Marsden, Susan Sarandon

Samuel Page

Film Writer

Robot & Frank is the film of an elderly, deteriorating gentleman, and the Robot, a technological care assistant, given to him by his son. The film focuses on the relationship between the pair, a more mismatched couple it is hard to imagine: a cranky, lonely old man and a blank faced, obliging machine. Frank Langella gives a brilliant performance as Frank; completely understated but complex and affecting. As an elderly man suffering from spells of memory loss, the viewer is never quite sure how much of an act he is putting on, either to hide his illness or to play it up. The character has a delicious penchant for mischief and is far from your typical



sweet old man. His past as a cat burglar is finely sketched but proves the driving force for the plot along with much of the humour of the film, which whilst rarely laugh-out-loud gives the film a lightness of touch that counterbalances the sadness at its heart. This is a film of dysfunctional relationships with Robot taking the position of Frank's helper, friend, perhaps even the son that he missed out on. The viewer is frequently asked to consider if Robot can be considered as a friend: can he be viewed as

a real person? As the story develops, the themes of memory and identity become more pronounced, particularly when contrasted between human and robot. Robot will never forget anything unless his memory is completely erased by his user, whilst Frank periodically forgets his own children yet is too stubborn to accept help.

Despite these topics which are explored the film largely avoids feeling like science-fiction, especially with regards to the plot. We get only brief

glimpses into a world of futuristic cars and video calling. Indeed, the film is set in 'the near future', not a particular year, such that the viewer doesn't feel like they are displaced in time. The character of Robot is a success: believably clunky yet pleasingly hi-tech. As half of the titular double act it was fundamental that the audience could believe that Robot might exist, which is helped hugely by the personality that Peter Sarsgaard gives him, as it becomes clear that Robot can make his own judgements, and can choose how to help Frank. Or can he? Often, Robot is the source of comedy as his naivety in particular is exposed. That Robot can have his straight-laced programming somewhat bent by Frank helps with accepting him, rather than some complete automaton. This central relationship progresses realistically, even if it takes unexpected directions.

Indeed, Robot is a far more interesting character than the human characters that surround Frank, and is, perhaps significantly, given more development than Frank's superficial and somewhat boring children, portrayed by James Marsden and Liv Tyler. The

scenes focusing on these characters slow the film, with Tyler being particularly annoying. Susan Sarandon, as a potential companion/love interest for Frank is better served as a librarian in a future when books have become 'retro-cool', which positions her in a changing world where she doesn't quite fit, like Frank. Although it is very rare that both Frank and Robot are not on screen, when one or the other is absent you are keen to get back to watching Robot and Frank, which the film largely obliges us with. Enough is made of their relationship that despite the film's relatively short running time it does not feel like an opportunity missed. The film is well structured and well-paced, with the story being told at a good pace until the close which with a late, sly but logical development ends somewhat ambiguously - not in terms of plot but regarding the emotions of the central characters. As a perfectly formed oddity, this film could quite easily be overlooked by those seeking more spectacular thrills, or even more dramatic performances, but this is a film which should be seen, even if it is hard to define.

The return of the Evil Dead

Evil Dead

Director: Fede Alvarez **Screenwriter:** Fede Alvarez, Rodo Sayagues **Starring:** Jane Levy, Shiloh Fernandez, Lou Taylor Pucci, Jessica Lucas, Elizabeth Blackmore

Simon Boyd

Film Writer

The original *Evil Dead* was one of the classic video nasties. Made for \$350,000 (1000th of the budget of director Sam Raimi's later film *Spider-Man 3*), it has become a cult classic and staple of the horror genre. It's a splatter-filled mess of black comedy, genuine terror and low-budget creepiness. It still scares and combines over-the-top set pieces with wit, strong characters and the all important shock factor; there's something about the pre-CGI effects that give it a tangible ickiness.

The story has become a huge horror trope now, a group of young attractive twenty-somethings go to a cabin in the woods to party. One of them finds a creepy looking book and reads from it, this unleashes a demon which possesses one of the members and chaos ensues.

Its production is as famous as the film. The actors described it as one of the worst experiences they had ever had. Opaque contact lenses meant that when the demons were attacking (with real weapons) they couldn't even see what they were doing. Bruce Campell (as career-defining Ash) twisted his ankle during production, and legend goes Sam Raimi kept poking it with a stick to keep continuity.

Original director Raimi hand-picked Fede Alvarez for the remake, and although not directly involved, gave his approval. It takes place 30 years after the original, and there was an effort to avoid using too much CGI and rely on "magic tricks and illusion tricks". But does it work? Will it get lost in a sea of other pitiful remakes or go some way to capture the magic of the original?

It's always a good sign when there are three huge guys cowering at the entrance to the cinema screen, daring each other to go in first. The film posters boldly claim that it's "the most terrifying film you will ever experience" and it has a long way to go to reach the

cult status of the 1983 classic.

In short, it's nowhere near as good as the original. It lacks the wit and humour of Raimi's version, and barely even alludes to the touches that set the original apart. It takes itself a little too seriously at times, only really letting its hair down at the end, and doesn't really try and fix the problems that the original had.

There is another problem in remaking this film, due to the 2012 Josh Whedon epic *The Cabin in the Woods*. For those who haven't seen it (and if you haven't I urge you to), it was a metahorror film that completely blew apart this very horror trope. Like Wes Craven's *Scream* did to slashers, it showed just how archetypal such films had become and almost dared them to up their game and change what they did. It made you re-think the whole genre.

Without the many black comic touches, *Evil Dead* almost slips into being pedestrian and "just another cabin in the woods" film. Whedon's film showed us what was wrong with the genre, and *Evil Dead* doesn't really try to change things.

Despite all this, overall I liked it. The story has been changed slightly, the cabin serves as a remote building

to help an addict go cold turkey. This not only actually gives a decent reason why people would stay at such a creepy spot, but also twists the plot slightly. As things begin to get increasingly weird and the addict character gets possessed, the others just assume it is the side effect to withdrawal.

One thing to say about it is that it is an incredibly well made film; first-time director Alvarez knows how to capture the mood of a scene and picks some excellent shots. CGI is largely ignored and this really makes an improvement (take note film directors!). Everything looks incredible and the tension is held really well. The gore is pitch perfect, the blood may start a bit slower than the original but by the end there are gallons of it.

It's also both creepy AND scary. It makes you jump, but by racking up the fear instead of relying on cheap scares. I did laugh out loud a couple of times as well, there's something about a brief moment of comedy in between horrifying scenes which can get big laughs.

All in all, I'd say it was a good film, and an excellent one for a first-time director. Don't go in expecting a darkly black comedy like Raimi's stuff, and definitely don't go in if you are squeam-

ish. It is a really well-made film, with some great touches, some surprises and some nice nods to the original. I'd be interested to see what Alvarez does next, give him an original script with a bit of a spark to it and I think he could deliver something really special. He hasn't quite hit it this time, but it's a damn good effort.



