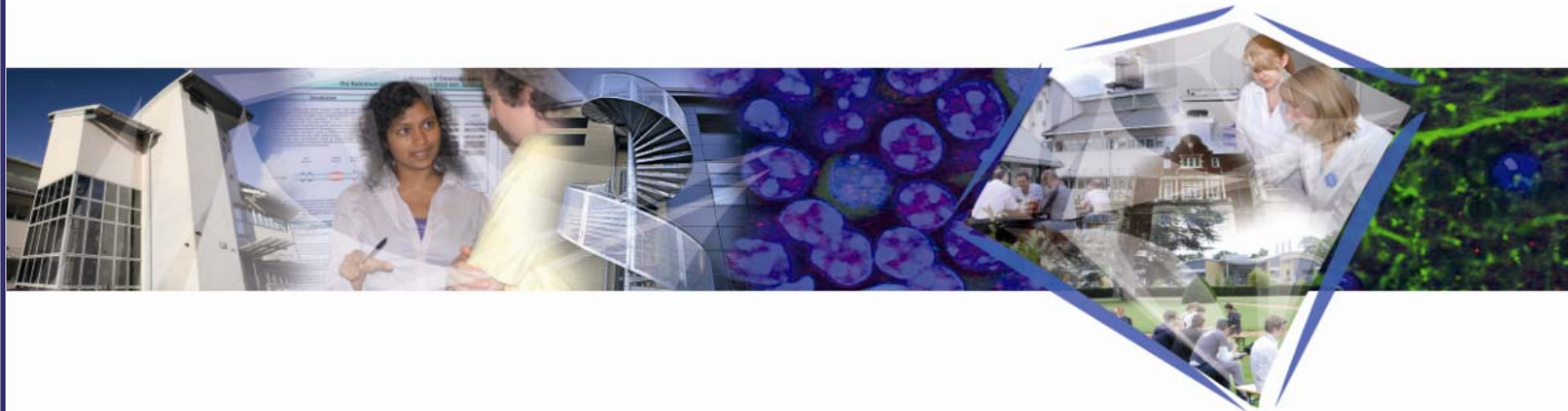


Sustainability of Public Engagement Projects



‘Engage and Inspire’ Science & Society at the Babraham Research Campus



Dr Claire E Cockcroft

Head of External Relations
The Babraham Institute



The Babraham Institute

- Biomedical research organisation
 - **Understand the basis of disease**
 - **Autoimmune, cardiovascular and neurodegenerative diseases, cancer, age-related diseases**
- Institute of BBSRC
- Advanced training for scientists - PhD
- Vibrant campus - enterprise and innovation
 - **Bioincubator with 30 companies**
- Science & Society
 - **Draw on all aspects of campus**
 - **Pre 2004: small scale internally resourced**
 - **Proactive, creative and responsive**
 - **All ages and abilities**
- Increase scientific literacy and inspire next generation



Babraham's Science & Society Programme

- Over 30 activities per year
- Primary and pre-school
- Secondary schools
 - **Schools' Science Day, 6th Form events**
 - **'Researchers in Residence', visits to schools**
 - **Summer lab experience, careers / mentoring**
 - **Social-ethical aspects of science, PHSE**
- Develop new resources and events
- Cambridge Teachers' Network & Open Evenings
- Cambridge Science Festival / village events
- New audiences
 - **U3A, WI, learning difficulties, Guides**
- Respond to requests from public
- **Communication training for staff and students**



Transferable skills for PhD students

How do we resource and sustain the programme?

- Babraham Institute
 - Small core funding allocation (£4k) - flexible
 - 'In-kind', infrastructure
 - PhDs, staff and Group Leaders (2 days)
- BBSRC Local Co-ordinators' Scheme (£800)
- RCUK National Science Week Grants (£2k)
- BBSRC Public Engagement Grants (£5k)
- BBSRC new source of funding for institutes (2006)
 'Science & Society' grants up to £20k/year
- Piecemeal approach
 - Expansion and short-term sustainability
 - Funded innovative pilots
 - Repeat funding based on evaluation of pilots
 - Time consuming, no guarantees
 - Success shapes type of outreach



Inspiring Primary School Pupils

- Highly successful established in 2005
- Piecemeal funding over 4 years demonstrating impact
 - Over 4,000 children, 24 local schools
 - 'Real scientists', hands-on activities vital
- Developed range of resource packs for KS 1 & 2
 - Co-ordinated with National Curriculum: Digestion & Health, Blood & Circulation, Nerves, The Brain, 'What is a scientist?'
- Funding - 'BBSRC local co-ordinators' & Babraham
- Maintenance – BBSRC '07 (£1k) & RCUK '09 (£700)
- Evolution – BBSRC £5k PE Grant awarded 2009
 - Extend to 'hard-to-reach' / no previous STEM
 - Outside locality - STEM Ambassadors
 - Assist with 1^o to 2^o transition
 - New resources



