Welcome to this week’s newsletter! This week we welcomed Ofsted in to inspect the quality of provision across the Academy. Jo Spencer, our Interim Principal has given more details below.

We welcomed Ranjit Sond, a solicitor and President of the Society of Asian Lawyers as part of the Speakers’ Programme. He shared his journey to his role and spoke about the BRIDGES qualities one needs to be a successful solicitor. I was particularly struck by the quality of questions that the Y12 students had prepared in advance of this talk, including asking Ranjit about his thoughts on the work life balance within the legal world, improving diversity within the legal profession and the Brett Kavanaugh vote in the USA.

Our Y12 Giveback programme begins this week. We are really looking forward to seeing our Y12 students continue to develop their work readiness skills and contribute to the INA and wider community.

Our Sixth Form evening takes place tomorrow night. Doors open from 5:30pm. We very much look forward to seeing you then! With best wishes,

Ms Alibhai
Vice Principal and Head of Sixth Form

Last Monday, Ofsted announced that they would be inspecting INA on Tuesday and Wednesday of last week. We were pleased to welcome the team of six inspectors who were looking at the quality of provision and outcomes from Reception to Year 13.

I would like to thank all of the parents who completed the Parent View questionnaire, our staff who all worked so hard over the two days, our students who made us so very proud, and our governing body and Ark for their support. We will share the outcome of the inspection with you when the report is published in a few weeks’ time.
My Education Journey...

Q&A with Mr Simpson, Teacher of Maths

**Q:** Which A levels did you study?
**A:** Maths, Physics and Classical Civilisation to A level. I took Further Maths to AS and I think I did AS Chemistry, but I can’t actually find any evidence for this!

**Q:** What made you take so many subjects in the first place?
**A:** They’re all Maths, which I love – I was going to take Biology but they made me write an essay in the first week so I dropped it. I took Classical Civilisation because I love Greek myths, and despite the essay-writing required, I did manage to get a C!

**Q:** Which universities did you apply to, and why?
**A:** Leeds and Birmingham – and I can’t remember the others. I did apply to a Scottish university to do Computer Science, but I didn’t follow through with that. I applied to Leeds because I heard it had a good night-life.

**Q:** Which university did you actually go to? Why?
**A:** Leeds. It was my first choice and I got offered a place, so why not?

**Q:** Which degree subject did you choose? Why?
**A:** Psychology. There were a number of reasons for this – mostly it was because I wanted to hang out with fun people rather than the Maths students who seemed to be very boring. I didn’t have a great maths teacher at A level, so in the end I don’t think I was challenged enough and that, in turn, didn’t lead me to want to pursue maths any further. I went to a school which didn’t really encourage us to excel which meant most of us did not achieve as highly as we could have.

As for why Psychology and not Maths… I thought Psychology was a bit cool, it had science in it, with a bit of philosophy, and I thought it would be quite interesting.

**Q:** What was the best thing about doing that course at that university?
**A:** The other Psychology students were good fun and turned out to be great for networking with other students who were also good company.

**Q:** What made you become a teacher?
**A:** I love kids and I love maths. Maths is my passion and I want to pass this on to the next generation. I want students to be taught by someone who can push and challenge students better than the teacher who had taught me Maths. Also I didn’t want to work in an office.

**Q:** Is there a decision you made that you are particularly happy about in retrospect?
**A:** Going to university – because when I got my results I had a serious think about whether or not to go to university or just to get a full-time job. Making that decision has completely altered the course of my life.

**Q:** Is there a decision you made that you regret in retrospect?
**A:** Doing Psychology. I should have done Maths.

**Q:** What message would you want the INA Sixth Form students to take away from your experience?
**A:** Don’t choose a subject to study at university that you don’t know anything about and aren’t really interested in. Don’t be influenced, either, by the kind of students who have opted for that course, you can socialise with people who aren’t on your course in your free time!
How I achieved the British Science Association’s Gold Crest Award

written by Reuben Harris (Year 13)

During the summer I spent four weeks on a placement at UCL that had been awarded to me by the highly competitive Nuffield foundation placement programme. This was not just any placement however, and was a lot different from what I expected it to be. I worked in an engineering lab at UCL where PhD students and professors work on projects. Throughout the whole four weeks I could not believe the amazing opportunity that had been handed to me and I am shocked even now, I was chosen out of so many for such an incredible opportunity.