FRIDAY 03 MAY





Cruiiiiis-eeeeee

Oblivion

Director: Joseph Kosinski Screenwriters: Joseph Kosinski, Karl Gajdusek, Michael DeBruyn Starring: Tom Cruise, Olga Kurylenko, Andrea Riseborough, Morgan Freeman, Melissa Leo

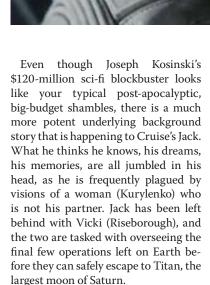


John Park

Film Editor

Opening with an information-heavy monologue detailing how basically Earth got destroyed by nasty aliens and that he's the only one of few people still left on the planet, it isn't difficult to see just where Oblivion is headed. And we fear that it's not due to end up in a happy place any time soon. As is the case with many science-fiction films, humans don't exactly fare well, in the beginning at least, and the mention of "memory-wipe" further complicates things and puts a darker spin on an already ambiguous set-up.





But just why is he unsure of all the commands that is being given to him by the creepy Sally (Leo)? Why does Vicki fail to share in his curiosity? Where are these supposed "Scavs" who

this woman he's seeing in front of the Empire State Building? Plus why is he being followed by someone wearing what can only be described as a Darth

All legitimate questions, all of them properly addressed to, but not without Kosinski taking his time in taking us through the harsh, barren lands of what once was our planet. It's beautiful yet unsettling at the same time, as the sweeping cinematography wonderfully captures all the details in many single long takes.

The cast all do an excellent job in bringing to life the deep imbeded love story that is wrapped around all the sci-fi madness. Headlining the whole project, Cruise is as usual a reliable lead with a touch of instability and curiosity to make his character work. Of the two women, the one faring better is

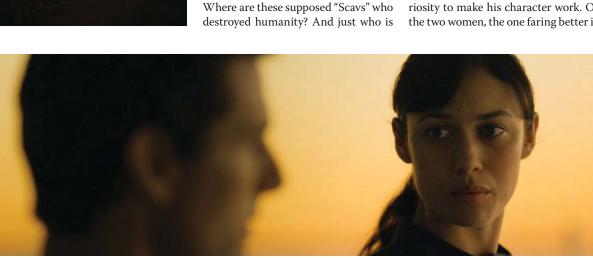
Riseborough, who ends up as a tragic heroine in this twisted tale and it's her highly effective cold, steel-like quality that brings out the overall sadness in the narrative. And once again Leo proves she only has to open her mouth to send chills down our spine. "How are you all doing this beautiful morning?" "Are you an effective team?" both seem like harmless greeting questions, but with Leo's delivery, you can instantly tell there is something a lot more sinister happening. And it's always good to see Morgan Freeman pop up in a film to provide his voice of exposition for some calm, chilled out explanation on what the hell is going on.

A healthy portion of the production budget seems to have been spent on building the spotless sets; all cold and silver on the edges, smooth and shiny on the exterior, so perfect in a way that makes us doubt the cleanliness of it all.

Fans of kinetic sci-fi action will also no doubt get their fair share as Jack pilots a funny looking bubbly plane, often hunted by nasty drones which have fierce speed, high fire-power and persistence.

The film's main weakness comes when it has to wrap things up. Instead of taking the logical route, it forces an awkward, senseless happy ending, one that doesn't do the rest of the film justice. With so many holes punched into the plot to make the Hollywood ending fit, it undermines all the hard work and build-up the film has put together previously.

Minus the final 10 minutes or so. Oblivion is an often thought-provoking piece, one that also makes sure everything looks perfect, as well as the right amount of fun delivered.











FRIDAY 03 MAY

FILM



Tony Stark will return

Iron Man 3

Director: Shane Black

Screenwriters: Drew Pearce, Shane

Starring: Robert Downey Jr., Gwyneth Paltrow, Don Cheadle, Guy Pearce, Ben Kingsley, James Badge Dale, Rebecca Hall



John Park

Film Editor

It would be safe to assume that after the events of Avengers Assemble, our Iron Man Tony Stark (Downey Jr.) is quite capable of handling almost anything that comes his way. He fought alien robots, flew off a nuclear bomb out of the earth's atmosphere, and quite literally came back from the dead. And yet here is another sequel in which Stark is really, really about to meet his match. Every superhero film promises somewhat of an upgrade when it comes to antagonists, inventing one badass villain after another. Here the billionaire playboy philanthropist squares off against an army of fire-breathing (yes, really), explosive human bombs who also have the ability to regenerate.

Suffering from post-traumatic stress disorder after saving the world by rescuing New York City, Stark is solely focused on his work, ie making more and more Iron Man suits (these all come in very handy later), an unhealthy obsessive behaviour that has his loyal girlfriend Pepper Potts (Paltrow) worried. But soon they're both given something to worry about as Stark's arrogant, philandering past catches up with him. Both international terrorist the Mandarin (Kingsley) and genius inventor Aldrich Killian (Pearce) seem to be gunning



for his downfall, and in a spectacular scene that really does hit the screen quite suddenly, Tony Stark's coasthouse is no more.

Stuck at a complete loss both in terms of resources (Stark puts together his very own low-budget suit using supplies from a convenience store, which contributes to one of the film's best scenes) and spirits, we see Stark reach rock bottom which sets things up nicely for chronicling how he gets back up on his feet. But instead we become stuck with a clumsily written jargon-full script that would have suited a police procedural more than anything else, of how Stark puts the conspiracy pieces together. The trouble is, the overall plot is no way near as complex as it thinks it is, and instead of focusing on Stark himself, the film is too preoccupied in juggling the large ensemble cast that really could have lost a couple of

Among the wasted are Cheadle, as Tony's trusted friend inside the Pentagon, who only sporadically shines towards the end; Hall, Stark's exconquest who has troubling information on her boss Killian, although ultimately serving very little purpose, which is almost an insult to just how talented Hall is as an actress; Dale seems to have fun with his pure-evil, psychotic villain's sidekick role, even though he too, is given a quick, anticlimatic write-off.

