

BBSRC Public Engagement Awards 2010

Dr Anja Drozd, The Babraham Institute
Real Life, Real Science

The Babraham Institute has pioneered a successful science programme for primary schools, which has delivered innovative science teaching by 'real scientists' to over 13,000 primary and pre-school pupils since 2004. This project will strengthen and expand the programme to enable pupils in more distant parts of the region that have previously not had any STEM engagement to benefit from Babraham's science enrichment programme. In particular schools will be identified that are disengaged from science and those in localities where there are high levels of social deprivation, unemployment and high cultural diversity. In October 2009, we pioneered an event with 40 year 6 pupils from three Hackney primary schools with little prior STEM engagement who attended a half-day event at the Babraham Institute. The event was so successful we are repeating it in January 2010.

Project objectives:

To transfer enthusiasm and excitement for science to the next generation and help young children (up to age 12) to understand the role and relevance of science in everyday life

To educate pupils about nutrition, healthy eating and raise awareness of food security issues and about bioscience in general

To target schools with no previous STEM engagement, delivering inspiring science and role models

To target and deliver to schools in more distant geographic locations within the region, where economic and social deprivation, unemployment and cultural diversity are high

To deliver science to new young audiences such as after school science clubs (primary-secondary transition) and community groups such as the Scout movement

To share best practice and resources with teachers outside our current catchment area

To enable post-docs and PhD students to develop their communication skills and to develop confidence and expertise in public engagement activities

To contribute to teachers' Continuing Professional Development (CPD), delivering workshops to increase teachers' self confidence in their ability to effectively teach science using our resource packs

To strengthen reputation for trust and openness at the Babraham Institute in the local community and across the Eastern region

To put scientists into schools to dispel myths and stereotypes about what we do and what we look like

To deliver existing resources to a wider audience.

Dr. Amanda Bamford, University of Manchester

Can Manchester feed itself? Food security in a changing world

A week of activities connected to food security involving local schools and community groups and culminating in a finale at Manchester Museum. Community activities will include cookery demonstrations from ethnic minority and refugee groups, talks and demonstrations covering topics such as where and how we can grow food, soil, permaculture and aquaponics.

There will be a project with a local school to experiment with different growing systems such as aquaponics and hydroponics and opportunities for pupils to analyse the results through visits to University of Manchester labs.

The Manchester Museum finale will feature specimens from the museum's collection of wild ancestors of crops, exhibition of novel crop lines, taster sessions, displays that resulted from the school's growing projects, workshops and talks involving local community groups.

Dr Andy Radford, University of Bristol, School of Biological Sciences

Bringing biodiversity to life

This project will bring biodiversity to life **over a sustained series of activities** for Key Stage 2 (KS2) school children, during the International Year of Biodiversity 2010. Students will work collaboratively with University-based scientists to survey their local school environments, studying the plants, animals and physical environment, and then together build and map their data on to models of their school grounds. Students will subsequently have the opportunity to participate in two follow-up biodiversity-themed events - Bristol's Bioblitz, a 30-hour survey of species in the Blaise Castle Estate, and the Festival of Nature.

This project will engage approximately 400 KS2 students from two schools, 12 teachers, and 16 postgraduate and early-career scientists from the School of Biological Sciences, University of Bristol. Participation in the Bioblitz and Festival of Nature will mean additional involvement of amateur naturalists, student volunteers, scientists and engagement professionals. Parents of some of the students will also be an audience for this project, through participation in school assemblies where students will present their work, and attendance at the Festival's weekend events.

Prof Christine Nicol, Animal Behaviour and Welfare Group, Department of Clinical Veterinary Science, University of Bristol

Animal Welfare in a Changing World

As animal behaviour scientists with an interest in farm animal welfare we propose a series of thought-provoking and controversial events that will highlight our (and others') BBSRC-funded work and draw the public into the complex debates surrounding our relationship with food-producing animals. We aim to reach 600-700 members of the public through a series of talks and discussion events, a further 40 members of the farming and food production community through dedicated workshops, and many more through web-based resources.

Proposed activities (the award will part-fund some of these)

- A public lecture by Professor Peter Singer to a public audience of up to 500 people on May 5 2010. This event will focus on the changes in ethical thinking about the place of food animals in the 35 years since the publication of his influential (and controversial) book 'Animal Liberation'. (In conjunction with the Bristol Festival of Ideas).
- 'Twilight Talk' event with Professors Mike Mendl and Christine Nicol and other members of the Animal Welfare and Behaviour research group will highlight new findings about animal minds and about how the study of animal behaviour can be used to make better decisions about farm animal welfare - estimated audience of 80-100 adults.
- A second evening discussion event with Dr Becky Whay and Dr David Main about the links between animal welfare and food production, how welfare research is implemented in the 'real world', and the ethical and economic issues it raises. Audience: 80-100 adults.

These events will be held in conjunction with the Festival of Ideas, which attracts a wide-ranging audience to its events.

In addition, we will hold two stakeholder workshops with farmers and producer groups later in 2010 to discuss how efficient productivity and good animal welfare can be achieved together.

Professor Jane Memmott, School of Biological Sciences, University of Bristol, Woodland Road, Bristol

Celebrating Bees and Pollination

We will use a festival at the University of Bristol Botanic Garden on 30th August Bank Holiday 2010, to engage and excite the public about the importance of bees and pollinators for fruit and honey production. In terms of scientific engagement the event will highlight the biology of pollination, e.g. perception of flowers by bees and adaptations of flowers for pollination by bees, and also the current plight of honey bees and wild bees in terms of recent dramatic population declines.

The event will engage with local bee keepers, orchard fruit growers, farmers, and cider producers as well as a wide audience of the general public. The Festival will be centred within and around a main marquee containing displays by contributors.

During the day there will also be a series of interactive half-hour discussion 'cafes' associated with each display, where members of the public can discuss the activities of the presenters to find out more about their activities. In addition we will organise tours both before and during the Festival: Ahead of the festival four special 'Bees and Pollination' tours of the Botanic Garden will be lead by Botanic Garden staff (e.g. Director and Curator), and researchers and students from SoBS. These will focus on the biology of pollination and the services provided to man by bees and pollinators. Post-graduate students will develop interpretive material for the tours as part of their training in public understanding of sciences and outreach. During the Festival special tours of the Botanic Garden lead by Botanic Garden Staff and Volunteers from the Friends will showcase the adaptations of flowers to pollination and advise people on which flowers to plant to best attract bees and pollinators to their gardens. Following on from the success of last year's BBSRC-funded 'Voyages of Discovery' events which engaged with a Deaf audience for the first time at the Botanic Garden, we will again make some tours accessible to the Deaf community with help from members of the University of Bristol's leading Centre for Deaf Studies.