

What's going on in ...



Biology and Chemistry

Human Biology

Our Yr12 Human Biologists are currently preparing for their Unit 1 examination. They are also completing their coursework module which included an exploration of the muscular and skeletal system. [CLICK HERE](#) to find out more about you skeleton. Our Yr13 Human biologists have completed their own microbiology investigations this year adapting the radial diffusion assay method. [CLICK HERE](#) to find out more about this method.

A level Biology

Our Yr12 biologists have acquired all their basic biological knowledge and are now applying it to real biological world i.e. why does a lugworm needs a haemoglobin with a higher affinity for oxygen? The year 13 biologists have been cloning their own cauliflower, learning about the latest developments in epigenetics and gene cloning. [CLICK HERE](#) to find out more about what they do in a gene cloning laboratory. In the Summer term our biologists will take part in the Biology Olympiad.

A Level Chemistry

Our Yr 12 Chemistry students have developed their key chemical analytical skills through their extensive laboratory work including titration. [CLICK HERE](#) to find out more about titrations. Year 13 Chemists have developed their chemical synthesis skills and this week they have successfully synthesised their own aspirin in the laboratory. Find out more about Aspirin synthesis [CLICK HERE](#). In the summer term the Chemistry student will visit Lancaster University.

SJR Extra... Career Academies Future Medics, Dentists and Vets

- Our Future medics, dentist and vets have had a busy year so far! We have had many talks to help students to understand the different roles in the NHS, university admissions and problem based learning.
- Our most recent talks were from SJR Alumni Sarah Gannon Children's Nurse in Paediatric Critical Care and Andrea Pilkington Obstetric consultant at Wythenshawe hospital.
- Students have also gained a wide range of practical skills such as suturing and dissection.
- Our most recent trip was to work with the Bowland Pennine mountain Rescue team for a training day. Students explored their teamwork and communication skills whilst they coordinated and successfully completed a casualty care and evacuation exercise.



Up next:

- University Trip, Public health Campaigns, UCAT course and charity work.

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SJR Extra... Career Academies

Future Scientists



- Our Future scientists have also had talks from scientists from a wide range of disciplines including Theoretical physics, Astrophysics, Genetics, Microbiology and Marine Biology. The most recent was Chemist Paul Hamilton from Unilever. He talked to the students about the use of robots to test new food products and personal care products.
- SJR also has a 'pop up' research laboratory. In the summer term Future Scientists and wider science student population will have the opportunity to work with University research scientists from Edge Hill University in this facility.
- Each Future Scientist has also been hard at work on their own independent research projects, completing a min. of 70 hours of their own work for a Gold Crest Award from the Science Association.



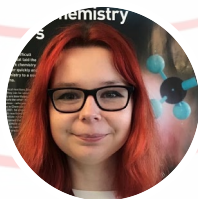
Jacob Rigby

My project is about how space and climate affect materials found on earth. This will mean we can make robots that can adapt to the climate wherever they are in the universe.



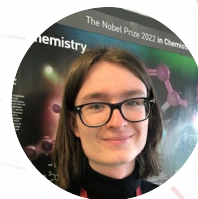
Jared Clarke

I am studying the antibacterial properties of spices such as clove, thyme, cinnamon and oregano to see whether specific spices have the ability to kill bacteria and whether this could be used in day-to-day life.



Charlotte Hancox

My project is on priming. This is a psychological theory that states a person's response to a stimulus can be affected by previous exposure to a different stimulus.



Sean Hartnett

My project focuses on urban herring gulls using a faecal analysis and observations of feeding. This may help guide population control of non-breeding gulls in the future, and help to reduce human/gull conflict.



Raven Baker

My project is about comparing humpback whales hearing in hertz to an average humans hearing in hertz. In my project I have gathered data from hearing tests done on individuals aged 13-55 years of age.



Mike Lord

My project is about the boundary between science and religion. Using a survey sent out to multi-generational and ethnic recipients to get a representative study. Can Science and Religion exist in harmony?



Lewis Hatton

I am researching the differences of in mental health as people age.

Up next:

- *Future Scientists will present their findings at the Science Presentation Evening at SJR*

Keep in touch...

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