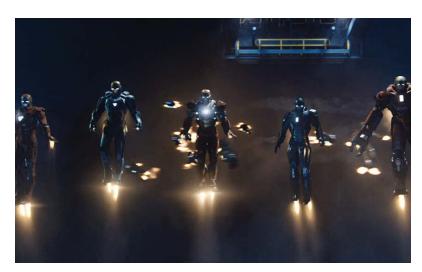
Part of what made Iron Man so popular in the first place was down to Downey Jr. himself and that he's still in the central role is still worth the entrance price alone. He's still got the cool, suave and intelligent sides intact, as are his lighter, humourous quips. He is given more to explore here, most notably the superhero's obvious vulnerability that surfaces. And whilst in the previous two installments he had Paltrow's sassy CEO to exchange banter with, here he spends most of his time paired up with a kid (Simpkins) who likes to invent a few things of his own. The dynamic and chemistry aren't quite as fun as when Downey Jr. was with Paltrow, but the boy opens up an interesting angle for Tony Stark to relate to, and who doesn't like seeing his snarky comments aimed at an in-

The two main villains have plenty of time to shine, with Pearce and Kingsley more than apt for their roles. Pearce, having a strange knack for playing over the top villainous roles (Lawless, Prometheus) and still coming off rather well with very little or no embarrassment at all, once again repeats his forte here as a man with a personal vendetta against Stark himself. But the real highlight is no doubt Kingsley: and to reveal

too much of his character would be to ruin him role altogether - but all that can safely be said is that he's not at all who you think he is. And it's Kingsley with his mighty talent that actually provides the most laughs with his hysterical character. Never before have we seen someone like this in a superhero movie wanting to be taken semi-seriously, but his involvement certainly elevates the enjoyment factor of the film in the most unexpected way.

As with any "Part Threes", the director does go overboard with all the action scenes - they have to be bigger, louder and more bombastic than they were. The explosions here are certainly those things, but doesn't make them any more enjoyable in any sense. They appear more chaotic, and in shambles, which is why no longer how much they stretch on for, there is little fun to be had overall. But as a finale bonus, a certain actress is given a rare chance to shine in a brief action flash, only to have her entire scene undermined by how quickly everything wraps up with a lazy

Having already amassed an amazing total of almost \$200 million in a single weekend in the international market, audiences are clearly still interested in whatever story Stark has to tell. He has fared well even before the rest of the Avengers entered the picture, although the quality of his latest outing shows otherwise. Downey Jr.'s contract is reportedly up after this third film. Let's pray, for the sake of Tony Stark's future, that he signs up for as many sequels as possible – as whatever the film's quality is, we can be sure of one thing: Downey Jr. will always be on top of his game.







Free café – 5:30 LIVE BAND





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Tricks of the Trade: Saving on Tech My Voucher Codes

saving you money every day

MoneySavingExpert.com

Maximilian Eggl

When it comes to new technology, it can often feel impossible to keep up with the Joneses. As soon as you've saved up enough money for one gadget, another brand spanking new one will come along and steal its 'must-have' crown.

From televisions to tablets, scanners to speakers - with this never-ending stream of new technology, how is it possible to take advantage of the latest, coolest, most innovative products on the market without being in danger of bankrupting yourself?

Luckily, there are ways to cut back on how much you're spending on tech without compromising a desire for the very best. Here are just a few pointers on how to save money and have enough left over to spend on those gadgets you

Sell your cast-offs

If you're guilty of keeping old phones, computers and USB sticks for the sake of it, then you're missing many a money-making trick! Instead of sticking them in the kitchen drawer and never giving them a second thought, put them on eBay or even flog them at a boot-sale. You might not get that much money for them (naturally the older they are, the less people will be willing to pay) but surely it's still better than nothing? By using old technology as a way of subsidising the new, you'll feel less guilty about having a

Tools like MoneySavingExpert's Mobile Valuer can even give you an idea of how much your current tech is

Instead of sticking your old tech in the kitchen drawer, put them on eBay

Consider refurbished items

Refurbished items suffer from a terrible misconception. Instead of being a straight-forward second-hand product (which people assume to be damaged, scratched and used as a result) they are often restored and revamped to look as good as new. If you're on the hunt for a new-ish product from brands like Apple or Dell, it would be well worth checking out their refurbs; you could end up saving up to 30% on tablets or laptops simply by going down this route.

Search for discounts online

It might seem like a no brainer, but you'd be surprised how many people miss out on a bargain by forgetting to look for vouchers online. For students especially, simply being at university is all you need to be entitled to some money off. It's not just restaurants and fashion either, there are some excellent student discounts to be had on technology, so have a look at voucher websites like MyVoucherCodes to see if you could save on everyday stuff like broadband rates and printer ink.

Avoid expensive repairs

If your laptop or PC has fallen foul to a virus in the past, you'll know how soul destroying it can be - if it were to happen again, you'd probably be willing to pay the earth rather than lose your entire music collection. But is it really worth spending hundreds and hundreds of pounds on a tech-expert? It's likely you won't be the only person to have had the same issue, so why not look at forums and technology websites to see if you can figure out a solution yourself? It might take time and seem like more hassle than it's worth, but if it saves you a bucket load of cash in the process, we reckon it'll be time well spent.

Now get out there!

If you're desperate to get your hands on a new bit of kit, try implementing just a few of the aforementioned money saving ideas - you might be surprised at how much you could save, and just how much you might be able to afford in the long run.

On the hunt for a new-ish product? Check out Refurbs!

Final quality inspection by Apple

The News Bubble

newest, weirdest and most futuristic things around.

Curved TV

LG Electronics have now released the first curved OLED TV for the public to purchase. The fact that it costs 15 million won (£8,725) which is not exactly cheap, and is only availabe in South Korea means that you will probably not be seeing it any time soon. However when it does finally become a bit more affordable as well as globally available, it will promise to bring that 'lmax' feeling right to yout own living room!

Twitter All Mighty

Recently hackers took over the Fox News Twitter account and declared that Obama had been assassinated. While this was (obviously) not true, the American stock market plunged after word reached investors of this bogus news. The Dow soon recovered, but this just proves what a power social networks and unprotected accounts have accumulated.

First Web Page

Cern is recreating the first ever web page to celebrate the 20th birthday of the internet. The aim is to allow younger generations an insight into the plattform that now dominates their life.

The Instagram Act

The government is now considering the Instagram Act. This legislation, which makes new provisions on orphan works (works where the authors cannot be easily identified), easing their licensing and allowing companies easier access for their use. This is not a big step away from online pictures as well, and, as they do fall under the orphan work category, they may be used by anyone. Thus anyone who is heavily involved in social networks, uploading pictures on a regular basis should be warned. You may be seeing these pictures more often than you like.

Facebook Home

Facebook has released a modified Facebook "wrap-around" for Android, which basically creates a Facebook OS. Your Facebook notifactions, messages etc. are directly on your phone and as such Facebook will always be open for you to use and peruse. However some have wondered at the privacy (as always with Facebook), as it seems that Home sends data to Facebook at all times about non-relevant things. Only install if you are a Facebook Junkie and don't care about your privacy!

Tweeting From your Glasses

Yes, Google Glass has been around for a while now, and people who won Google's contest can even test them out. Now the interweb is abound with rumours of a dedicated Twitter app for the shiny new gadget. This certainly is interesting as well as good new for Google, as it not only implies a consumer interest for Glass, but also a will to support it from other companies. It knows that the more apps are optimized for the device the more likely its success will be. However this makes those annoying pictures of food, cluttering the internet, even more easy to take....sigh.

