



NMSC Newsletter

MESSAGE FROM THE PRINCIPAL

Dear Parents,

It has been an eventful month. Although the inclement and unusual weather which we witnessed in the last week of February has delayed the start of Spring, it is now heartening to see the snowdrops beginning to emerge from the winter gloom.

We celebrated the Chinese New Year of the Dog with a dinner in College and were treated to a very colourful display of traditional Chinese dress by the students.

Our Enrichment programme continues to expand and develop, enabling our students to access a wide range of academic and social experiences, which will help them prepare for Higher Education and their life beyond. This month, we have welcomed a number of outside speakers. These included: Dr Corinne Hanlon from the Warwick Integrative Synthetic Biology Centre, Dr Kat Rock, a researcher in the mathematics department at Warwick University and Miss Elizabeth Von Nardoff, an expert on American university admissions and testing.

Perhaps one of the most significant events of the month was our visit to the Houses of Parliament where our students and staff crowded the visitors' gallery to witness the parliamentary debate on Geoffrey Robinson's own Private Members Bill - Organ Donation Deemed Consent. The students' own parliamentary debate followed the main debate and I am sure you will enjoy the detailed accounts of both these events in this newsletter.

It has been a busy month on the competition front. Dr. Robotham led a team of students in the Analyst competition at the University of Wolverhampton and the physics department hosted two physics Olympiads at the College. We look forward to hearing the results of both.

Upcoming Events

March 17th at 2.30pm

Belgrade Theatre - Performance of "Unmade" - First Year students

March 19th

Shamreen Merza - Outside Speaker - Molecules to Medicines Talk

Important Announcement

A reminder of Spring Term Dates:

March 23rd @ 1pm – College closes to students

March 24th @ 4pm – Residence closes to students

April 7th @ 4pm – Residence opens to students

April 9th – Summer Term begins – all students and Staff

And finally, we are delighted to announce that the First Year students will be making their debut in the production 'Unmade', a play specifically written for them, at the Belgrade Theatre on Saturday 17th March at 2.30pm. The event will be professionally filmed so that you will have the opportunity to see this at a later date.

In the meantime, I wish you and your family a peaceful and happy Easter break.

With best wishes



Antonia Giovanazzi

Principal

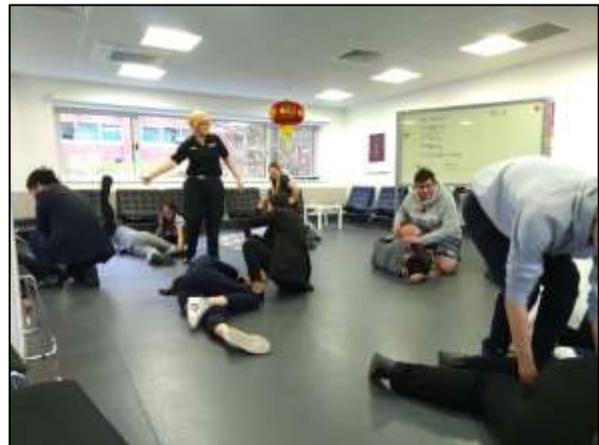


First Aid Training

On Wednesday 21st February, the whole College spent the afternoon learning about First Aid techniques. They were taught by medical staff who came into College from the St John's Ambulance service, a charity organisation which specialises in first aid provision at sports and outdoor events.

For many students, this training was important preparation for their Duke of Edinburgh expeditions, which will take place in April. They learnt how to treat many problems which might be encountered when exploring the outdoors, and although we hope they will not need to put any of their new skills into practice, it is always better to be prepared.

For students who are not involved in the Duke of Edinburgh Award, it was decided that they would also benefit from training in First Aid. One never knows when one might need to give others medical assistance, and so even if these skills are not used until years in the future, our students now have some knowledge of how to assist others in emergencies.



Mr Lambert

The Chemistry Department

We were delighted to welcome Dr. Corinne Hanlon to the College who gave a fascinating and engaging talk about Synthetic Biology.

Corrine has worked at Queen Mary's University London, Imperial College London. She has a degree in materials engineering from the National University of Ireland, Galway and completed her PhD in Biomedical engineering at Leeds University, studying the forces involved on the spine and modelling the longer term effects of spinal burst fracture repair using vertebroplasty.



She now project manages a 12.5 million pound project at Warwick Integrative Synthetic Biology Centre. WISB delivers an integrated, internationally leading programme of research, innovation and training for synthetic biology.

Synthetic biology is identified as one of the 'Eight Great Technologies' for the UK that support UK science strengths and business capabilities.

In collaboration with industrial partners, WISB researchers aim to maximise opportunities for industrial translation of research in the key areas of:

- Healthcare: Pharmaceuticals
- Healthcare: Treatments for disease
- Industry: Commodity chemicals
- Environmental: Biodegradation and Bioremediation
- Food Security: Crop Production

Synthetic biology also generates important insight into fundamental principles underpinning the operation of living systems. For example, by modifying the noise characteristics of gene expression systems, we are learning about the role of stochasticity in the evolution of life. This very same knowledge also informs the design of synthetic systems utilized in our applied Research Themes.



It was a fascinating talk – giving students an insight into how the studies they are completing here at NMSC may lead to a career that they haven't even thought of yet and we were extremely grateful to Corrine for her excellent presentation and time spent with our students answering their many varied and insightful questions.

