



Twyford  
C of E  
High School

**Twyford Advanced  
Programme  
&  
MedSoc  
2019-20**

## TAP

### What is TAP?

TAP is a programme aimed at preparing students for the application to Oxford or Cambridge University (Oxbridge). There will be approx. 50 students on the course, selected based on GCSE grades and an induction essay.

In Year 12, students can expect:

- A weekly wider reading lesson
- A weekly lesson introducing the Oxbridge system
- Personal statement support
- Beginning of the EPQ course (see overleaf)
- Information regarding open days, masterclasses and summer schools at Oxford and Cambridge
- The opportunity to attend Lumina, a free week-long course at Harrow School supporting students in their Oxbridge applications

In Year 13, students can expect:

- Interview workshop
- 'Assertiveness training' led by an external professional
- A mock Oxbridge interview held by governors, directors and lead members of staff
- Fortnightly EPQ lessons
- Completion of the EPQ
- EPQ presentation evening
- One-to-one support in writing and editing personal statements



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UCAS

## Extended Project Qualifications

These projects involve detailed research into any topic of the student's choice, allowing students the opportunity to go outside and beyond their A Level subjects. Students will do the vast majority of this research over the summer holidays at the end of Year 12 and will work one to one in the autumn and spring term with a supervising member of staff to turn this research into a piece of extended writing.

The projects can take the form either of a 5000 word essay, or an artefact (such as a piece of art, a science experiment or a film etc) accompanied by a 1000 word essay.

This essentially equips students with the skills needed to bridge the gap between A Level and undergraduate style learning, as well as looking very impressive on personal statements.

It also supplies university interviewers with a topic to discuss with the applicants, which can demonstrate the breadth and depth of the students' knowledge and interest in their subject.

Examples of previous projects:

University Course	EPQ Title
History and Politics	Given the radical ideas present in the country at the time, why was the English Civil War outcome so conservative?
Animation	To what extent are animated features able to display complex emotions?
English Literature and Drama	Should censorship exist in the theatre?
Geography	What is the effectiveness of COP21 in aiding developing countries with the transition to greener climates without inhibiting economic development?
Aeronautical Engineering	To what extent have aeronautical advances been responsible for globalisation?
Medicine	How effective are treatments of secondary cancers in primary sites?
Economics	An ongoing slump - The Japanese Economy 1990-2010
Maths and Computer Science	How effective is game theory at helping AI to win computer games?
English Literature	How has the Cinderella story of 'rags to riches' evolved?
Politics	Are we living in 1984?

## Wider Reading

To ensure the strongest possible Oxbridge applications, students will need to have read around their interests within their chosen field. Students will receive a monthly Wider Reading Newsletter, with 21 different subjects included. For each subject, there will be articles, books, podcasts, documentaries, free exhibitions and lectures in London.



## ENHANCED LEARNING

Twyford Wider Reading Newsletter: September 2018 edition

### In this issue:

- Subject-specific articles
- Free enrichment events in London
- Documentaries and podcasts

*"If you only read the books that everyone else is reading, you can only think what everyone else is thinking"*

—Haruki Murakami

### Maths

#### Video/Audio

- Mathematics and Music  
*Melvyn Bragg and guests discuss the mathematical structures that lie within the heart of music.*  
<http://www.bbc.co.uk/programmes/p003c1b9>
- Chaos Theory  
*Melvyn Bragg examines whether the world is a fundamentally chaotic or orderly place.*  
<http://www.bbc.co.uk/programmes/p00548f6>

#### Books

- Does God Play Dice? By Ian Stewart  
*A very accessible introduction to the exciting field of chaos, it gives an insight into the mathematics behind fractals as well as many other situations in which you can find chaotic behaviour.*

### Law

#### Articles

- Making war illegal changed the world. But it's becoming too easy to break the law.