Secondary Schools

- Schools' Day (Babraham & RCUK funding since 2005)
 - 140 GCSE/A level students
 - 2 lab projects
 - Careers discussion
 - Inspiring role models
- School visits
 - Science / Careers / PHSE
- Workshops for years 10/11
 - Master-classes at Cambridge (WP)
 - Understanding Animal Research
 - Commercialising science
 - All abilities
- Teachers' Open Evenings (BBSRC)
 - Feedback and discuss ideas for new resources
 - Curriculum changes e.g. signalling, stem cells
 - CPD
- Future: After School Science Clubs (years 7 and 8)



**WORK
WITH SCHOOLS**
Award for Excellence in
Employer Engagement



Futures & Options in Biomedical Science

- Understanding Animal Research – half-day workshop
 - Scientific and ethical aspects (DEMOCS)
 - Institute of Animal Technology - careers
 - Q and A
 - Babraham facilities & tour of construction site
- Funding (barriers - travel/supply cover)
 - BBSRC science & society - pilot 2007
 - RCUK - Science Week 2008 and 2009
- Audiences
 - Years 10 / 11 from 4 local schools
 - Content adapted for ability range
 - Long Road L6th Form
 - Home Schooling Groups
- Sustainability – embedded in curriculum
- Share resources and event format



Enriching 6th Form Science

Increased engagement with 6th formers since 2006

- 6th Form Symposium Feb 2006 pilot (BI)
 - lectures, careers, ethical discussion, half-day lab
- Visits to Sixth Forms – science and careers
 - Deeper Insights into the field, role models
- BioEnterprise event – with Bioincubator companies
- Science & Society ‘Question Time’ Assembly (March '09)

- 6th Form Conferences (delegates across the region)
- Summer work experience/Nuffield bursaries
 - Bioscience Boot Camp summer 2007
 - High ability
- Larger scale events - BBSRC Sci&Soc Funding

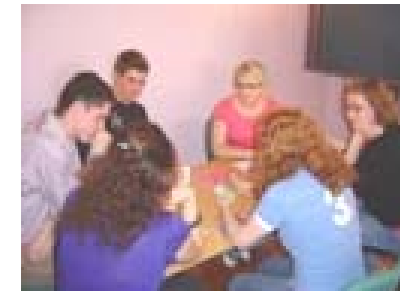


Bioscience Bootcamp

- Innovative project evolved out of need
 - Pilot one-week programme for Year 12
 - 15 students (Cambridgeshire, Peterborough, Surrey)
- Insights into research and careers
- Science lectures + Half day practical
- 2.5 days lab experience
 - Group Leaders/post-docs, one on one
- Facilitated ethical discussion
- Careers talks & University admissions
- Half-day Bioscience Enterprise workshop
 - Drug discovery with GSK

“Boot Camp confirmed my decision to do a scientific degree and gave me the opportunity to see what real scientists do”

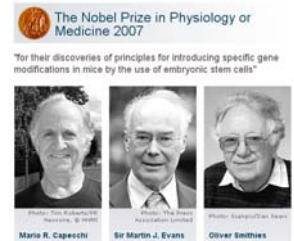
“We need to track and monitor these students!”





6th Form Conferences

- Scientific, ethical and commercial applications of biomedical research
- Q and A with leading scientists
- Careers advice
- Funding BBSRC (£4k travel, catering, conference packs)
- Stem Cell Science - November 2007
 - 160 students from Cambridge & region
 - Academic and commercial talks, ethics workshop
 - “nice that big names have time to aid younger people’s understanding”*
- Bioscience of Ageing – June 2008
 - New target schools outside region
 - Babraham science
 - MRC - epidemiology of disease
 - Careers workshop





Ensuring longevity

- Track record of high impact public engagement projects
 - Piecemeal funding plus infrastructure from BI
 - Enthusiasm of scientists
 - Evaluation – impact across ages
- Sustaining and innovating public engagement (2009)
 - BBSRC - core funding to BBSRC Institutes
 - Focus on secondary education in 2009
 - Babraham Institute – new part time position
- Sustain and expand on current levels of activity
- Repeat successful events and pilot more innovative ideas
- Future: Partnership and collaborations
 - Sharing resources and best practice
 - STEM Ambassadors
 - Don't reinvent the wheel!

Vision for Babraham's Science & Society Programme



Make science accessible to all public audiences and stakeholders

through exchange of ideas

Transfer enthusiasm & excitement for science to the next generation with hands-on science