

## Meeting Report: Brain matters – New directions in neuroethics

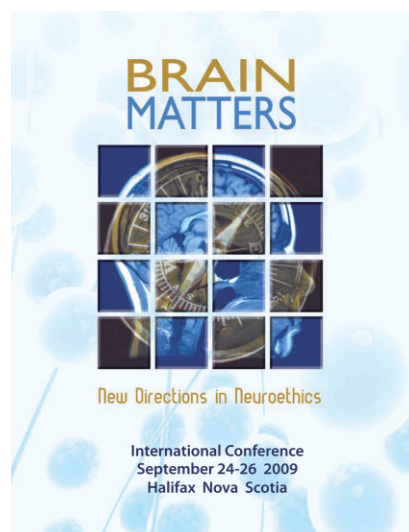
Over a two-day period, Brain Matters brought together an impressive array of expertise from a variety of disciplines to focus upon the science of neuroscience and its ethical implications. The conference received sponsorship from eight different sources, including the Canadian Institute of Health Research, and was co-hosted by Francoise Baylis, Professor and Research Chair in Bioethics and Philosophy and Joceyln Downie, Professor and Canada Research Chair in Health Law and Policy, both of Dalhousie University. It was attended by well over 100 people from 15 countries and 5 continents.

*Use ethics to fight against all forms of health inequality, not just those highlighted by emerging neuro-technologies*

Setting the scene for a substantial topic within the Brain Matters Conference, the day before the opening of the Conference, Erik Parens (Senior Research Scholar, The Hastings Center) presented a public lecture on what has become known as the **Cognitive Enhancement Debate**. For the uninitiated, the enhancement debate, or 'deadlock' as some conference speakers referred to it, revolves around the use of new (and not so new) psychotropic drugs for use by people who would consider themselves as healthy. These drugs appear to offer people a chance to become above-average in memorising, achieving mental tasks, or avoiding unhappiness of any form. Instead of arguing either for or against the use of a new or relatively new range of psychotropic drugs either being fundamentally problematic or emblematic of a new and great human future, Parens chose to analyse the debate itself. He argued that both the 'for' and 'against' neurological enhancement camps share the language of authen-

ticity and human nature, but differ in how they interpret these terms. Indeed, if we are thoughtful, rather than confrontational, we will struggle to hold a single line on this issue. Nevertheless, despite the intractability of this discussion, the prospect of neurological enhancement becoming commonplace clearly continues to fascinate bioethicists, as witnessed by number of conference speakers presenting talks on this issue. Some speakers chose to map out the discussion and its implications for clinical practice, others focused upon specific philosophical constructs within the debate, and yet others asked questions about socially acceptable forms of enhancement through hypothetical case studies. The discussion looks set to run and run.

**Free-will**, again an old discussion given new vitality by emerging neurotechnologies, also featured heavily at the Conference. Walter Glannon (Canada Research Chair in Medical Bioethics and Ethical Theory) argued that challenges to free-will come from the idea that our mental states and subsequent actions originate from some other source than our conscious thoughts – in other words, we are *controlled by* neuro-chemical processes within the brain, rather than controlling these processes through our thoughts. However, while the growing use of brain scanning (particularly fMRI imaging) might appear to present such a challenge, in reality brain scans present us predominantly with information concerning mental stimuli and correlates measurable through such imaging. As such, brain scanning tells us little about causation and does not offer a fundamental challenge to concept of free-will and choice in 'normally functioning' individuals. Brain scanning is still generally carried out with people with brain



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[http://www.noveltethics.ca/site\\_brainmatters.php](http://www.noveltethics.ca/site_brainmatters.php)

dysfunction, which provides only speculative challenges to free-will in people who do not have such dysfunctions, and only a limited understanding of causation even within this population group. In short, in the general population, we may still have to look elsewhere (to cognitive psychology for example) if we want to explore brain functionality as it impacts upon observable actions in the general population. More specifically, if we are to use neuroscience within the criminal system we will have to be cautious about assuming it can tell us about whether an individual is no longer responsible for their actions and therefore not subject to legal sanction.

These philosophical and ethical questions rightly dominated the discussion. However, there was also room for medical scientists to discuss the importance of ethics in developing good clinical practice. Indeed, for those out-

side the philosophical traditions of learning, the key message might well have been that ethics does have implications for the provision of care for unwell. While the enhancement discussion is likely to deflate over time, the fundamental values that it highlights are as relevant to medical practitioners as they are philosophers and bioethicists of the philosophical tradition. How we interpret knowledge from the neurological sciences is important because these interpretations are the basis for our actions. Both

medical practice and public health are heavily reliant on the outcomes of such discussions, and as we were reminded by Caroline Tait (Assistant Professor, Department of Native Studies, University of Saskatchewan), ultimately we need to use the language of ethics to improve the lives of those who bear the heaviest burden of ill-health and social stigma. In world where social prejudice and mental illness frequently present themselves as a combined burden to individuals and cultures, talk of enhancement and

free-will may appear to be misdirected, but the values exposed by such discussions challenge us to use ethics to fight against all forms of health inequality, not just those highlighted by emerging neurotechnologies.

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