*As the rules prohibiting the use of force are crumbling, we risk returning to a world where might is right and war is legal.*

<https://www.theguardian.com/news/2017/sep/14/making-war-illegal-changed-the-world-but-its-becoming-too-easy-to-break-the-law>

#### Video/Audio

- House of Lords: an audio collection  
*Dr Richard Heffernan discusses the past, present and future of the House of Lords.*  
<http://www.open.edu/openlearn/society-politics-law/politics/house-lords-audio-collection>
- The English Fix  
*Patrick Wright meets the philosopher Sir Roger Scruton, who argues that the EU has encroached on the fundamentals of Englishness: the landscape, and the common law.*  
<http://www.bbc.co.uk/programmes/b0939wgl>
- Why we may never know if British troops committed war crimes in Iraq  
<https://www.theguardian.com/news/audio/2018/jul/13/why-we-may-never-know-if-british-troops-committed-war-crimes-in-iraq-podcast>
- 'My death is not my own': the limits of legal euthanasia  
*Henk Blanken knows Parkinson's disease might one day take him past the point at which he wants to carry on. Dutch law says it is legal for a doctor help die when the time comes—but there's no guarantee that will happen*  
<https://www.theguardian.com/news/audio/2018/aug/17/my-death-is-not-my-own-the-limits-of-legal-euthanasia-podcast>

#### Events

- Brexit: Recovery of Sovereignty or Loss of Rights?  
*Lecture by Sir Geoffrey Nice QC*  
Tuesday 9th October, 6-7pm. Museum of London  
<https://www.gresham.ac.uk/lectures-and-events/brexit-sovereignty-or-loss-rights>
- State Torture  
*Torture was officially outlawed in France in the 1780s and in Europe in the 19th century. In the late 20th and early 21st centuries, it has returned as an instrument of state policy. How have languages of patriotism, law and order, justice, the 'civilising mission', and human rights been used to foster attitudes towards and practices of torture in Western societies? What should our responses be?*  
Thursday 18th October, 6-7pm. Barnard's Inn Hall. <https://www.gresham.ac.uk/lectures-and-events/state-torture>

it? Try your cluck at these chicken problems.  
[ardian.com/science/2017/sep/11/can-you-solve-it-try-your-cluck-at-blems-alex-bellos](http://ardian.com/science/2017/sep/11/can-you-solve-it-try-your-cluck-at-blems-alex-bellos)



## MedSoc



### What is MedSoc?

MedSoc is a program for aspiring doctors, dentists and veterinary scientists. The program runs for two years supporting like-minded individuals through the exciting and challenging journey to becoming a medical professional.

In Year 12, students can expect to attend:

- Journal club which require prior reading about medical interests that are then presented to peers
- Support sessions designed to help students develop their medical portfolios ready for university applications
- Entrance exam preparation
- Personal statement support
- Problem based learning, similar to those used in some universities

In Year 13, students can expect to attend:

- Journal club which require prior reading about medical interests that are then presented to peers
- Entrance exam preparation
- Personal statement workshops
- Mock interview advice and preparation sessions
- Mock interview practise following the more commonly used MMI style of interview
- Mock group interview practise

## External Speaker Program

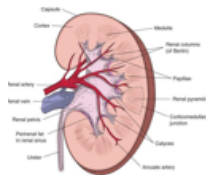
There is an extensive program of external speakers, many of whom specialise in the medical field. Talks take place after school and students are strongly encouraged to attend these talks to widen their understanding of different medical disciplines. Examples of talks that have taken place in the past include:



**External Speaker**  
**Thursday 27<sup>th</sup> September**  
**3.30 – 4.30 in A20**

### **Hafsa Malik – Dentistry Student**

Hafsa is in her final year of Dentistry at Barts and The London School of Medicine and Dentistry (part of Queen Mary University of London). Hafsa will be speaking about her journey from finishing GCSE's (with no clue about her future) to coming to the end of University with a career plan! She'll also cover what it's like going to university in London, living out vs. living at home and making the most of university (both academically and socially), followed by a Q&A to answer any questions on these topics, or anything else on your mind!



