We have some key events coming up in the next few weeks.

**Ahmed Al-Khafaji day takes place on Wednesday 20th November.**
On this day we encourage everyone in the INA community, staff and students, to get engrossed in learning about something that really excites and engages them. For some this will involve a trip to a museum or gallery, for others curling up and reading some books related to a course they are studying or watching documentaries or films related to course material. Some students spend the day making music with friends or practising a sport. Some staff members visit other schools to learn from best practice or carry out research or further reading. We all learn off-site on this day.

**Our first IL Day of the year on Tuesday 26th November.** On this day, school is closed to students, whilst teachers are engaged in assessing and moderating assessments. Students will be provided with learning for each of their subjects on the day and should have at least five hours of learning. All learning will be available on the school website.

I wanted to share that Year 13 students will receive their reports today. Please look over these and discuss UCAS choices as a family.

- **2 choices should be in line with UCAS predictions**
- **2 choices should be in line with INA predictions**
- **1 choice should be below INA predictions**

This will mean that students should have a range of offers to chose prudently from when final mock results are released before the final choice deadline.

Finally, well done to the Year 12 students for working hard and showing many BRIDGES dispositions during their exams this week.

With best wishes,

Ms Alibhai, Vice Principal and Head of Sixth Form
Speakers’ Programme

This week we welcomed Evelyn Ngugi from the National Apprenticeship Service as part of our Speakers Programme. Evelyn’s talk was highly inspirational in that she explained an alternative route to completing a degree whilst in employment. We know not all young people follow the same route into their chosen career, however without hard work, drive and commitment needed to excel, any chosen route will be difficult.

The higher degree apprenticeships involve students working whilst balancing the demands of a degree. Students are paid an annual salary and their employer covers the cost of their degree. There are a number of employees who sponsor young people on this route, for example Land Rover, Virgin and British Airways. As a school that truly appreciates diversity we are keen for all our students to explore aspirational routes. Ms Joy is looking forward to speaking to students about this amazing pathway.

Safeguarding

The welfare and safety of our students is our priority. We do everything possible to ensure our students’ safety, both within the school community and outside of school, including working with relevant agencies to address any issues related to child protection.

Students are informed of who they should go to should they have a concern about their own safety or the safety of others.

At INA, all staff have regular safeguarding training to ensure that they are able to meet their statutory responsibilities. We also have a number of staff who are designated to respond to any child protection concerns and to liaise with social services:

**Designated Safeguarding Lead (DSL)**

Leanne Abbott-Jones  Assistant Principal

**Deputy Designated Safeguarding Lead (DDSL)**

Sugra Alibhai  Head of Sixth Form

**Designated Child Protection Officers**

Eva McEvoy
Mariam Mayet
Jag Singh

You can find the INA Safeguarding policy, Child Protection policy and other related policies and procedures on the Academy’s website.
Maths Supercurricular Activities and Resources

Cambridge University
- [https://www.undergraduate.study.cam.ac.uk/events/masterclasses](https://www.undergraduate.study.cam.ac.uk/events/masterclasses)
  General page for booking master classes. Check back periodically.
  Free to students receiving FSM. £20 to others.
- [https://www.undergraduate.study.cam.ac.uk/events/mathematics-masterclass](https://www.undergraduate.study.cam.ac.uk/events/mathematics-masterclass)
  Link to last year’s maths masterclass in April. Likely to run again this year. Check back periodically.

Oxford University
- [https://www.maths.ox.ac.uk/study-here/undergraduate-study/outreach/years-12-13](https://www.maths.ox.ac.uk/study-here/undergraduate-study/outreach/years-12-13)
  Great opportunities already up, including a one-day conference for girls on 17th January 2020 – deadline 8th November, and UNIQ Spring and Summer Schools – applications open in December.

Imperial College
- [https://www.imperial.ac.uk/be-inspired/student-recruitment-and-outreach/schools-and-colleges/students/on-campus-activities/programmes/maths-online-programme/](https://www.imperial.ac.uk/be-inspired/student-recruitment-and-outreach/schools-and-colleges/students/on-campus-activities/programmes/maths-online-programme/)
  Online platform for students thinking of studying maths. Open to both Y12 and Y13.
  Last year’s dates. Likely to run again this year. Check back periodically.

