

# Implantable Microchips and the Future of Work

## *Understanding the use of implantable microchips in the workplace.*

**Date:** 5<sup>th</sup> June 2019, from 9.30am to 4pm

**Venue:** Partners' Room, Newcastle University Business School, 5 Barrack Road. NE1 4SE.

Prof Natasha Mauthner (NUBS) and Dr David Lawrence (Law School) have secured funding to undertake a pilot project around the advent of implantable microchip technologies, in particular as they relate to the future of work and their existing early adoption by employers. In the first instance, they are building a network of academics, government bodies, regulators and businesses – both early adopters and more established companies - to determine some of the key issues and concerns in this area.

They are inviting all interested parties to join a roundtable discussion on the 5<sup>th</sup> June at Newcastle University's Business School.

## **Background to the pilot project**

Human-implantable microchips are a rapidly emerging technology. Several companies in the UK and elsewhere are already producing and selling these devices (e.g. UK's Bioteq and Sweden's Biohax), and they are available both at commercial and very affordable consumer prices. In the US and Sweden, there are a number of instances in which companies are trialling RFID/NFC enabled implants on their employees on a voluntary basis (e.g. Three Square Market; Swedish national rail operator SJ; Swedish tech business incubator Epicentre). Reports emerged in November 2018 that major UK legal and financial firms, some of which have hundreds of thousands of employees, are in discussions with companies such as Biohax about using this technology themselves. This has generated concern amongst trade unions and business spokesbodies about the potential for these devices to infringe on privacy rights and to be used as surveillance tools; questions which will only become more urgent as the technological capabilities of implantable chips increase to include biodata harvesting and, potentially, location services. The emergence and growth of these technologies is therefore an important area in which to embark upon serious academic study with a view to inform future decision-making regarding their use in the UK and beyond.

## **The roundtable discussion on the 5<sup>th</sup> June will centre on four strands of research:**

1. Organisational dimensions including: organisational trends, strategies, policies and practices with regard to the use of microchips in the future of work; employer and employee perspectives on the use, management, and implications of implantable microchips.
2. Legal and regulatory questions and challenges raised in the areas of data protection, human and privacy rights, employment law, product liability and the implant procedure; as well as determining the appropriate frameworks that could be applied to emerging de novo scenarios.
3. Techno-/bio-ethical issues surrounding bodily integrity and identity, autonomy, human enhancement and cyborgism; as well as issues raised by the collection of biomedical, personal, and location data.

4. Investigation of public understanding of non-medical implant technologies and their potential significance for the future of work and society more generally.

***Attendees will benefit from both general discussions as a full group and breakout sessions focused around the four themes listed above.***

## **Lead academics**

**Professor Natasha S. Mauthner**

Director of Research

**Newcastle University Business School**

Natasha has over 20 years' experience of conducting externally-funded interdisciplinary research and knowledge exchange on work, family, wellbeing and emerging technologies in diverse employment, geographical and national contexts, as well as on ethical issues around data sharing and Big Data. Her research has been funded by the Economic and Social Research Council, the Engineering and Physical Sciences Research Council, the European Union, the Joseph Rowntree Foundation, the Society for Research Into Higher Education, the Carnegie Trust, the Royal Society of Edinburgh and the Scottish Universities Insight Institute. Most recently, she was Co-I on the EPSRC-funded Digital Epiphanies project which explored how digital technologies are changing work and family practices (EP/K025392/1) and Co-I on the Digital Families Across the Lifecourse knowledge transfer seminar series funded by the Scottish Universities Insight Institute.

**Dr David Lawrence**

Research Excellence Academy Postdoctoral Fellow

**Newcastle University Law School**

David's research in bioethics and biotechnological law has largely focused on human enhancement technologies and the ways in which they are likely to affect both society and what it means to be human. During David's PhD studies, he acted as PI on several projects funded by the Wellcome Trust and Institute of Medical Ethics, whilst also acting as the research manager of a Wellcome Strategic Award led by Professor John Harris. Since receiving his doctorate in 2017 he has secured a further two Wellcome Trust grants, as Co-I and most recently as PI on the Regulating the Tyrell Corporation: Company Law and the Emergence of Novel Beings project (WT208871/Z/17/Z), which investigated questions of rights and moral value in new forms of sapient life developed by private concerns.

**Please do feel free to share this opportunity within your network. To attend, interested parties should complete the following form:**

<https://forms.ncl.ac.uk/view.php?id=4339739>

**To connect to the project academic team or to request funding assistance to attend, please contact:**

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