Maximilian Eggl Tech Editor







GAMES

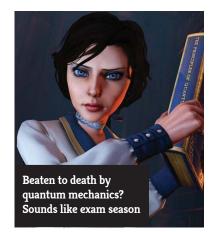
Heads... or tails...?

Ross Webster gives his spoiler-free review of Bioshock: Infinite

he long wait is finally over. After being teased for way over a year, the third game of the *Bioshock* franchise is out. I dedicated a good chunk of my life to the game already, so I think I'm in a good enough place to review it.

I'm going to skip my usual spiel about the history of the series, and just jump into the city of Columbia – the location of *Bioshock: Infinite*'s story. You are Booker DeWitt, a former Pinkerton agent (Pinkertons is a reallife detective agency) who amassed a lot of gambling debt. Given the option to wipe the slate clean by retriving a girl from the city of Columbia, you jump at the chance, and you start playing Booker just as you're on your way to the city.

If you've played either of the previ-



ous titles (*Bioshock*, and *Bioshock* 2) you'll understand how the game aims to have you immersed in the world around you. Despite the prequels being dark and grimy, the levels still had character, with signs of recent life all around you, in the tight underwater confines of Rapture. *Infinite* not only takes a leaf from this book, but turns the whole page over. No longer stuck in the claustrophobic and abandoned world of Rapture, you are catapulted in the vibrant and living world of Columbia, the city above the clouds.

Kids are playing in the street, couples lay down in the grass with their picnic set – this is a world that, instead of simply using audio recordings to create the history and personality, uses the inhabitants to charm you.

As soon as you emerge in Columbia, you're presented with one of the main themes of the game. This time, there is no industrialist who builds a city to drive his capitalist views, instead you have a prophet who created a haven in the clouds, to save his devotees from the sodom below.

Soon, you're faced with vigors (the new term for plasmids), the comedy duo and of course, racism. Tasteful, historically accurate racism, but still, I'm surprised how they got this through the censors.

You soon find your ward, Elizabeth, and then it's the.... uh.... simple... task of getting back to the surface. Thankfully, Elizabeth has the ability to open

'tears' (rhymes with bears, not beers) into other dimensions, allowing you to bring in automated turrets, weapons, allies, etc to the fight. Luckily, you're not the only thorn in the prophet's backside, as a rebellion, led by a group known as the Vox Populi, is wreaking havoc across Columbia.

Combat is the same as Bioshock 2 left click fires your weapon, and right click uses your plas.. vigor (dammit, every time). There's a wide selection of weapons and plasmids to suit your playstyle, along with upgrades to both, so that's all fine and dandy. Travel in Columbia is a bit of an issue, when it's made up of floating platforms. You can't really have a lot of associated risk, each time you want to move around, so you use the skyline instead. Imagine railway tracks that float in the air, and you luckily picked up a set of train wheels right at the start. Oh, that reminds me - melee is back and is as brutal as ever - this time, you get to smash faces in with your skyhook, and if you're feeling particularly stressed out, you can execute your opponents in beautiful visceral detail.

Many people feared that you would be having to rescue Elizabeth again and again, *a la* clichéd escort mode, but she can take care of herself, and spends her free time rummaging through rubbish to give you extra ammo and money. In fact, she puts way more effort into this relationship that you do.

Further affirming Webster's First Law of Gaming, adding hats makes everything better. You've got four inventory slots that can have different types of clothing, that all grant different traits and abilities. Think of them as the new tonics.

There's not much more to say about the game, without me mentioning specific areas, moments, fabulous hats, or parts of the storyline. Trust me when I say that you'll want to enjoy your time working through Columbia on your own, rather than having me spoil everything for you. I see something new each time, and the detail put into the world is incredible.

I truly love everything that *Bioshock: Infinite* has to offer, and I cannot recommend it highly enough. I would wait for your exams to be over first though – I don't want to be held responsible for any more failing grades. Chin up, they'll be over soon.



Random acts of kindness – from the desk of Ryan

Andrew Ryan Every day I'm splicin'

Dear Mr Rvan.

What makes a person kind? Why do some people reach out and help others even if they do not know them well, whilst others do not reach out even upon being asked? I don't understand what creates this difference in people; is it a question of a difference in nature and nurture?" -Jill

Dear Jill,

No-one is born good, and no-one is born evil. Instead, we are all born greedy. From birth till death, the human race is an animalistic force. Everconsuming, its hunger never satiated, not a thought of conservation crosses its mind as it depletes the world around it. Evolution has forced this situation.

Nature teaches us to only care for those who share our genes - the goal

being to propagate *ad infinitum*. Society brought guilt and kindness to men. Both traits are seen as a sign of weakness by the parasite. "A free meal." they say, as they take food with one hand, and hold a dagger in the other.

Today, children are taught by bloated and corrupt governments, that they should be kind, and that they should help others. The men in the church teach children to kneel, and to treat others as they would want to be treated themselves. Neither teach children the irony of the real world, and the perils of naivety and sloth.

The world has changed since our ancestors left their caves, but not by much. Those who offer help to others, do it not from the goodness of their own hearts – their motives are cloaked behind their smile and outstretched hands.

Regard the beggar on the street. Nature is forcing him to live. Nurture is

making him expectant of aid. It is not nature's fault that he has no job, and is a leech on society. That is the fault of nuture.

Why would someone offer aid to this man? Political gain? More power in the shadows? Of course, many will claim that they do it, because they feel like a

better person afterwards, or that their god commands it. If someone believes that their god is going to reward them for handing out a blanket, then they are the one requiring help.

Maybe there are selfless people within this world, but they wil be too busy dreaming about their altruistic utopia, to ever act.

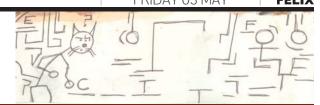
Thanks Mr Ryan! If you have any questions for Mr Ryan, please do not hesitate to email **felix.games@imperial.ac.uk** with the title "Ask Andrew", and we'll pass them along to his people.



FRIDAY 03 MAY

HANGMAN





the Week

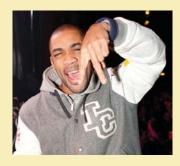
Immortal Technique: "Harlem Renaissance"



day, like watchin' a porno on 56K"

Wow. Really, you're going with that as the simile there? Isn't there a load better things to say than that surely? You really would think that before recording this and putting it out there you would stop, listen, and realise it's going to make you sound like a massive nerd.

Wiley: "Heatwave"



"I wanna see an ice cream van on the road"

What are you ten? That's definitely not gangsta to want to see an ice cream van, unless it's some amazingly convoluted terminology that actually somehow means something selling drugs. It's not though. You just want a 99p, which probably costs like £1.20 nowadays. Fucking inflation.

Do people laugh at you all the time?

Really?