Kings College, London
- [https://www.kcl.ac.uk/events/mathematics-taster-day](https://www.kcl.ac.uk/events/mathematics-taster-day) - 4th December
- [https://www.kcl.ac.uk/events/christmas-lectures-2019](https://www.kcl.ac.uk/events/christmas-lectures-2019)

Queen Mary, University of London
- [https://www.qmul.ac.uk/maths/outreach/outreach-activities--events/](https://www.qmul.ac.uk/maths/outreach/outreach-activities--events/)

University College, London
- [https://www.ucl.ac.uk/maths/outreach](https://www.ucl.ac.uk/maths/outreach)
  Including London Maths Outreach – weekly meetings.

Social Mobility Foundation
- [https://www.socialmobility.org.uk/](https://www.socialmobility.org.uk/)
  The social mobility foundation run maths and engineering careers days, as well as an Aspiring Professionals Programme. General criteria are FSM and 5 7s or above at GCSE. They will consider others on a case by case basis.

Royal Institution

Read about maths in the media and in books
- Plus online magazine: [https://plus.maths.org/content/](https://plus.maths.org/content/)
- [https://mathblog.com/mathematics-books/](https://mathblog.com/mathematics-books/)
- Follow Marcus du Sautoy on Twitter
Taster Sessions and Open Days

Following on from the LSE talk, we would strongly recommend that both year 12 and 13 students begin/continue to take the research into university options very seriously. It is well-worth your time and effort to try to attend a taster or, if there is no taster, then at least an Open Day, at the universities you are considering. For year 13, it is very important to do this before you finalise your Firm and Insurance choices. Often, there will be Offer Holder Days, and these allow you to fit in a visit between being made an offer and having to decide whether you wish to accept or decline it.

Many London universities offer taster courses at: https://london.ac.uk/ways-study/study-campus-london/university-taster-courses

Below, are some of the courses available through the London Universities website, but I have also included a few taster courses outside London, or other courses in London not shown on the London University taster courses site. For the latter, I have included the shortened URLs.

<table>
<thead>
<tr>
<th>Course</th>
<th>University</th>
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<tbody>
<tr>
<td>History</td>
<td>Kings College London (KCL)</td>
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<tr>
<td>Electronic Engineering</td>
<td>KCL</td>
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<tr>
<td>Neuroscience &amp; Psychology</td>
<td>KCL</td>
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<tr>
<td>Culture, Media &amp; Creative Industries</td>
<td>KCL</td>
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<tr>
<td>Global Health</td>
<td>Queen Mary (QMUL)</td>
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<tr>
<td>Geography</td>
<td>KCL</td>
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<td>Music</td>
<td>KCL</td>
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<td>Physics</td>
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<td>Midwifery</td>
<td>KCL</td>
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<td>Child Nursing</td>
<td>KCL</td>
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<td>General Engineering</td>
<td>KCL</td>
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<tr>
<td>Biomedical Engineering</td>
<td>KCL</td>
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<tr>
<td>International Women in Engineering</td>
<td>University College London (UCL)</td>
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<td>Physics</td>
<td>Royal Holloway (RHUL)</td>
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<tr>
<td>Theoretical Physics</td>
<td>RHUL</td>
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<tr>
<td>Biochemical Engineering</td>
<td>UCL</td>
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<tr>
<td>Applied Science</td>
<td>London South Bank (LSBU)</td>
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<tr>
<td>Veterinary Nursing</td>
<td>Royal Veterinary College</td>
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<tr>
<td>Your Future in Marketing</td>
<td>Lancaster University</td>
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<tr>
<td>Architecture</td>
<td>Reading University</td>
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<tr>
<td>Health and Medical Sciences</td>
<td>Warwick University</td>
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<tr>
<td>Inspiring Minds, STEM</td>
<td>Loughborough</td>
</tr>
<tr>
<td>English: Fantasy and Literature</td>
<td>RHUL</td>
</tr>
<tr>
<td>Law and Criminology</td>
<td>RHUL</td>
</tr>
</tbody>
</table>
Links to information about open days and taster events at recommended universities:

- University of Bath
- Lancaster University
- University of Birmingham
- University of Leeds
- University of Bristol
- University of Manchester
- Durham University
- Loughborough University
- The University of Edinburgh
- The University of Exeter
- University of Nottingham
- University of St Andrews
- Imperial College London
- University of East Anglia
- King’s College London
- University of Warwick

(Open days are referred to as ‘Visiting Days’)

Ms Joy,
Sixth Form Study Centre Supervisor & Information, Advice and Guidance Advisor
Russia and Revolution London, 10th December

Over the day, students will hear from five world-class historians, each of whom brings a wealth of experience and enthusiasm to the day:

- **Prof. Martin McCauley** will discuss Stalin's dictatorship and legacy;
- **Prof. Catherine Merridale** will give an unmissable lecture on 'Vladimir Lenin, Shaper of the Revolution', considering why it was possible for Lenin to make such an impact on historical events;
- **Dr Simon Huxtable** will explore Nikita Khrushchev’s claim that the Soviet Union would build communism by 1980;
- **Prof. Robert Service** will explore revolution, civil war and the rise of communism;
- And **Dr Daniel Beer** will deliver a thought-provoking look at the collapse of the Romanov dynasty.