During the four weeks I worked with Professor Dr Grau-Bove, known for his work in engineering and sustainable heritage, to develop a new type of device that could change the way we monitor pollution. I was just about able to hide my excitement as Dr Grau-Bove informed me I would be working on a multimillion pound project in a state of the art lab, starting off a project that could impact the world in such a positive way, before handing my ideas over to his team of researchers. This is definitely one of the best things I’ve done in my life to date and although it there was a lot of hard work involved, it was a lot of fun.

As Dr Grau-Bove described it, I was essentially undertaking PhD-level research at the age of 17 before even completing A levels. It was amazing to be part of such an interesting project, the physics of which were so intriguing. I learnt an incredible amount in those four weeks which will give me an advantage when I go to university as gained skills such as how to use computer-aided design software (CAD) and Excel applications that will be invaluable when I undertake an engineering degree next year.

Following this project I had to write a detailed report and I was advised my project was eligible to be sent off to the British Science Association in the hope of getting a Gold Crest Award - an award that would look particularly attractive on my CV and personal statement for universities and future employers. I was not very optimistic that I would get awarded such a prestigious award and submitted my award more in hope than expectation, so I was both surprised and delighted to have been informed of my success.

This placement was incredible, when I saw that it would be 4 weeks long I thought it was going to be too long but it flew by and I enjoyed every minute of it and it has been very rewarding. Following this I definitely want to study engineering (mechanical) at a top university such as UCL and even go on further to study a master’s degree and get a PhD (yes I am very ambitious!) having already working in a PhD lab working like a PhD student. My dream is to be part of a major engineering project that can have a positive impact on the world and the way we live- something I hope I have already helped achieve at UCL.
As a result of my success I have been asked to share my project at a poster gallery in central London where I will be presenting my project in front of fellow students from across the country who have done all types of STEM placements, through the Nuffield organisation such as mine which was found by our study centre supervisor Ms Joy (thank you so much Ms Joy!) as well as professors and scientists from around the world. I am the only student that has been chosen to present my project so I am very excited (and nervous!).

I hope I already have, and will continue to, proudly represent the INA community and my family at this event for something I have worked so hard for and am so proud of. I would like to thank all my teachers for their support and for inspiring me to take on this unique challenge. Below is a snippet of parts of my report and pictures of how my project progressed throughout the four weeks.

This project was about creating pollutant monitors that were easy to make, affordable and sustainable. Currently pollutant monitors are only used effectively in major cities such as London and Paris. This is because pollutant monitors are very costly, therefore the aim of this project was to provide affordable pollutant monitoring. The answer that Dr Grau-Bovemy mentor came up with is using pollutant monitors which are known as Diffusion-Regulated Aerosol Concentration dosimeters (DRAC) that can be used anywhere around the world and later analysed in a lab. The 3D printing technology required to create these devices is very recent and now we have the technology, 3D printing could become incredibly useful in the way the world monitors pollution. It does not matter whether an area is in a LEDC/NIC/MEDC, the idea of this device is that all that is needed is a 3D printer to create this device, which is a lot cheaper than the current pollutant monitors being deployed.

You might ask why the need to monitor pollution in the form of particulate matter? The main focus of the project was for museums, galleries, libraries and archives, as well as historical palaces and houses, where valuable pieces are stored in urban areas with an ever-changing urban atmosphere. These valuable pieces can be badly affected by the particulate matter, deforming from its original state. Moreover, Particulate Matter (PM) has also been known to have effects that impact on human health negatively. These effects include: heart or lung disease, heart attacks, irregular heartbeat, asthma and decreased lung function.
The section of the project on which I was working was focused on creating a new device to monitor pollution in the form of particulate matter. I was asked to design these new type of pollutant monitor devices which are called Diffusion-Regulated Aerosol Concentration dosimeters (DRAC) using computer-aided software Google Sketchup.

Prior to creating this device my mentor Dr Grau-Bove and I discussed how we envisioned this device to look like and work. We drew up some rough sketches of how we wanted the device to look like so it could achieve its purpose. The measurements, shape and structure of the device were yet to be determined- as this was the first time a device like this was to be created so a lot of creativity was needed to overcome problems which naturally arose (common with any new prototype for a new device).