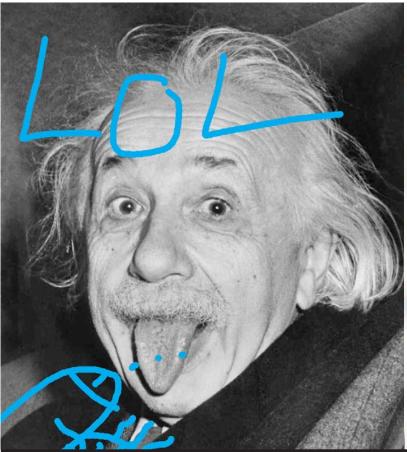
Well you're probably funny (looking).

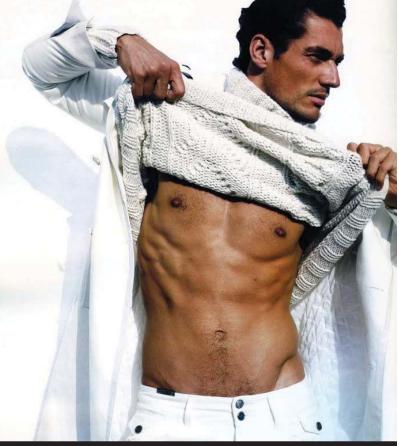
Anyway... Send stuff in: felix@ imperial.ac.uk

Rap Lyrics of the Week Snapshat

Everyone uses wishes they used Snapchat for sexting

You just send a quick photo of yourself and it appears for a few seconds then deletes. Amazing! Nothing can go wrong! Except if someone just takes a photo of their screen as you have no way of knowing they did that and no way of deleting the photo. Well, now you're paranoid, read the photos you will and probably won't receive on Snapchat.





If Einstein were a student today he'd probably be sending this to all the Physics LADS. And, of course, the classic torso shot.

Photos you will get

- 1. Various in-jokes from your friends. Most likely just the first thing they see when they're bored.
- 2. Strange, awkward attempted flirts. Of course there will also be the creepy guy who sends you some weird, flirty messages that are completely unwanted. Much like an unwanted Facebook inbox message, it's a cautious game pretending that you didn't see any photos from people you don't want to talk to. The secret to Facebook by the way is stealth. If you just put on a well place email notification, you can read it in your emails and then draft a reply. Then, when you send it, it looks like you've just managed to come up with some witty off the cuff remark, when really it's a carefully honed, thoughtout message. Secret to Snapchat: "Oh, shit, yeah, I must have been distracted and didn't see that photo of how hairy
- your knee is.
- 3. Photos at about 1am from a drunk friend that you know definitely now fancies you. Think of it as basically a step above drunk texting. As if it needed to get any worse, now you send a photo. Oh well, at least the evidence deletes itself after being briefly imprinted on your retina.
- 4. A classic "me with my mouth open with a penis crudely drawn onto the picture". Inventive.
- 5. Very soon, probably, some kind of spam. Along the lines of "date people now! Singles in your area."
- 6. An irritating amount of selfies. Hopefully without the arm still in
- 7. None that you think: wow, I really wish this was on Facebook so I could see it again and again...



Photos you probably won't

1. Any form of actual sexting. No really you probably won't. In fact, a study of 1 trillion people found that 0.00000000000000000000000001%of all photos sent are actually people stripping off. Of these 0.000000000000001% were women. Essentially, it's like one of those dating agencies that says that it is in trouble

as there are "too many sexy singles desperate for a date in your area". Most of the naked photos were men sending it to their mate as a joke. Admittedly, this study was just entirely made up on the spot just now, but the point still completely stands 100%. No, wait:

Anyway, what would even be the point. By the time you've unzipped your flies your snap has already been deleted. Unless you have some kind of superhuman masturbatory technique (which, as you are at Imperial let's assume vou probably do/will develop over the exam season) you're probably going to be a bit slower than about 10 seconds. If you want to do that why not just use the regular webcam? If they are also making themselves a bit more comfortable it'll be pretty hard to actually film you (as is presumably your worry). The morale of the story: just use a webcam people. So much





HANGMAR

THE NEWS WITHOUT THE NEW



ACCIDENT AT FISHING NET PLANT TRAPS WORKERS



NASA SCIENTISTS CRITICIZED FOR LACK OF SCROTAL DETAIL ON PENIS DRAWING

SUMMERSCOPES – HOROSCOPES, BUT HOTTER





This week you are too skint

to buy condoms and substi-

tute with a trusty sheep in-

testine. But it splits, coating

her sheets in semi-digested

grass. Not to worry though:

you bite into your overdraft

and split both the cost of her

laundry and the morning af-

ter pill: you are a true gentle-



can lick your own genitals! But

frustrated by the lack of adult

TV aimed at canines, you set

up your own post-watershed

channel. The evening sched-

ule warms up with leg-humping

and bum-sniffing, and moves

on to leashes and collars as the

night goes on Mmm bestiality.



This week you need metre-long

lines of caffeine powder to get

you through revision, and la-

ment that you have neither the

time nor money to swap it for

something stronger. It will all be

worth it when you have that city

salary though, and your stuck-

up children will enjoy the hedo-

nistic lifestyle you have been



This week you find a sneaky

way of arousing yourself in

the library without the social

stigma associated with watch-

ing porn in public: Harry Pot-

ter fan-fiction. Reading about

how Draco and Hermione sati-

ate themselves in the Room of

Requirement really gets your

juices flowing while you study



This week you go to the STI

clinic (as a responsible sexu-

ally inactive Imperialite) and

confidently take the swab to

the bathroom. But then it is

miraculously sucked into your

womb, where it grows into a

mucus-covered cotton-wool

baby. Congratulations, it's a

girl, and her first word is 'chla-

mydia'. You must be so proud!

This week you and your secret crush are on a desert island, and the only 2 humans left in the world (score!). You get together to save mankind from extinction but realise that your children would have to copulate to propagate the human race. An end to humanity or incestuous children: you decide...



This week you are not ready to penis in your anus for life.



This week an exciting-looking neighbour lives on oblivious.



so cruelly denied.

This week you see how long you can grow your pubes. You lovingly condition them with nutritious oils and lotions, even caressing and singing to them to coax them to grow. But they become shy with all the attention and pressure, and curl up, becoming horribly ingrown. They become infected and everyone thinks you have an STI.



fluid dynamics

This week you really like someone but are too shy to say it to their face. But while you're being cowardly, they hook up with the girl next door and you hear them having sex every night. You develop voyeuristic tendencies to patch up the heartbreak, but are eternally devastated it's not you on the other side of the wall.



This week you must choose between having paperweights clamped to your genitals or nipples in place of nostrils. The heavy hanging paperweights could make your penis longer, but wouldn't be so ideal for labia. The nipples would be less uncomfortable but lactating snot could hinder your credibility. What's it going to be?