**External Speaker**  
**Tuesday 2<sup>nd</sup> October**  
**3.30 – 4.30 in A20**

### **Dr Jeremy Levy – Imperial College Healthcare**

**Making difficult choices in healthcare: Only one kidney available – who should it go to?**  
**Should you *buy* a kidney for your mother if she needs one?**

Professor Jeremy Levy is a Consultant Nephrologist (kidney specialist) at Imperial College Healthcare NHS Trust, Professor at Imperial College London.

There is never enough of anything! In healthcare we face this dilemma all the time. This afternoon we will think about how to make such choices using examples from patients with kidney disease, needing dialysis or a kidney transplant: how should we decide how to allocate one kidney if there are lots of people waiting? Is it the right thing to do to buy your mother a kidney if she needs one and no-one in the family can give one?



**External Speaker**  
**Wednesday 25<sup>th</sup> April**  
**3.30 – 4.30 in A32**

### **Dr Bea Vickers – St George's Hospital**

**Relaxation or Mindfulness - what's the difference and how do they relate to the brain?**

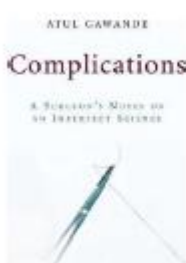
Dr Bea Vickers, (MBBS, BSc, MRCPsych) is a Consultant Child and Adolescent Psychiatrist at St George's Hospital in South London. After studying medicine at UCL and working in various medical jobs Bea decided to specialise in psychiatry and now only works with teenagers with mental health problems. She is interested in how the brain copes with trauma and what has been shown to work when treating young people who have had traumatic experiences.



## **MedSoc Wider Reading**

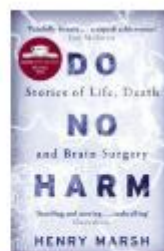
To ensure the strongest possible medical school applications, students will need to have read around their interests within the medical fields. The library has a number of specialist science books, including those specialising in the medical disciplines. In addition, there is a MedSoc Wider Reading List, developed based on recommendations from previous MedSoc students who have successfully secured a place at medical school. A section of the recommended reading list can be seen below.

### **MedSoc Recommended Reading List**



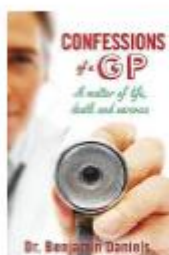
#### **Complications by Atul Gawande**

Sometimes in medicine the only way to know what is truly going on in a patient is to operate, to look inside with one's own eyes. This book is exploratory surgery on medicine itself, laying bare a science not in its idealized form but as it actually is -- complicated, perplexing, and profoundly human.



#### **Do No Harm by Henry Marsh**

Neurosurgery has met its Boswell in Henry Marsh. Painfully honest about the mistakes that can 'wreck' a brain, exquisitely attuned to the tense and transient bond between doctor and patient, and hilariously impatient of hospital management, Marsh draws us deep into medicine's most difficult art and lifts our spirits. It's a superb achievement.



#### **Confessions of a GP by Benjamin Daniels**

Confessions of a GP is a witty insight into the life of a family doctor. Funny and moving in equal measure it will change the way you look at your GP next time you pop in with the sniffles.



#### **A Very Short Introduction to Medical Ethics**

**By Tony Hope**

Issues in medical ethics are rarely out of the media and it is an area of ethics that has particular interest for the general public as well as the medical practitioner. This short and accessible introduction provides an invaluable tool with which to think about the ethical values that lie at the heart of medicine.

Further information about extra-curricular events in the Science department can be found at

<https://twyford.ealing.sch.uk/specialisms/science>



Twyford  
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**Executive Headteacher**  
**Dame Alice Hudson**

**Associate Headteacher**  
**Miss Karen Barrie**

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**Twyford Church of England High School**

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