Dr Grau-Bove showed me his notes on how he wanted the device to work and gave me some articles to read so I had a better understanding of what these devices would need to achieve and what the device I was going about to create was going to be used for. I had to overcome several problems from issues involving the measurements in my designs to problems with the equipment. At the end of the project however, I am delighted to say that I was able to achieve my project goal in creating the first successfully tested DRAC devices.

To conclude my findings, I found that these DRAC devices definitely have the potential to work as intended. Early results from the DRAC devices as shown in my data show that the DRAC devices was able to diffuse the particles into the diffusion gaps so that these particles could stick to the glass inserts. The number of particles then reflected the level of pollution. I expected the DRAC devices outside the lab to find there to be a higher level of pollution then the DRAC devices inside the lab. This is exactly what was found which was reflected in the mean and standard deviation on my graph as explained on my final results page. Therefore the DRAC device has already shown it can serve its purpose in monitoring pollution for the good of not only the valuable pieces that are stored in our most famous museums but also our health.
Join us for our Sixth Form Open Evening where you can tour the Sixth Form, meet teachers and participate in taster sessions.

9th October 2018
6pm-8pm

Doors will open at 5:30pm and the Principal will speak at 6pm and 7:40pm.

Sixth Form applications for September 2019 will open on Wednesday 10th October 2018. For more details, please visit the website.
Websites offering advice and guidance on sources of financial support for students

[Which University]

https://university.which.co.uk/advice/student-finance/applying-for-university-bursaries-and-scholarships

[GOV.UK]
https://www.gov.uk/student-finance/who-qualifies

[The Complete University Guide]
https://www.thecompleteuniversityguide.co.uk/university-tuition-fees/other-financial-support/university-bursaries-and-scholarships/

Calling all English students, Drama students, Feminists, and other interested parties:

The Donmar Warehouse’s ground-breaking Shakespeare Trilogy is now available to watch for free in schools. With an all-female cast and set in a women’s prison, the productions asked the question, “Who owns Shakespeare?” The Trilogy was described by the Observer as ‘One of the most important theatrical events of the last 20 years.’

If you would like to see one or more of these plays screened in school, Ms Rudd is happy to arrange this for/with you. Please see her in T27/S44/S43 ASAP if so.

Ms Rudd
Dark Matter Day 2018 - Diary of a WIMPy kid:
Using Light to search the dark
Tue 9 October 18:30 – 19:30

The Universe is over thirteen billion years old and consists of hundreds of billions of galaxies, each containing hundreds of billions of stars. Over the past 2000 years our understanding of the Universe has greatly improved: from having the Earth at its centre to having no centre at all! However, in the last 80 years it has become apparent that we understand less than 5% of the Universe - the other 95% being made up of the mysterious dark matter and dark energy.

In this lecture, Dr. Walding will discuss the evolution of our Universe model and why we believe dark matter exists. He’ll then ask for the audience’s contribution to design an experiment to search for weakly interacting dark matter (WIMPs) using light!

This is a free evening lecture from the Department of Physics at Royal Holloway, University of London and everyone is welcome. Click here for more information.

Change Britain, Stop Brexit: A Lecture by Will Hutton
9 October 2018, 7pm - 8:30pm

The Progressive Economy Forum and SOAS Economics are pleased to present a lecture by Will Hutton on “Changing Britain”. The Brexit referendum result exposed deep economic and social divisions in our society, and this was decisive in persuading millions to vote against the status quo. Leave voters were right – the British status quo is insupportable – but our problems were firmly minted at home by a succession of policy failures, not by the EU. In this lecture, political economist and PEF Council member Will Hutton analyses the roots of those divisions and lays out a comprehensive programme of reform, best exploited if Britain remains a member of the European Union.

Speaker biography:
Will Hutton is Principal of Hertford College, co-founder of the Big Innovation Centre and a columnist for the Observer, where he was Editor, then Editor-in-Chief for four years.

Click here for more information.
Monotonicity and Stochastic PDEs: The Inaugural Lecture of Professor Carlo Marinelli

16:00 - 17:00, 10th October 2018

Professor, UCL Department of Mathematics, Professor Marinelli’s research interests include stochastic (partial) differential equations, monotone operators and nonlinear semigroups, control theory, heavy tailed processes, and applications to finance and management science.

