



Students from schools in England and Japan took part in the science workshop with Dr Claire Cockcroft (right) at Babraham

## Science hosts rising sons & daughters

POST-16 school students from Britain and Japan have been attending a unique workshop in Cambridge designed to promote scientific achievement and develop global awareness and international understanding for young people through science.

This was the first time the University of Cambridge had hosted the Clifton Scientific Trust initiative.

Fifty students from 12 schools across England and Japan participated in the science workshop. By living together and working in small teams with professional scientists and engineers, they experienced real life science and its challenges at first hand, as well as learning about each other and forming lasting friendships. At the end of the week, they gave team presentations of their achievements.

Dr Eric Albone of the Clifton Scientific Trust, who organised the weeklong event with colleagues at the University, the Babraham Institute and in Japan, said: "Britain and Japan face a common challenge. In both countries, too many young people remain uninspired by their encounter with science in school and both countries are working to address serious concerns that too few talented young people are attracted to science-related careers, particularly in the physical sciences and engineering.

"The challenge we face is to prepare them to be the confident, motivated, science-literate, globally-aware, questioning young people the 21st century demands."

Dr Claire Cockcroft, head of external relations at the Babraham Institute, added: "This is a pioneering initiative in science outreach, bringing together 6th formers from different cultures to work on scientific projects and solve problems.

"Twenty-five students have been immersed in projects encompassing molecular biology, biochemistry, neuroscience and computational biology within Babraham Institute's Bioscience Bootcamp.

"Bootcamp is a one-week programme designed to give 6th formers insights into biomedical research through short research placements, ethical workshops and a science conference.

"We hope that this experience will provide a greater understanding of the way research is carried out, the collaborative nature of science and may inspire them to pursue careers in science and technology."

Twenty-five eager students enlisted for Babraham's Bootcamp, which brought together Hills Road Sixth Form College, Netherhall Sixth



Form, schools in Bury St Edmunds, Colchester, Watford and Dartford with six science high schools in Japan for a unique learning experience.

The Babraham Institute works closely with Ian Harvey, head of biology at Hills Road 6th Form College to provide students with access to hands-on lab experience and role models in science-based professions.

He said: "The opportunities offered by the Babraham Bootcamp are invaluable to sixth formers contemplating a biological career. To work on projects with 'real life scientists' is an inspiration. A' levels today are formulaic and allow little latitude for indulging in biological pursuit for intrinsic interest and this is what the bootcamp offers.

"Working alongside students from such different backgrounds - indeed different cultures - adds a new dimension and brings young people together with a shared enthusiasm for their subject.

"My students have enjoyed and gained much from the experience and will enter their A2 year with added impetus and the conviction that they want to be biologists!"

Dr Remy Poland, research scientist at the Department of Genetics in Cambridge also provided some exciting ecological projects for the UK-Japan Young Scientist Workshop.

Eighteen students were engrossed in projects surveying various insects, such as ladybirds, butterflies and the horse chestnut leaf miner as part of a study into infections

affecting horse chestnut trees in Madingley.

Dr Poland said: "At the Evolutionary Genetics Laboratory in Madingley we have hosted 18 Japanese and British students, working on three projects in insect ecology.

"Initially some of the students were quite squeamish about the insects and spiders we collected, but by the end of it, I think I had at least some of them convinced that entomology is cool!"

"Students have gained useful experience of ecological research: conducting fieldwork, developing sampling techniques, using the microscope and analysing data. But, perhaps most importantly, they have been learning skills in teamwork and communication, vital attributes for any scientist."