This week you lose the ability to identify with people, and are only able to empathise with bikes. Your sleek, carbon fibre frame whispers that you must do anything it takes to promote the noble sport of cycling. In your desperation to keep it happy you alienate your friends, ending up with

only its tribars to cry on.

lose your virginity yet so turn to anal sex as a hymen-preserving alternative. But the digestive remnants coating your back passage react unprecedentedly with your partner's ejaculate, immediately turning to a dried superglue-like consistency and cementing his

parcel addressed to your neighbour arrives through your letterbox: moral dilemma. You ignore your conscience and open it, but are devastated when it later turns out to be anthrax spores. You die a regretful and self-sacrificial death, while your would-be assassinated 28 FRIDAY 03 MAY







The final frontier... Coming soon.

The numbers in each row and column tell you how many groups of black squares are in a row or column, as well as how many black squares each group is made up of. Filling in the grid produces a pretty picture, which in turn produces points if you send it in, so get solving!

	3 11	12	9	5	4 7 1	2 9 1	1 3 1 4 2	2 4 3	1 3 1 2 4	2 6 4	4 5 3	5 3 1	4 4 1	2 12	7
3 3 3 3															
616															
5 3 3 1															
4115															
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Little teaser

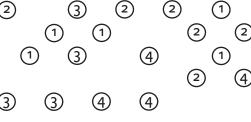
Are you good at spotting patterns? Here is one I have seen people struggle with:

3 What are the next two rows?

13
1113 Next line with last terms solutions if you

3113 want a clue

Hashi



2 6 5 4 5

2 4 2 1 2 2 1

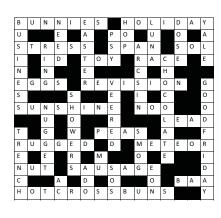
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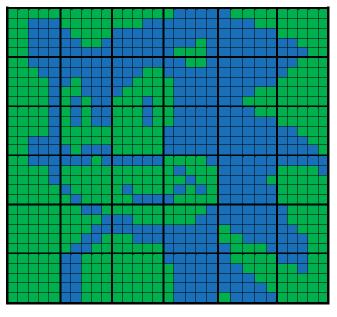
2

1 2

Connect all the islands with bridges so that you can get from any island to any other one. There are restrictions, though: the bridges have to be either vertical or horizontal and they must not intersect. You can have up to two bridges between any two islands and, last but not least, each island must have exactly as many bridges stemming from it as the number on it.

Solutions from last term





Teaser Hint: Next line 132113

Draw a single closed loop by vertically and horizontally joining the dots so that the numbered squares are surrounded by the corresponding number of lines.



unionpage



Nominations open now for The Union Awards



The Union Awards serve as recognition for individuals who have made great contributions to the Union and their fellow students during the academic year. The Awards have been tradition for a long number of years, and the tradition continues this year. If you know anyone who deserves some recognition for their involvement in the Union, nominate them for an Award!

There are four awards for students: Union Colour, Outstanding Service Award, Imperial College Union Fellowship and Imperial College Union Fellowship with Distinction. Recipients are presented with their Awards at the Union Awards ceremony on the 13 June.

Nominations are open online until Friday 31 May through eActivities (eactivities.union.ic.ac.uk). Help someone get the recognition they deserve for their contribution to the Union.

imperialcollegeunion.org/unionawards

Ease the exam stress with Stress Less



We know that exam time can be very stressful, so much so that you list it as your biggest single issue as a student at this time of year. Stress Less is a range of events and activities aimed at giving you a moment to destress during revision and exam time.

From a petting zoo and bouncy castles on the Queen's Lawn, to free open air lunchtime exercise classes, we can help get rid of your exam stress. Also, look out for our destressing masseuses giving quick relaxation hand and back massages in the library. We want you to also share your great revision tips with your fellow students using #icustressless.

imperialcollegeunion.org/stressless

Idea Days 2013 - help us make your Union better



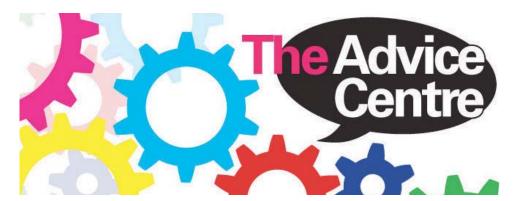
Our Idea Days are designed to get your input on the Union's draft Strategic Plan, so that we can create a final plan for the organisation to work from for the next three years. We will be asking for your opinions on a wide range of issues to find out what's important to you as a student at Imperial College, and how we can help you get the best of your experience, both during and after your time here.

Our first Idea Day is on Wednesday 15 May, Sherfield Foyer, South Kensington campus. Details of Idea Days on other campuses will be coming soon.

In the mean time, you can give your feedback online on each of our Strategic Themes. All comments we receive will help us inform our Strategic Plan and ensure that it fully caters for all of our members.

imperialcollegeunion.org/strategy

Free Sexual Health Clinic next week



Imperial College Union has a free sexual health clinic run by the Terrence Higgins Trust, on Thursday 9 May, 11:00 – 16:00. This clinic will offer chlamydia, gonorrhoea, and rapid HIV testing, condoms, and advice. The clinic is open and free to all students regardless of age, gender, study type or country of origin.

To book a slot, please come to East Wing Basement in Beit Quad from 10:30 where slots will be allocated on a first-come, first-served basis. We will release extra slots at 13:00 for those unable to attend at 10:30.

For more information please contact our Representation Coordinator, Zoe Richardson (z.richardson@imperial.ac.uk).

30 FRIDAY 03 MAY FELIX

SPORT



discDoctors scoop podium finish at Nationals

Imperial's Ultimate team ends the season on a high in Nottingham

Andrew Moss

Ed Parker

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On the 20th April, Imperial's Ultimate Frisbee team – the discDoctors – took to the fields in Nottingham to compete against the country's top clubs at Outdoor Nationals, the highlight of the competitive calendar for university Ultimate. Battling it out across two days of intense competition, the team found their feet after a sluggish start to secure an impressive third place in the tournament's second division.

Having endured subzero conditions to earn their spot in the competition at the south-east regional qualifiers in March, the team was surprised to be greeted by warm sun and little wind to speak of - ideal conditions for quick and competitive Ultimate. After a disappointing loss to Newcastle in the opening game, Imperial soon got over their early jitters to brush past a spirited Bristol team. With intense manmarking in defence combined with incisive and flowing attacking play – particularly from David Pryce and Stephan Rossbauer – the team put on a ruthless display, recording a convincing 13-7 victory.

The final group game saw Imperial

take on a well-drilled Nottingham outfit in their most physical encounter so far. The game even saw the team's first casualty of the tournament, as Ashley Hemingway tore two ligaments competing for the disc, leaving him on crutches for the remainder of the weekend after a hasty trip to A&E. Despite losing out narrowly in a hardfought contest, the discDoctors had done enough to secure second place in the group after other results fell kindly. This left old foes Portsmouth, who Imperial had recently edged past in a tense encounter during regional qualifiers, standing in the way of a place in Sunday's quarter-finals.