The Mathematics Department will be celebrating the Inaugural Lecture of Professor Carlo Marinelli, titled Monotonicity and Stochastic PDEs. Join us to hear a discussion of how abstract versions of monotonicity allow us to obtain well-posedness results for some classes of stochastic PDEs (Partial Differential Equations) with irregular coefficients. Analogies and differences with deterministic PDEs, as well as open problems, will be emphasized. Our Inaugural Lectures Programme provides an opportunity to recognise and celebrate the achievements of our professors whom are undertaking research and scholarship of international significance.

Click here for more information.
President Trump’s Re-imposition of Iranian Sanctions and European and Global Responses

11 October 2018, 18:00 to 20:00

This talk will address the key elements of the re-imposed sanctions regime targeting Iran in the wake of the US withdrawal from the Joint Comprehensive Plan of Action. It will analyse the growing conflict between the US and the European Union as to the desirability of these sanctions and what the Europeans are doing to circumvent them.

It will also review the second set of US sanctions that are planned for November and how various importers of Iranian products are preparing to respond.

Click here for more information.
The Economic Expansion in the US since 2009

Trevor Evans (HWR Berlin)

Date: 11 October 2018

Time: 5:00 PM - 7:00 PM

The most recent expansion, which began in mid 2009, has been characterised by relatively low growth and investment has been weaker than in previous expansions. Unemployment has fallen sharply, but many of the new jobs have been in low-paid services.

The Trump government’s much-touted investment programme is dependent on mobilising private funding but this has not yet been very forthcoming. Moves to relax the tighter banking regulations introduced in 2010, while strongly welcomed by the big banks, have been widely criticised. Key indicators of financial tensions are unusually low, but profitability and investment, which usually serve as leading indicators of the business cycle, have begun to decline and this suggests that the current expansion could be approaching an end.

Click here for more information

HOW TO AVOID THE WORST EFFECTS OF CLIMATE CHANGE

15 Oct 2018
18:00 – 19:00

Meet the authors of the Intergovernmental Panel on Climate Change (IPCC) Special Report into the effects of climate change at 1.5°C. The Special Report on Global Warming of 1.5°C will be launched on Monday 15 October and this meeting offers a unique opportunity for you to meet two of the authors of the report. Professor Myles Allen, Head of Climate Dynamics, University of Oxford was an author on Chapter 1: Framing and Context, and Dr Joeri Rogelj, Grantham Lecturer in Climate Change and the Environment, Imperial College London, an author of Chapter 2: Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development.

The event will include two short presentations from both authors about their involvement and the content of the report followed by a Q&A session where the audience will be invited to ask questions.

Click here for more information about the lecture and how to register.
Making sense of Auschwitz: New perspectives on the Holocaust

Wed 17 Oct 2018 18:30 to 19:45

‘It is the task of the historian’, wrote the Auschwitz survivor Primo Levi, to help us imagine ‘the experience’ of the camp; this would expose common myths and misconceptions about the Holocaust. But how can historians make Auschwitz more palpable? How can they uncover the textures of everyday terror?

Drawing on recent research in spatial and sensory history, and the history of emotions, this lecture reflects on the lived experience of prisoners and perpetrators in the most lethal Nazi camp. It suggests that by looking more closely at landscapes and places, at feelings and perceptions (of spaces, smells and sounds), we can advance our understanding of the Holocaust.

Click here for more information.

Daniell Lecture 2018
17 October 2018, 16:00 to 18:00

This lecture is aimed at students aged 16 – 18 interested in studying Chemistry at university.

The Cutting Edge of Forensic Science

When we use science in the service of justice we expect it to be of the highest quality and deliver results in the most robust way possible - or so you would expect. But is this really true? What is forensic science really and how do forensic scientists do their work? How does the interaction between the law and science work? How can citizens get involved in the scientific research work that is needed to underscore the evaluation and interpretation of evidence recovered from a crime scene, suspect or victim - of should we even be asking the question?

We will talk about what forensic science is, where the strength and limitations are and how we can open up new and exciting possibilities for creating more robust science in the service of justice.