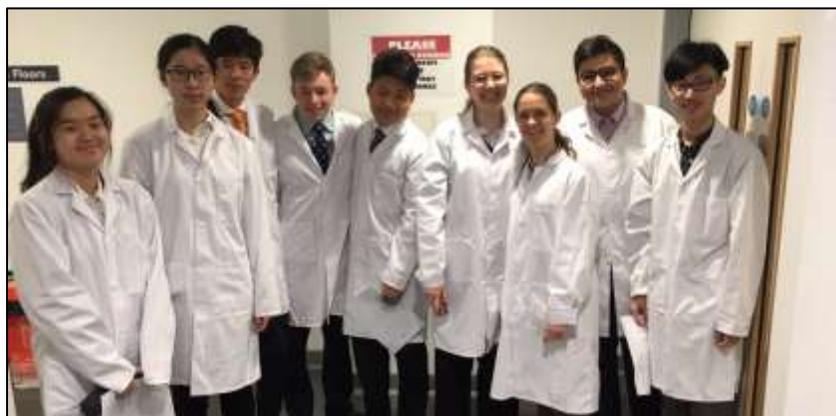
Dr. Robotham



RSC Analyst Competition

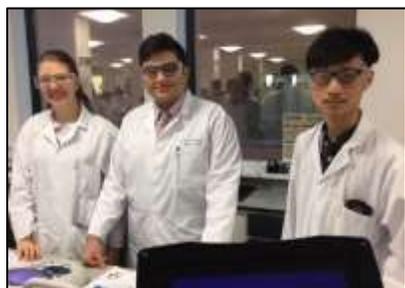
6 marks separated our top team in the Regional heats of the Royal Society of Chemistry Regional heats from top place. Three teams of three students travelled from NMSC on Friday 16th February to compete in this competition against other schools and colleges from across the West Midlands Region.

The teams of 3 students undertook practical analytical exercises based on problems relevant to industrial or social needs. Some of the tasks were linked to the A-level curriculum, using equipment and concepts familiar to the students such as titrations.



The competition involved a three-hour practical which challenged the students' ability to work carefully, maintain their focus and adhere to high standards of scientific practice when collecting and interpreting their data.

All teams finished in the top 10 in the region – with team Carbon 5th place overall, just 6 points behind the 1st place team scoring over 80% of all available marks. All teams scored over 80% at least one of the practical components.



We enjoyed a 'flash / bang' lecture whilst awaiting the results of the competition and here is Leo activating a touch sensitive explosive!

Well done to all teams for their performance and for the confidence that we can gain from knowing that the science of the future is in safe hands.

Dr. Robotham

Duke of Edinburgh Skills Training



On Sunday 11th March, the students involved in the Duke of Edinburgh Award scheme spent the morning training for their expeditions. The Mountain Leaders who will be supervising students during their expeditions came in to College to run the training. They met our students and introduced them to some of the skills they will need on their weekends away. There were skills sessions on equipment and clothing, on suitable food and camp cooking (noodles yes; uncooked chicken no!), and on maps and navigation.

Several students said afterwards that the training made the coming weekends away seem more real, and that they were really looking forward to putting some of their skills into practice.

Students undertaking Duke of Edinburgh will need to have their kit/equipment all ready at the end of the Easter Break. I have asked all students to bring their kit in to College on the Monday after Easter (April 9th) so that we can check they have everything ready to go. -



Mr. Lambert

Parliamentors Programme 2018



I was deeply impressed by our students' contributions to the National Mathematics and Science College's debate on Organ Donation on Friday, 23rd February 2018. It was a 'whole' College event so from my perspective, it was important to get the organisation of the teams and the day just right, especially due to the early start!

Thanks to the assistance of Pierre and the College's debating society, the 'dress rehearsal' went very well on the previous Wednesday as it gave the speakers and their audience a chance to walk through some of the arguments that would be addressed during the official debate in The Wilson Room.

The Proposer Aidar and his Second Proposer Wayne were in favour of the new Opt Out System for Organ Donation whereby each person is deemed to consent to their organs being used for transplant after their death. This capable team were equally matched by their worthy opponents, Anete and Rick, who argued against the case for an opt out system citing Just to add an extra element of interest, both teams had speakers who had to argue against their own personal views so a huge thanks to Anete and Wayne for their willingness to embrace arguments that were counter to their own views.



Aidar and Wayne's arguments in favour were clear, concise and logical and both speakers answered difficult multi-layered questions without notes in a compelling way; Aidar even quoted Latin to excellent effect. Their arguments were respectfully received and countered by Anete and Rick's impressive responses in which they cited the importance of medical infrastructure and nursing support in Spain where organ donations have reached nearly 40 per million of population; and the failure of the system introduced in Brazil in 1997 repealed in 1998 without public discourse on the opt out system. Anete also spoke with a depth of knowledge beyond the scientific brief provided for the debate, talking confidently of brain stem death.

Lastly, I would like to thank the audience for their excellent contributions from the floor; I'd like to mention excellent contributions from Veritas, Gemini, Anthony, Pierre, Leo, Ekaterina, Valentino, Viviann and Tommy in particular. Although the final vote in favour of the Opt Out System of Organ Donation won by 14 to 7, everyone seemed to enjoy the process of the debate rather than its result! Geoffrey Robinson's own Private Members Bill Organ Donation Deemed Consent had passed its Second Reading nem con (with no one against) just before the NMSC debate, but that did not diminish the verve and energy of the students' debating skills so congratulations to all of those who took part, you should be very proud of this achievement.



Miss Bruce