Now in their fourth game of the day, Imperial really started to come into their own against an opponent that struggled to keep up with the pace of the game. The discDoctors raced to an early lead, thanks in part to an unstoppable performance from James Threadgill, and displayed calm and clinical efficiency in attack to finish with a 9–5 win. Battered, bruised and – in some cases – broken, the team had booked their place in the top eight.

As the wind picked up on Sunday morning, Imperial adapted well to the new conditions in their quarter-final against a Glasgow team that was so far undefeated in the competition. Blistering pace from captain Phil Sandwell and a towering performance from Matthew Okenyi helped the team secure an 11-6 victory, and left them just one win away from a coveted place in the finals. With the team's momentum gathering, however, they finally met their match in the form of a ruthlessly organised Limerick side. The Irish team employed a zonal marking system that put a lot of pressure on Imperial's throws in the increasingly breezy conditions. Despite hard work from Pryce and Rossbauer, and James Ward's unending commitment to putting his body on the line in defence, Limerick's tactical prowess proved too much for the team. The Irish side went on to lose narrowly to Nottingham in

Imperial had little time to dwell on this disappointment as they faced up to St Andrews in the 3–4 play-off. The bagpipe accompaniment provided by their Scottish opponents lent the final game of the weekend a suitable element of grandeur, and both teams seemed determined to finish the tournament on a high. Although St Andrews drew ahead as the game wore



on, another remarkable display from Threadgill (who only seemed to get faster as the weekend went on), combined with several diving blocks from Rossbauer, helped Imperial draw level and eventually edge their way onto the podium in a sudden-death finish.

While the tense encounter had brought the weekend to a fittingly dramatic conclusion, the aches and bruises are likely to last well into the summer.

Cycling through the pain

James Dixon

Sports Writer

Friday, 18.00. Set off from College in the minibuses. Painstakingly prepared genre-based mix tape 1 out of 6 'Reggae' wobbling out from Transit subwoofer to minimal enthusiasm from backseat passengers - requests for Kraftwerk's 'Tour de France' soundtrack pouring in thick and fast from Sioni. Halfway along the A40 in gridlocked traffic, we realise we've left Cyprien behind. After a quick phone call, he forgives us and tells us to keep going so we batter on. This remarkable change from everything going to plan to everything going tits up, only to revert back to going to plan some time afterwards would set the pace (at about 45 km/h) for the weekend.

Saturday, 02:00. Arrive at mountain hut in the middle of nowhere, Wales. After being warned of 'low outside temperature' by the van's sweetly humanitarian dashboard display, we could confirm for ourselves

that it was right nippy in that hut. After what felt like lying down on a wooden board for about four hours being woken up periodically by some smut or other from Will and BTB in the Presidential Suite, we got up to put Lycra on, eat hot bacon & beans and get outside in what turned out to be glorious sunshine. The first day of riding was one of the best rides I've ever been on - and I think all others could say the same. 65 miles of curving, smooth roads up some of Britain's best climbing roads in perfect cycling weather - sun out, no wind. I'm told the MTBers also had an amazing time walking through the ice up the tallest mountain in Wales with bikes on their backs. But then, I guess what goes up a mountain gets to come down pretty quickly - so fair enough. That evening, due to a packed-out pub in a little Welsh railway village (the only one for miles around), we had hot steak & ale pies on an ice-cold picnic bench outside. The waitress kindly turned a blind eye to us using the placemats

as arse-mats, an action which for me deserves a Michelin star in itself. Get back to hut, 2 lads sick into bog after perilous descent down trapdoor ladder (off beer? Too much beer?) and a good night's sleep for more riding in the morning.

The second day was to see things going pretty far from the original plan. Roadies jumped at the chance to be able to do a real A-to-B étape, taking in 60 miles of big hills via Lake Bala before arriving at the Coed-y-Brenin Trail Centre where we would meet our knobbly-tyred brothers with the minibuses to head back to London. About 15 miles from the finish in waning daylight and gathering cold, unfortunate events and the kindness of strangers would change the face of the Cycling Club, for at least a week or two. A crash involving a fractured carbon fork (!) on a cattle grid would leave the injured Tom, a broken bike and about 7 or 8 lads huddled on bleak Welsh moorland while me and Dan race after a Welsh man in his car we spotted a few miles down the road. Upon telling him what had happened, the kind old man drove back up the mountain to rescue Tom (and Josh for company) to drive them to the Trail Centre in order to be 'transferred' via Iain's car to the hospital. We all owe him for doing what he did, and I owe Josh for this story: the 80-something year old would complain about the sun in his eyes only to reject Josh's offer for the use of his cycling shades in favour of his own Tom Cruise-style Aviators. Just goes to prove, you're never too old to look daft.

The rest of us set off, leaving the broken bike on top of the mountain to be collected/worried about later. The delay of the crash had seen it get darker and the batteries on our GPS run out. Confusing Welsh town names and wiggly roads meant we soon got lost. We stumbled upon a house. Asked for directions, a man obliged, we set off. As I was turning the cranks round their first revolution on the way home, the chain snapped clean down

through a link. After swearing had stopped and the air had de-misted, I went back to the house to ask the man for a lift. Again, credit to the generosity of old Welsh blokes, he drove me the 5 miles (with my bike safely in the back of his car and the other lads in convoy) to the trail centre. In the car, he told me his name was David Lloyd George. Maybe he was having me on. Maybe he wasn't. A couple of hours and several stitches later, Tom was safely out of hospital and we had the minibuses stoked up to go take him – and the rest of us – home.

Monday, 02:30. Back parking the minibuses behind the library in an eerie Sunday-night-feeling campus. All in all, a fantastic trip combining the best of cycling and going to the pub, despite the crash it was amazing watching the solidarity of the club come through in tough circumstances and credit is due to everyone there. Feeling of relief. But then, as if it wasn't inevitable enough: "shit, we've left Mihai!"



SPORT

Women's Handball victorious in France

First and Third place for Imperial

Samuel Giles

Sports Write

As the plane door opened, the cold French, garlic and baguette ridden air hit us. We knew the challenge, to go to the French engineering university championships and beat them at their own sport, handball.

We brought with us four sides, two men's and two women's, all with high expectations. The men were defending champions and the women had a very strong squad. Upon arrival we received typical French hospitality as we were shown to our accommodation. It was minus seven, and we were to stay in tents. The next morning the inside of all the tents were frozen and we were more than a little chilly.

All four of the teams progressed smoothly through the morning's group stages, posting some impressive results, with both men's sides topping their groups, and both women's qualifying for the quarter-finals.

Here the men's run came to an end. The seconds were drawn against last years defeated finalists Central Paris, and the firsts against the eventual champions, Central Lyon. Despite courageous efforts, both were

knocked out.

The women however fared much better. The second team faced Central Lille and advanced comfortably 11-8. They were to then play the winners of Imperial 1st against Central Lyon Alumni. It was a truly nail-biting encounter with team captain Rebecca Pfistner providing a commanding performance. The match ended 6 apiece after extra-time, leading to the dreaded penalty shoot-out. Red Elmahdi was heroic in goal, saving 3 of 4 penalties and helping to ensure safe passage to the all Imperial semi-final.

