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## Uses and Abuses of Biology Programme Concluding Workshop

19th – 21st September 2014, Christ's College Cambridge

The Uses and Abuses of Biology Programme (UAB) held its concluding workshop in Cambridge across the weekend of the 19th – 21st September.

The UAB Programme was set up in 2011 to investigate contemporary non-scientific uses and abuses of biological thought (beneficial, benign or negative) in the domains of philosophy, the social sciences, the media, religion and politics. The Programme aims to foster cross-disciplinary and collaborative work, and has been pleased to support 18 research groups from universities across 4 countries to conduct a range of projects related to the theme of uses and abuses of biology.

The concluding workshop was held to celebrate the work of the Programme and to disseminate to a broader audience some of the key findings that have emerged over the last two years. The workshop featured presentations from researchers who have participated in the UAB programme in the past two years, with much of the research being presented for the first time.

Key findings that emerged included:

- **Dr Amy Unsworth** (The Faraday Institute, St Edmund's College, Cambridge) presented the results of a newly-conducted national survey in the UK (n = 2116) which revealed that the number of British citizens who reject evolutionary theory may be much lower than previously thought. Only 3% of the sample rejected the idea that animals and plants have evolved from earlier life forms, while 6.8% that that humans could not have evolved from non-human life forms. Among active religious worshippers, the figures were higher but still lower than expected, with 28.6% of regular worshippers (once a month or more) rejecting human evolution from non-human life forms, and 14.3% thinking that plants and animals did not evolve.
- **Prof Bill Struthers** (Wheaton College) reported the results of a psychological study among students of a religious college in the US. His team presented students with news stories about the role of the brain in human behaviour. He found that when the stories were presented with brightly-coloured images of MRI brain scans to support the neuroscience, students did not find them more

- credible or persuasive than when just the text was used. In fact, when the story purported to show that religious belief and behaviour is just an affect of brain function, students found the story less credible and persuasive when accompanied by brain imagery, suggesting that investment in the issue caused students to be more sceptical.
- **Prof John Evans** (University of California at San Diego) talked about the results of a national US survey which asked participants about how they define what a human is – are these definitions mainly theological, philosophical or biological? He reported that those people who have a mainly biological conception of humans, defining them by their physical appearance and genetic endowment, are more likely to view people as ‘object-like’. In other words, they are more likely to think that humans are not special, not unique, not equal and like machines in their behaviour. In addition, this conception of humanity meant that people were more likely to support unethical actions like non-voluntary blood donation or selling organs on the open market.
  - **Dr Annie Jamieson** (University of Leeds) presented results from her empirical investigation teaching a new, alternative curriculum of Genetics to a class of students at the University of Leeds. Her course emphasised the environmental factors that are important in human development and focussed on complexity and interaction in human genetics, in contrast to traditional Genetics courses which focus on simple genetic examples like Gregor Mendel’s pea plants. She found that students taught the alternative course had a less deterministic approach to genetic causation and the influence of genes on behaviour.
  - **Dr Clodhna O’Connor** (University College London) reported on the results of her study into neuroscience in the media. She tracked the dissemination of a controversial neuroscience paper on the differences between male and female brains through its university press release, the wider media and reader reactions in blog posts and comments. The investigation found that the original study was generally used by all readers, both academic and popular, to affirm existing gender stereotypes (for instance, about male map-reading, female multi-tasking, parenting proficiency, etc). Happily, the research was only rarely used to make derogatory remarks about the other sex, although more subtle forms of sexism were visible in much of the discussion about the research.

To find out more about this research, or with any other media enquiries, please contact Nell Whiteway, the Programme Coordinator at [faraday.grants@st-edmunds.cam.ac.uk](mailto:faraday.grants@st-edmunds.cam.ac.uk).

For more information about the Uses and Abuses of Biology Programme, and to access podcasts and media work related to the workshop, go to [www.uabgrants.org](http://www.uabgrants.org).