# NESTA Crucible: Interdisciplinarity, Innovation, and Inspiration

Tom Webb & Phill Cassey

Most Junes, Royal Holloway's Egham campus would doubtless be delightful; this year, it is wet. It's a Saturday afternoon, and we've just recognised each other as ecologists, within a select group of early career researchers drawn from across the spectrum of scientific disciplines (with a sprinkling of social scientists to liven things up). We are about to embark upon NESTA's 2007 Crucible programme, and we've no idea what to expect...

Six months and three weekends later, Crucible has proved to be an extremely valuable and enjoyable experience. Here we share some of the highlights with you, in an effort to encourage more ecologists to participate in these unique events in future.

#### What is NESTA?

NESTA (www.nesta.org) is the National Endowment for Science, Technology and the Arts, and is the largest single endowment devoted exclusively to supporting talent, innovation and creativity in the UK. Between April 2006 and March 2007, they invested around £18M towards this aim, funding early stage companies and informing policy. Crucible is specifically aimed at fostering this spirit of innovation among early career researchers.

## What does Crucible involve?

The annual Crucible programme (www.nesta.org.uk/ programmes/connect/crucible) provides 30 early career participants with the opportunity to critically examine the social and technical challenges facing young researchers. Crossing disciplinary boundaries is widely seen as important for innovation, but also as difficult given the highly departmental research infrastructure within most universities and other research institutes (see Holt & Webb 2007:

Bulletin 38(3): 2-13). The key to Crucible's success is to break down these barriers, providing the space and time for people from very different backgrounds to interact and to explore the common themes which apply to all of us. This year, the process included talks by eminent art historians, journalists and TV producers, a 'question time' with members of Commons and Lords select committees, sonic art with infrasound and a robotic doll playing a Theremin, meetings with venture capitalists, a drinks reception with the great and the good in one of the more prestigious London postcodes, and excellent accommodation, dining, and entertainment in Surrey, Edinburgh and Devon.

### Who goes?

This year over 150 researchers applied for the 30 positions and as well as we ecologists the final group contained a fascinating mix of people with research interests in quantum physics, deep sea marine biology, creative technology and science-based policy among many others. Uniting us all was a strong desire not to become entrenched within a single area of expertise, but rather to explore the wider implications of our research. 'Breadth, not depth' might be a suitable motto, were it not for the impressive levels of in-depth expertise displayed by our fellow participants! Communication emerged as a common theme – from writing screenplays to writing *Bulletin* articles – and we were encouraged to explore techniques such as explaining our research in terms accessible to a hypothetical 'Auntie Mabel' or pinning a presentation on a single pertinent word.

#### What are the benefits?

NESTA are understandably keen to derive quantitative indicators of the success of Crucible, and undoubtedly some formal collaborations (some of them truly interdisciplinary) will result from this year's programme. But from a personal development perspective, the opportunity to interact with such a dynamic and creative group of researchers in itself makes for a very rewarding experience. In addition, it's comforting to realise that whinges about funding, career



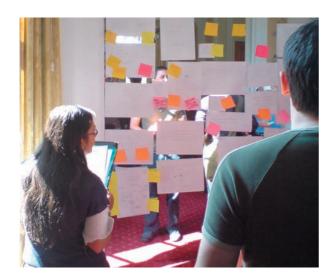
Being creative in the bar at Royal Holloway

# Notes and News



Designing the 'Universities of Utopia' in Edinburgh

progression and general academic frustrations are universal, and handy to get advice on pitching grant proposals from people who have recently achieved success in highly competitive and lucrative schemes such as the European Research Council. The range of activities designed to facilitate interdisciplinary research and innovative thinking was impressive, and all were led by inspiring individuals. Finally, the social aspect should not be overlooked – from the intellectual satisfaction of chatting with a group of intelligent, socially aware and articulate scientists, to the fun of sharing a good few pints with the same! A measure of the success of this programme is the enthusiasm with which the possibility of a fourth weekend was greeted.



Interacting with the wall of collaborations

#### Get involved!

We would strongly recommend Crucible to any early career researcher who is considering a long term role for themselves in science and technology, and who is interested in the wider social context of their research. It was noticeable how many of the issues raised are of interest to ecologists, but also salutary to realise how low down the pecking order funding in the environmental sector sits. We have both returned from Crucible weekends inspired and with renewed enthusiasm, and urge you to look out for future calls around December time.

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Tom Webb photo