Both Women's sides were particularly strong this year and there wasn't much to pick between them. It was a terrific encounter and was desperately close. The second team scored in the dying moments to seal a memorable 10-9 victory and receive a place in the final. The first's won their third place play-off to ensure Imperial would have two teams on the podium, but the final was left to the next morning to decide the champion.

The girls met Central Lyon in the final. The first half was a tense affair and the game was locked at 6-6 at the interval. However in the second half the women produced a truly dominating



performance to win the match 13-10 and so claimed the trophy.

The weekend was a great success for

Imperial and capped off a successful year for the club. At least one team has been on the podium at all three differ-

ent competitions we entered this year and we are looking forward to the next tournament in Lille in April.

Bridge team wins University Bridge Championship

Jorrit Schafer

Sports Writer

The Imperial College Bridge society was shut down a several years ago but after some convincing the Imperial College Union decided to give us another shot and the Imperial College Bridge club was up and running again in 2010. Our sport once again had a dedicated club at our university (and yes, it is a sport according to the IOC!).

With a very good turnout at Fresher's Fair and our first session of term, we were eager to prove ourselves as we entered in the Portland Bowl (British University Championship) in 2010. We managed to reach the finals that year, which we lost to Oxford. Despite the loss we were all very happy to have made it to the finals, something which no Imperial team had done so far since the tournament started in the 1980s.

This year we entered the Portland Bowl again for the 2012-2013 season and immediately drew a strong Cambridge B team for the knock-out qualifying rounds. We managed to beat them by a small margin only to find out our next round opponents were Oxford A, who kicked us out of the tournament last time! This was a bit of a grudge match but also a very important one, the winner would advance to the Top 4 and a chance to play at the famous Portland Club in Brook Street. Our team played solidly and pulled off a convincing win against Oxford!

Last Saturday we headed to the Portland Club for our semi-finals match against Cambridge, which has won the Portland Bowl more than any other team. It was a slugfest the entire day with points going back and forth but the overall scores remaining very close. At the end of it we were ahead by 4 IMPs (with over 100 IMPs having been exchanged). But this score was still subject to change as Cambridge had appealed two tournament director rulings which were still being processed. If Cambridge won both those of those appeals then it would be a tie, meaning we would have to play another 6 boards for the tiebreaker. Fortunately for us they lost both appeals and we could get some rest before the finals on the

On the day of the finals we were playing very strong Edinburgh team with players from the Scottish Open and Womens team. They had beaten LSE in the other semi-final by quite a large margin, so this was definitely not going to be an easy match for us to win. Interestingly, neither Edinburgh or Imperial College had ever won the finals of the Portland Bowl since it started in 1984 so either way this year's winners would be writing history.

We were trailing for more than half of the match and at the end of the 4th set we were behind 15 IMPs. While this was not an insurmountable lead, we were running out of time with only 2 sets to go and needed something good to happen. That is exactly what happened when we had a monster of a 5th set and went from 15 IMPs behind to a 29 IMP lead going into the last round. Edinburgh managed to cut down on our lead by quite a bit but not enough, the final score being 126-118 in favour of Imperial College!



Issue 1545



Fresh powder in the Arcs

Lizzy Griffiths

Friday 22nd March brought more excitement than the usual end-of-term celebrations for 48 of Imperial's snow enthusiasts: we were heading to the French Alps for our Easter ski trip. BUSC Main Event, organised annually by the British University Snowsports Council, is a week full of competitions, après events and drunken antics attended by 1,500 students from the UK, and this year - hosted in Alpe D'Huez – promised to be as crazy as

The long coach journey passed surprisingly quickly with the combined effect of alcohol, high spirits and sleep deprivation/induction, and soon we were in the resort, stocking up on pasta and cheap booze for the week ahead. Craving release from the confines of reclining seats, we unleashed our wild sides with our first fancy dress theme: animals. From the conventional slightly slutty leopard print to a penguin complete with a startlingly realistic blacked-up face, we gathered around our watering hole to enjoy games of Arrogance and 20+1 (and less conventional variations). In what would prove to be a theme for the week, we were chased from our room with noise complaints from angry French residents/BUSC reps, and

fled into the night to seek the relative safety of the town's bars.

Despite night-time disturbances from the furious and incoherent penguin, most of the group was up fresh-faced and buzzing for first lifts on our first day tearing up the slopes. The Gods of Pow had looked favourably on us: fresh powder at Easter is a rare treat, and what powder it was! Our skis and boards were barely tainted with slush or ice all week, and the snow at the top of the mountain was as perfect as the view. We toasted the first day's success at the Après-bar, where we could be found most evenings enjoying vin chaud – a pursuit even more enjoyable in the sunshine of the following days.

Evenings merged into nights with more drinking, drinking games and fancy dress. There were some truly inspired costume ideas for Wednesday night's bad taste theme at the midweek party, where a rogue priest and his disciples spent much of the evening drumming up support for their society. We also dominated the bar on the last night with displays of nudity that most Metric-goers could only dream of. Night-time entertainment never finished when the bars did, though. Expeditions to the only kebab shop in town open at 3am were numerous, while back at the hotel attempts to dampen spirits by reps and



weary roommates alike were met with serious resistance. Alcohol and adrenaline can often bring out the best in people, though not in the case of one half of the notorious John duo, whose keenness to get the first lift one morning began with putting his ski boots on at 4am.

As well as busting Imperial's reputation for being boring by winning the prize for most noise complaints, we put up an impressive show for the serious competition side of the week too, with competitors representing the club in many ski and all snowboard disciplines. Resident Irish badass John even managed to nail the freestyle event with fresh stitches in his shin! Thanks to some spectacularly gnarly tricks from the current (John) and future (Mikkel) Presidents, Imperial had two top-10 finishes in the Shred and Butter competition, and top-20 finishes in the Slopestlye. We also stole the show at the Red Bull 1976 Winter Olympics Games revival, where dark horse Will performed a back-flip on blades, securing the team 3rd place for 'initiative'. The nationallevel standard meant that competition was incredibly fierce, and though we didn't place in the racing this year, we had a strong turnout and hope to build on the progress that race captain Michael has been tirelessly working for at next year's event.

As the rest of the week raced by, acquaintances became friends; tomato pasta was usurped by meat/cheese fondue; snowploughing skis became parallel; library-induced pale faces were replaced by peeling goggle tans/ burns; and ridiculous quotes became in-jokes (cue 'I'm so horned out like'). Before we knew it, we were scrubbing away the last beer stains from our rooms and reluctantly dragging our sweat and snow-drenched luggage back to the bus. The journey home was a subdued affair, though fortunately certain emotional group members managed to hold back previously shed tears for the sad inevitability of leaving the mountains. We will be back next year, les Alpes: absence only makes the heart grow fonder.