There will also be a helpful exam session to equip students with the tools to excel delivered by **Dr Robin Bunce**, University of Cambridge, who will also chair the day. With plenty of time for questions too, students are guaranteed to leave with newfound insights, motivation and confidence!

[Book now](https://thetrainingpartnership.org.uk/study-day/history-in-action-russia-and-revolution-10-12-2019/?utm_source=History+ALL&utm_campaign=d8c1b6deea-History+Russia_2019_11_13_01_36&utm_medium=email&utm_term=0_85e8d29f88-d8c1b6deea-283622805)
Accelerate into Maths and Science
Imperial College London

Applications open for Year 12 students

Accelerate into Maths and Science (AIMS) is an after school programme for Year 12 and Year 13 students, run in collaboration with academics from the Faculties of Natural Sciences and Engineering. It aims to give students an insight into how maths is applied across different science disciplines studied at university-level.

Following a launch event at the beginning of January, Year 12 students attend ten after school tutoring sessions during the spring term. When students are in Y13 they will be invited back for a further eight tutoring sessions during the autumn term. Sessions are run by Imperial academics and current undergraduate students.

Where? Imperial College London, South Kensington Campus
When? 5pm to 7pm on Wednesdays

This programme is FREE for applicants. Due to being fully funded, eligibility criteria apply. To find out more about the programme and eligibility criteria, please visit our web page.

The deadline for applications is 23.59 on Monday 18 November 2019.

For more information email aims@imperial.ac.uk

Spring Maker Challenge
Imperial College London

Applications open

Are you aged 14-18 and do you like making? Apply to the Maker Challenge! Over 12 weeks, young people aged 14-18 will prototype, design and make with access to cutting-edge equipment in our state-of-the-art workshop. We’ll teach a crash-course in 3D printing, laser-cutting, woodworking, electronics, programming and more. It’s the perfect opportunity to improve your STEM skills and the winners will receive an amazing prize. What will you make?

Dates: Every Tuesday or Thursday evening (4.30pm-7.30pm) from January 11 - April 4.
This includes 4 weekend sessions (11/01, 12/01 or 18/01, 15/02, 04/04); no sessions take place during half-term.
Cost: Free (dinner included) Location: Makerspace, The Invention Rooms, White City
The deadline for applications is Sunday 15 December 2019
If you need help, book a place on our Application Support Session.
Sick individuals and sick populations in the molecular genomics era

19 Nov 2019, 17:00–18:00

Speaker: Professor George Davey Smith from the University of Bristol

Epidemiology is being transformed by the ability to incorporate molecular genetic markers into large-scale population studies. Given the intuitive link between genomics and personalised medicine, this might be expected to steer the epidemiological enterprise away from population health thinking epitomised by Geoffrey Rose. This presentation will propose that, far from this being the logic of the union of epidemiology and genomics, such developments simultaneously strengthen our ability to identify population-level intervention targets and to construct a rigorous theory of how group and individual influences on health act together.

The series of Geoffrey Rose Memorial Distinguished Guest Lectures are held in memory of Professor Geoffrey Rose, CBE (1926-1993), who was a highly influential epidemiologist whose seminal publications included “Sick Individuals and Sick Populations” (1985) and The Strategy of Preventive Medicine (1992), which had an impact that went well beyond the field of epidemiology and into that of public health. Previous guest speakers at these popular lectures have included Professor Albert Hofman (2017), Professor Sir Richard Peto (2015), Professor Sir Michael Marmot (2013) and Professor Jeremiah Stamler (2011).

Free to attend but you must register on Eventbrite beforehand.

Finding Purpose in Your Career

Professor Alex Edmans

4 December 2019, 6:00pm–7:00pm

Many influential leaders stress the importance of pursuing a purpose rather than choosing a career based on salary. While inspiring, such talks can sometimes seem impractical because many people find it difficult to know what their purpose is, and unrealistic given rapidly rising living costs and the view that lucrative careers are not purposeful.