Click here for more information.
Understanding Child Abuse and Prevention

17:30 - 19:00, 18th October 2018

The UCL Psychology Society is delighted to start the Lecture Series for the 2018/2019 Academic year with Professor Richard Wortley.

During this talk and Q&A session, Prof Wortley will explain how a child’s age affects the context and timing of sexual abuse, and whether victim disclosure can be predicted. He will also describe evidence-based preventive methods against child abuse, particularly online, and the interpretations and assumptions that the public often wrongly makes out of these.

This lecture is free for all to attend, but a ticket is needed to enter the venue.

Click here for more information.

UCL Science Society Meeting: Meeting the Global Health Challenge with Vaccines at 15 Cents Per Dose

18:00 - 19:00, 18th October 2018

Speaker information
Prof Tarit Mukhopadhyay, Senior Lecturer, UCL Biochemical Engineering, Chair of the Vaccine Development Working Group for the UK Vaccine NetworkTarit was recently promoted to Professor in recognition of his leadership of vaccine bioprocessing research and teaching agendas, leadership of the Gates Foundation ULTRA grant and the new EPSRC Vaccine Manufacturing Research Hub.

Vaccines are the most successful public health initiative of the 20th century. Today, vaccine supply and affordability are the two key issues that limit our ability to eradicate disease, reach immunization goals, and respond to epidemics. Many vaccines use manufacturing processes that are 50-60 years old and have resulted in supply interruptions in the UK and developing nations. This investment will create tools and novel manufacturing technologies that will modernize vaccine manufacturing processes that were established in the last century, such that these life-saving medicines are available to all, irrespective of economic circumstance.

Register at: http://www.ucl.ac.uk/science-society/

Click here for more information.
CBRL Lecture - Syria’s People: Lessons for the Future?

Mon 22 Oct 2018 18:30 to 20:00

Dawn Chatty, author of ‘Syria: The Making and Unmaking of a Refuge State’ and Diana Darke, author of ‘The Merchant of Syria: A History of Survival’ will each give a presentation on their recent books. Together, these talks will explore Syria’s historical embrace of refugees of all hues - Christian, Muslim and Jewish and its impact on its people.

Click here for more information

A WORLD OF ARCHITECTURAL HISTORY CONFERENCE

02 Nov 2018
10:00 – 18:00

Admission: £25.00 for students

A World of Architectural History is the 4th annual conference of the Architectural Research in Europe Network Association (ARENA). The conference aims to critique and celebrate the latest global advances within architectural history over the last few decades, by focusing upon the word ‘global’ in two senses:

Geographically - referring to the increasing inclusion of all parts of the world in more complex and multiple discourses of architectural history.

Intellectually - the ongoing expansion of architectural history into other academic subjects, plus the reception of ideas/themes from those subjects.

Conference presenters will include those from a wide range of subject areas within The Bartlett Faculty of the Built Environment and leading figures in architectural history across the world.

Click here for more information about the lecture and how to register.
Lauren Slater on ‘Lies and Lying’

18:00 - 20:00, 27 November 2018

Lauren Slater, Writer, Institute of Advanced Studies, A psychologist and writer, Lauren Slater is the author of several memoirs and works of fiction.

In Lying, first published in 2000, Lauren Slater forces readers to redraw the boundary between what we know as fact and what we believe through the creation of our own personal fictions. Mixing memoir with mendacity, Slater examines memories of her youth, when after being diagnosed with a strange illness she developed seizures and neurological disturbances – and the compulsion to lie. Openly questioning the reliability of memoir itself, Slater presents the mesmerizing story of a young woman who discovers not only what plagues her but also what cures her – the birth of her sensuality, her creativity as an artist, and storytelling as an act of healing.

Click here for more information.

The Psychology of Poverty

16:30 - 18:00, 7 December 2018

Do poor people make choices that lower their willingness to take risks in favour of higher future incomes, or are these choices what lead to poverty in the first place?

The UCL Psychology Society is delighted to welcome Professor Jennifer Sheehy-Skeffington to explain the influence of poverty on cognitive processes, behavioural patterns, and the challenges that results from poverty itself. Further, she will be explaining why it is important that policy-makers bear this in mind if they aim to reduce poverty.

This lecture is free for all to attend, but a ticket is needed to enter the venue.

Click here for more information.