

ST. OLAVE'S GRAMMAR SCHOOL



Teacher of Biology September 2019

We seek an enthusiastic and inspiring biologist with a good degree who will relish the challenge of teaching very bright students in this outstanding department in one of the nation's top Grammar Schools.

Biology is one of the most popular choices for A-Level students, with currently six sets in Year 12 and six sets in Year 13. All of these students are expected to achieve top grades and progress on to top Russell Group Universities, including Oxford and Cambridge, with many going on to read medicine, biomedical sciences and biological sciences.

You will be joining a dynamic, cohesive and well-resourced faculty, and will be expected to teach KS3 Science in Years 7 and 8, and Biology at GCSE and A-Level. Excellent subject knowledge and a commitment to keeping abreast of new ideas in the field of Biological Sciences will be important, as will your ability to challenge and inspire young people to enjoy the fascination of this subject and to pursue individual research into areas of interest.

All colleagues at St Olave's are encouraged to play as full a part as possible in the wider life of the school community.

The Biology Department

The Biology Department currently comprises four full time biologists, including the Head of Department, and one part-time biologist. We are a dynamic and friendly team, committed to the sharing of ideas and resources, and always seeking new ways in which to improve our practice and challenge our students.

We have followed the Edexcel specification at A-Level and GCSE, very successfully for many years.

Many Sixth Form students take part in the Biology Olympiads and have succeeded in achieving Gold and Silver awards, while a significant number are involved in ongoing research projects in partnership with the Society of Biochemistry and the Institute of Research in Schools.

The excellent results achieved year on year speak for themselves, but they also contribute to the popularity of the sciences post-16. In 2018, 92% of grades were at levels 7-9 in GCSE Biology, and 95% of grades were at A*/B in A-Level Biology, with 46% achieving A* grades.

At present, around 110 students are studying Biology at AS-Level, and about 90 at A2 level. Set numbers are nominally capped at 18.

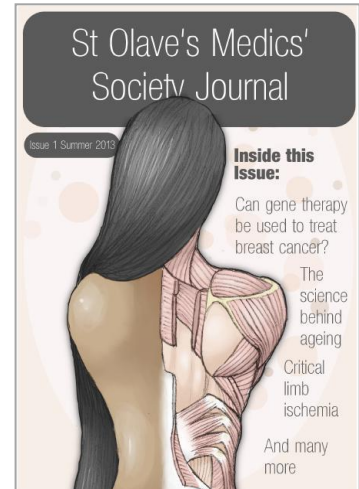
The Science Faculty

The Science Faculty is housed in a purpose-built block, comprising twelve spacious and very well equipped laboratories, two of which were added in 2015, and two large preparation rooms. Every laboratory has a whiteboard and a digital projector. Four laboratories are designated specifically for Biology.

The Science Faculty is dynamic and forward-thinking, and our success is driven by the enthusiasm of staff and students alike. Within the Faculty each discipline is encouraged to flourish and make its own identifiable contribution, but communication and teamwork across departments is also a strong element of our identity. To this end, Science is taught by one teacher per form in Years 7 and 8 as a combined course following a modified KS3 programme of study. In Years 9 to 11, the three sciences are taught separately by subject-specialists, leading to three GCSEs in Biology, Chemistry and Physics.

Enrichment activities within the Faculty include many thriving Sixth Form societies: Medics' Society; Natural Sciences Society, Engineering Society, Astronomy Society, and a new cross-science research group, all of whom regularly publish outstanding journals. These embody the spirit of intellectual curiosity, championed at St Olave's, with some fascinating research articles such as:

- Saturn's moons: the cool, the big and the shiny
- Autoclave sterilisation
- Is RuBISCO the most important enzyme?
- Solar energy: polymer-based solar cells
- Beta Thalassaemia
- Epigenetics – the truth about DNA
- Are replacement bio-teeth a realistic possibility?
- Critical limb Ischemia
- The tree man – Epidermodysplasia Verruciformis
- The problems caused by Cane Toads in Australia
- Carbon nanotube fibres and brain communication
- Trastuzumab – a treatment for breast cancer



In the Lower School, personal curiosity and investigative skills are encouraged through a Junior Natural Sciences Society, a Crest Club, Astronomy Club, and the ever popular Chemistry Club. We also have a wildlife area and biology garden which is being maintained and developed by Year 9 Duke of Edinburgh volunteers under the leadership of Year 10 and 11 students.

The Science Faculty comprises sixteen full and part-time teaching staff, plus four technicians. All are expected to be able to teach across the sciences in Years 7 and 8 and some offer two subjects to GCSE. All members of the Faculty are encouraged to play a full role in its development (e.g. writing and revising schemes of work) – which indeed they do – although the responsibility for matters such as these rests ultimately with the Head of Department.

Andrew Rees
Headteacher

Caroline Marwood
Head of Biology