This talk will introduce a practical framework to help you find what your purpose is, as well as explain how to pursue a career which is rewarding both intrinsically and financially.

Alex Edmans is the Mercers’ School Memorial Professor of Business at Gresham College, Professor of Finance at London Business School, and a TED Speaker.

He completed his BA in Economics and Management at Merton College, University of Oxford, and did his PhD in Finance as a Fulbright Scholar at the MIT Sloan School of Management. In 2007, Professor Edmans joined The Wharton School, University of Pennsylvania, as an Assistant Professor of Finance and then was promoted to a tenured Associate Professor.

Working at the intersection of academia and practice, Professor Edmans is an expert on corporate finance (including executive compensation, corporate governance, investment, growth and innovation), behavioural finance and investing, and corporate social responsibility.

Reservations Required

All lectures in Alex’s series Business Skills will be ticketed.
Economy and Ethics in the Cosmic Process
18 December, 5.30pm

THE HUXLEY MEMORIAL LECTURE by Professor Chris Hann, Max Planck Institute for Social Anthropology

When, late in life, T.H. Huxley returned to the themes of evolution and religion, he did so with a focus on ethics. But his audience was puzzled (and Herbert Spencer dismissive): how could morality be explained in Darwinian terms if man’s destiny was to combat the amoral laws of the “cosmic process”? These issues are still with us. While Huxley paid little attention to political and economic institutions, this lecture will consider the historical materialism of that era and arguments for socialism (rejected by the liberal Huxley). How can human societies evolve a healthy balance between private and collective property, market and redistribution, efficiency and equity, economic maximization and ethics? The difficulties will be illustrated with reference to the rise and fall of a State Farm in the western zone of the Great Hungarian Plain (Danube-Tisza interfluve).

This event is free but you must register on Eventbrite to attend.

Surgery, statistics and science

Professor Eric Lim will share how mathematics transformed his career from bewildered medical student to international clinical opinion leader.

Eric Lim is a Professor of Thoracic Surgery at Imperial College London, a pioneer and specialist in minimally invasive (single-port) thoracic surgery. He graduated from Sheffield University, and completed a higher degree in Medicine and a Masters in Medical Statistics. His higher surgical training was undertaken at the Royal Papworth Hospital in Cambridge and the Royal Brompton Hospital in London.

Mathematics is the fundamental basis of clinical decision making. In medicine, every day of the working life of a doctor is spent evaluating the probability of a diagnosis, estimating benefit of treatment, calculating the risk of harm, and predicting prognosis. As a doctors’ careers progress, clinical decisions are less reliant on textbooks and more on acquisition and synthesis of published evidence (evidence based medicine).

For many doctors, statistics was either not taught or presented from a pure mathematics perspective obscuring the link to medicine. As a result, many excellent clinicians do not recognise the importance of statistics in their clinical practice and have limited ability to evaluate the medical literature. Without a strong foundation, they will struggle to effectively discuss management options and involve patients in clinical decisions in a fast-paced world where applied statistics, coding and artificial intelligence becomes the norm.

In his inaugural lecture, Professor Lim will share how mathematics transformed his career from bewildered medical student to international clinical opinion leader. He will discuss difficulties doctors experience in making clinical decisions and the challenges they face in the interpretation and uptake of new medical information. He will provide views on the limitations of conventional (frequentist) statistics in medicine and the increasing role of artificial intelligence.

Free to attend but you must register on Eventbrite beforehand.
This lecture will consider the treatment and prevention of common cancers in women. The outlook for those with breast cancer and uterine cancer have substantially improved in the last three decades, and the great majority with the diagnosis will be alive and well a decade later. The outlook for ovarian cancer is less good although improving.

This lecture will consider the evolving treatments, including the importance of genetic markers and hormonal treatments and approaches to prevention and screening.

Christopher Whitty CB FRCP FMedSci is Gresham Professor of Physic (the term for medicine when the post was created in 1597) at Gresham College. He is also Chief Medical Officer (CMO) for England, the UK Government’s Chief Medical Adviser, Chief Scientific Adviser at the Department of Health and Social Care and head of the National Institute for Health Research (NIHR).

He still practices as an NHS Consultant Physician at University College London Hospitals (UCLH) and the Hospital for Tropical Diseases. He is involved in many day-to-day public health decisions for the UK.

No reservations are required for this lecture. It will be run on a ‘first come, first served’ basis.

Doors will open 30 minutes before the start of the lecture.