STUDENT SCIENTISTS FROM RICHARD TAYLOR CE PRIMARY SCHOOL YOUNGEST TO SHOWCASE AT NATIONAL EXHIBITION

- ++ Richard Taylor's Viking poo investigation could help children across the world ++
 - ++ Well World project helping to save Nidd Gorge from relief road ++
 - ++ Institute for Research in Schools inspiring the next generation of scientists ++

On Monday, 18 March, student scientists from Richard Taylor CE Primary School in Harrogate were the youngest to showcase their cutting-edge research findings at the third anniversary celebration of the Institute for Research in Schools (IRIS) at The Francis Crick Institute in London.

Richard Taylor's investigation of Viking poo and work on wellbeing and biodiversity was recognised and celebrated by the scientific community.

Working alongside real archaeologists, these 8- and 9-year-old students found whipworm eggs in the poo and concluded that the personal hygiene of the Vikings was a problem. As a parasitic worm, whipworm affects around 500m people globally – mainly children. Richard Taylor students will now go on to research how the parasites found in Viking poo compare to those around today.

These findings coincidentally link to another of the projects that IRIS offers to schools – Genome Decoders - where schools across the country are mapping all 15,000 genes in the human whipworm genome to help cure a debilitating childhood disease that affects millions of children in subtropical countries.

As part of their Well World project, Richard Taylor students have been measuring the biodiversity in The Nidd Gorge and Bilton fields area and comparing it to their school grounds. The children have been assessing their own wellbeing when they are at Bilton Fields and found that being in an area of rich biodiversity gives the highest results in terms of wellbeing.

The students have been working in the community to promote the importance of the area as there are proposals to build a relief road through this Green Belt. Students have been writing letters and creating posters and art work for displays in the community and have written and recited poetry about it.

This is all made possible by IRIS, which has given these passionate student scientists in Harrogate access to real world and potentially life changing science projects. These students could be the next generation of scientists to change the world as we know it.

IRIS student scientists – right through from primary up to post-grads - form part of a research community, together with their teachers and scientific researchers. Young people working with IRIS can annotate a human whipworm, analyse data from the International Space Station, and tackle fundamental challenges of climate change.

We have a national shortage of scientists and engineers, with Engineering UK estimating that by 2024 we will need to train 186,000 engineers annually to keep up with industry demand, and the current Science, Technology, Engineering and Maths (STEM) curriculum is not enticing enough to fill that huge gap.

IRIS aims to plug this gap by inspiring the next generation of scientists. Giving these Harrogate students first-hand experience of cutting-edge research has a positive impact on the numbers of those who choose to continue studying STEM subjects after they turn 18 – and there's an actual possibility of them making a scientific discovery before they even go to university.

Professor Becky Parker MBE, Director of the Institute for Research in Schools, said:

"Huge congratulations to our student scientists at Richard Taylor CE Primary School. It was wonderful to celebrate their important contribution to wellbeing and biodiversity and learning through history and science at our third anniversary.

"We know from working with almost 250 schools that students need first-hand experience of scientific research for it to 'stick'. Now is the time to nurture these young scientists in Harrogate if we want to bridge the gap between supply and demand in the industry.

"STEM education should give students the opportunity to work on genuine problems facing our communities – whether that is helping fight debilitating diseases in third-world countries or getting to grips with the factors that affect people's well-being. Coming face to face with real science is the way to make children fall in love with science - so much so that they continue their studies at A level, onto university and then out into the world as passionate scientists."

Emma Crisell, STEM lead and Deputy Headteacher at Richard Taylor CE Primary School, said:

"We are incredibly proud of the contribution our students are making through their research projects. Their passion and motivation to learn through real scientific research is infectious. I would urge all schools to embrace the opportunities that working with IRIS brings."

Fabian Kelly, Year 6 student, said:

"Presenting our Viking Poo research at the Crick Institute boosted my confidence, especially speaking in front of so many interesting people. It's an experience I will never forget."

Frankie Kwai, Year 5 student, said:

"Taking part in real scientific research, as part of the well world project, makes me feel I have made a positive difference to my community."

A parent of a Year 6 student, said:

"We loved the experience of being involved. The research has given our daughter the opportunity to get hands on with a subject she loves – science - whilst at the same time learning about the environment and its importance. Being given the opportunity to go to the IRIS anniversary event was fantastic. It was her first trip to London, and she was over the moon with the whole experience. We can't think of a better more exciting way to develop her confidence and passion for science."

Notes to editors:

The <u>Institute for Research in Schools (IRIS)</u> provides students and their teachers with the opportunities to participate in authentic STEM research and to make valuable, recognised contributions to the scientific community.

More information about IRIS projects, some of which will be showcased at the anniversary event, <u>can be found here</u>.