Conference "Law and Neuroscience"
Panel discussions

Panel: What do lawyers want to know from neuroscience – and what can neuroscience deliver?

Time: Tuesday 27 October, 17.30-18.30
Panelists: Roger Brownsword, School of Law, Kings College, London, UK
Nigel L.G. Eastman, St. Georges Hospital Medical School, London, UK
Nicole Vincent, Technical University Delft, NL
Chair: Eva Hoogland, European Science Foundation, FR

Abstract
The aim of this session is to explore the extent to which the findings of neuroscience – both in terms of the neurobiological correlates of legally relevant behaviours or functions and in terms of visible indicators or biomarkers of neurobiological states – can in fact deliver legally relevant information. In many other areas of biomedicine, the 'translation gap' between basic science and application has been recognised and extensively discussed – for example, the relative failure of genomics to deliver clinically or therapeutically relevant applications; the current lack of appropriate neurobiological markers to aid diagnosis of mental disorders. So is this 'translation problem' also present in the criminal justice system – are we seeing unjustified extensions from small scale experimental findings to claims about their large scale practical implications? The questions that arise here are many and varied. To give a few examples:

- What are the problems to which neuroscience seems to be offering a solution? Are these social, political or legal problems? Or none of these - should neuroscience be seen as focussed on scientific problems alone?
- Do lawyers believe that, at the present or in the foreseeable future, neuroscience can adequately answer questions of witness reliability, identify excusing or mitigating conditions for violent or impulsive acts etc.
- More generally, are there areas of legal doctrine that might be evaluated or transformed by neuroscience?
- If so, where will neuroscience achieve traction? What kinds of neuroscience are potentially having an impact on what aspects of the legal system – and what aspects of the legal system might benefit from what kinds of neuroscience?
- If not, is this an empirical problem that will be solved by developments in the science, or is it a more fundamental problem of a discrepancy between neuroscientific and legal reasoning?
- And, if some of the specific claims for the role of neuroscience prove unfounded or premature, will neuroscience nonetheless have a more general impact on the 'folk psychology' that underpins legal thought?
- Can we learn anything from the ways in which the legal system has responded to previous technological and scientific developments?

Panel: Social and ethical perspectives on the promises and problems of neuroscience in legal contexts

Time: Wednesday 28 October, 17.45-18.45
Panelists: Renata Salecl, London School of Economics, UK and University of Ljubljana, Slovenia
Ilina Singh, London School of Economics, UK
Irina Sirotkina, Institute for the History of Science and Technology, Moscow, RU
Chair: Trudy Dehue, University of Groningen, NL

Abstract
Many of the concerns that have been expressed by social scientists and ethicists about the potential impact of neuroscience on law come from the United States and have a decidedly US flavour – as neuroscience seems to threaten some values that have particular salience in the US – ideas of individual autonomy, a certain notion of freedom, particular ideas about privacy and so forth. Are the concerns different in European countries? In particular:

- What problems might be taking shape in European criminal justice systems as neurogenetics research makes claims to unravel the genetics of crime and impulsivity, and as some claim that evidence from genetics and brain imaging can identify 'biomarkers' indicating vulnerability to future criminal or antisocial behaviour?
- What are the consequences when such technologies are used for risk assessment of troublesome schoolchildren or shape decisions about sentencing, treatment or release of convicted offenders?
- Has the rejection of 'genetic determinism' in favour of 'gene environment interaction' opened a new and optimistic era for neurobiologically informed strategies for the prevention of criminal and antisocial conduct, or is the novelty of this approach overstated?
- Do these neuroscientific developments provide a welcome opportunity for early and preventive intervention by the State in the name of individual well being and public protection, or do they represent a potential widening of the scope of intervention into the lives of children and young adults with damaging consequences?
- Should schoolchildren, or offenders, be screened – using genetics or brain imaging – for markers of risk?
- Can law, in practice – for example in the courtroom - provide adequate scrutiny of the truth claims of neuroscience – as for example in the use of brain imaging evidence in the courtroom, or evidence about genetic predispositions?
- What problems arise when a criminal justice system is 'forward looking' – concerned with the question of the sentence that will produce the best possible future outcomes for individual and society – rather than 'backward looking' – concerned with individual criminal responsibility and the 'tariff' appropriate for a particular offence? Are European legal systems moving in this direction? Should they?