

Reporting the UK-Japan Young Scientist Workshop programme

Inspiration and achievement beyond the curriculum



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To share an understanding of the success of our UK-Japan Young Scientist Workshop programme, and specifically our 2025 UK-Japan Young Scientist Workshop which was hosted at Cambridge University, and celebrate with you the outcomes which young people from both our countries achieve living and working together with scientists and engineers through these Workshops, let me begin by reporting words from Aimee Li, the teacher from the outstanding Urswick School in Hackney, and two of her students, Lucas and Ayan (see right). The Urswick School is the fourth most deprived school in London and has 504 of its 814 pupils eligible for pupil premium.

So, what brings about these transformations, and what happens?

The 2025 Workshop built on the experience of 30 such Workshops that the Clifton Scientific Trust has organised and hosted with our Japanese colleagues in universities in Britain and Japan since 2001. Our 2026 Workshop in Japan will mark our 25th Anniversary.

Following our usual pattern, last summer we brought together 50 senior high school/post-16 school students from a dozen schools, equally split between from Japan and from UK, including six students from Urswick School.

They lived closely together for a week in a Cambridge college, sharing rooms between the two countries and in the evenings were engaged in all manner of student-centred activities: a gift exchange evening, an evening playing sports, etc.

"This is the second year The Urswick School has had the privilege of participating in this programme and somehow, it has once again far exceeded my expectations. The progress of the students over the course of the week has been extraordinary. What began as a group of nervous but enthusiastic participants developed into a cohort of confident, articulate young scientists capable of presenting and defending their ideas with clarity and professionalism. It allowed me to witness the remarkable capacity of my students to rise to intellectual and personal challenges. I cannot put into words how grateful we are... Your vision has changed countless lives and your legacy will continue for many years to come."

Aimee Li, Teacher, The Urswick School

"It was the most valuable, most exciting, experience of my life. Meeting so many different people was eye-opening and helped me inform my future career choices. I learned a lot about scientific research and it really changed my perspective on lab work and postgraduate degrees."

Lucas, student from The Urswick School.

"Coming from a background where chances like this don't come around often, this trip left a deep mark on my heart. The opportunity shaped the way I view the scientific world, how diverse it is and what it has in store for me in the future. Friends of a lifetime have been made across the world."

Ayan, student from The Urswick School.

During the day, as small international student teams, they were welcomed as guests of science/engineering research groups across the university, where they were introduced to the focus of their hosts' research and given a research challenge related to that work to explore. There were no hidden answers and students were encouraged to question, and to think for themselves, and to work as an international team, putting their school knowledge to real-life work. At the end of the week, each team gave a

formal presentation of their achievements and answered probing questions in front of an audience that included distinguished invited guests. As Aimee reports, the outcomes in just a few days are amazing.

Students worked as teams in six research projects

These projects ranged from the design of turbine blades – to enhance the efficiency of jet engines with a team in the Whittle



Laboratory in Engineering, to the exploration of past climates with a joint team from Earth Sciences and Geography, through to the examination of sediment core.

There was also a project in science communication with the Naked Scientist team – students interviewed the other project teams in their laboratories and put together a podcast, posted online, which encapsulated the essence of their research in a way which they judged would be of general public interest.

This year there were two new projects with research groups we had not worked with before. One, with scientists in the Department of Pathology and Cancer Research Cambridge Centre, explored the role of proteins associated with cancer cells. The other, with the Bionano Engineering Group in the Department of Chemical Engineering and Biotechnology, linked with the study of how nanomaterials could mimic enzymes. You can see more by visiting www.ukjapanscienceworkshop.com

On the final day of student team presentations of their achievements, valuable commentary and advice was provided by the Earl of St Andrews, Patron of the Great Britain Sasakawa Foundation (and also Patron of Clifton Scientific Trust); Dr Michael Rivera King, Chief Executive, the Japan Society; Mr Takeshi Maruyama, Managing Director and Head of Technology, Otowa Electric Co Ltd; Katherine Paynter, MOD Tri-Nation (Italy, Japan, UK) Future Aircraft Programme; and Professor Roger Cashmore CMG, Emeritus Professor of Experimental Physics, University of Oxford and formerly Principal of Brasenose College Oxford and formerly Chair of the Atomic Energy Authority and Director of Research at CERN.

We are grateful to have continued to receive financial support in 2025 (and over many years) from the Great Britain

Sasakawa Foundation, from Mitsubishi Electric Europe, from the Japanese Women's Association in Great Britain. This year we were joined by a new supporter, Otowa Electric Co Ltd, whose senior executives travelled from Japan to be with us in Cambridge.

We are also grateful for the past substantial support from the Japanese offices of Barclays Bank and Rolls Royce, triggered by our engagement with schools serving communities in Japan affected by the 2011 Great East Japan Earthquake and Tsunami, as well as support from other donors. Funds are used to make it possible for students from schools who would not be able to take part, to participate.

Students grow through the workshop experience

Although it is very challenging, there is much laughter, and in just a few days, students develop as globally-aware young scientists, while developing teamwork and presentation skills in ways which they can then take forward in their lives.

Questioning is really important; no question is stupid. The experience is particularly valuable for students from schools serving disadvantaged communities, such as the Urswick School, whom we support through the funds we raise. For such students, their schools report that the growth in self-confidence through their achievement is a very important outcome.

Teachers accompany their students. They observe but do not take part in the research, take responsibility for and support their students. They take back to their own schools what they have learnt in the Workshop, including from networking with the teachers from the other country. This is enhanced by the "Teachers' Forum", which is always a part of the programme. We are now developing an Alumni Fellowship through which past and present students can support each other.

I end with some words from Professor Sir Martin Rees, Lord Rees of Ludlow OM FRS who looked in on our Cambridge Workshop this year, as he has done on previous Workshops since 2010.

"What has really impressed me about the UK-Japan Young Scientists Workshops are how quickly the talented young scientists from two very different countries develop friendly contacts and are able jointly to tackle challenging projects. The programme offers a memorable and formative experience of science as the one truly global culture that transcends national boundaries which the students can share.

"The 'format' plainly works. Much dedicated effort goes into the planning and running of these events, but above all it's Eric Albone's vision and commitment over the last 25 years that's been crucial. Let's hope these Workshops will continue for another 25 years – and it's a 'template' that could surely be expanded and replicated if the funds were there."

Professor Sir Martin Rees

If you are interested in learning more or might consider being involved in some way, please do not hesitate to get in touch at eric@clifton-scientific.org.

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