# Revolution, Regulation & Responsibilities

## Technology & Democracy in the 21st Century

**2010-2011 series**

### » Revolution:

The range, scope and magnitude of emerging technologies promise to transform society in ways that have previously been unimaginable. From nanomedicine and acute delivery of medicine in the human body to advances in biotech and the creation of new biological systems; from neuroscience increasing our understanding of brain function to IT helping us to map and imitate brain function, as well as posing fresh questions over privacy and surveillance, as these technologies evolve and converge it will without doubt transform our understanding of what it means to be human.

### » Regulation:

But with this transformation comes scientific uncertainty and regulatory disruption. Fear and risk have to be mitigated against a backdrop of advancement in science and technology which currently cannot be fully explained or predicted.  Existing regulatory systems are disrupted by the pace of new technologies resulting in legislative frameworks becoming redundant and to regulatory "disconnection".  A vast new landscape is opening up before us but there are no well worn templates to help us frame the future. As Justice Michael Kirby notes 'We are experts without a great deal of expertise'.

### » Responsibilities:

Therefore the need is great for a diverse range of stakeholders and representatives to gather together to engage with each in order to craft new models of policy making, governance and regulation which will connect as well as hopefully evolve with technology. Models which offer enough protection to manage the risks involved without being too excessive and stifling innovation and the potential social and economic benefits.

*In response to this, BioCentre invites you to its 2010-11 series of symposia,* **Revolution, Regulation and Responsibilities: Technology and democracy in the 21st Century.** *The series will seek to initiate dialogue on questions pertaining to technology and democracy and the ethical, legal and social implications which arise as a result.*

**Bio**Centre

# BioCentre

## 1

## Getting Connected: How to achieve effective regulation of new emerging technologies?

**Monday 22nd November 2010 at 14:30, House of Lords**

As new emerging technologies evolve and develop so does the need for effective and 'connected' regulation. But given the fact that these are 'new' technologies, there is a fine balance required in order to develop regulation which offers enough protection to manage the risks involved but which does not stifle innovation and the potential social and economic benefits.

Who are the primary actors involved in helping to shape and give direct to the regulatory process? Who and what is helping to fund research in these new areas and informing decision makers? In what ways can communication be improved between scientists and the wider public. This symposium will seek to explore these questions as well as help to explore the intersection between new emerging technologies and policy making.

*Speakers include:*

- **Dr. Chamundeeswari Kuppuswamy,** University of Sheffield - Speaking on international regulation of new and emerging technologies.
- **Dr. Steven Hill,** Head of Research Councils UK Strategy Unit
- **Julia Manning,** Chief Executive, 2020health.org  and author of the recent report *Health, humanity and justice: Emerging technologies and health policy in the 21st Century*
- **Andrew Miller MP** – Chair of the Commons Science & Technology committee
- **Prof. Charles Raab,** University of Edinburgh - Speaking on 'Regulating IT and Privacy: Instruments and Policy Actors'.
- **Prof. Andrew Stirling,** University of Sussex - Speaking on the 'opening up' of a more vigorous and democratic politics regarding the direction of technological progress.

## Still to come in the series:

## 2

**Nanotech: Where are we heading?**
In 2004 the Royal Society and the Royal Academy of Engineering report on nano identified the immediate need for research to address uncertainties about the health and environmental effects of nano technologies. Yet the consensus of subsequent reports is that progress to date is "disappointing". What is happening to plug this gap? What can be done in terms of national and international regulation?

## 3

**Biotech:  Personalised medicine**
As the power of genome sequencing methods continue, increasing amounts of personal genetic information is being generated for both research and healthcare. Are concerns over personal privacy, data security and the potential for discrimination justified and what can be done to address these concerns?

## 4

**Infotech: The wired society**
The development of the new information technologies has led to what has been termed the 'information society', where computers are more and more integrated everywhere into our environment. This symposium will explore digital culture and the sociological and anthropological implications.

All symposia are free to attend **but RSVPs are required.**
*To RSVP:*  e: **info@bioethics.ac.uk |** t: **0207 227 4706  |** w: **www.bioethics.ac.uk**