



## **Centre for Reproduction Research Seminar Series**

Wednesday 11 October 2017, 12 – 1.30 Edith Murphy House room 4.10, De Montfort University, Leicester

Dr Cathy Herbrand, De Montfort University

'Genetic Inheritance and Reproductive Processes through the lens of Mitochondrial Donation'

As places are limited, please email CRR@dmu.ac.uk if you wish to attend to secure your place.

## **Abstract**

This seminar will explore how the mediatisation and legalisation of mitochondrial donation in the UK have challenged current conceptions of identity, genetic inheritance and reproduction. These new high-profile IVF techniques aim to prevent the transmission of maternally inherited mitochondrial disorders to biological offspring, by transferring the nucleus of the affected mother's egg into a healthy enucleated donated egg. The striking novelty is that the conceived child will inherit DNA from three individuals, not only the nuclear genome from both intending parents but also, albeit to a much lesser extent (0.1%), the mitochondrial DNA from the donated egg. Moreover, this donated mitochondrial DNA will be transmitted over the generations through the maternal line. By rendering reproductive mechanisms more complex and introducing third-party genetic material, mitochondrial donation transforms current understanding of reproductive processes as well as prevalent conceptions of biological connectedness. It also questions the conceptualisation of genetic inheritance as a whole, by introducing a distinction between the nuclear and mitochondrial DNA and by questioning their respective importance for our sense of selves and family identity. This paper draws on a current research which seeks to understand reproductive choices made in the context of mitochondrial disorders, in particular with respect to new reproductive technologies. The study included interviews with women affected by mitochondrial disorders, genetic counsellors, clinicians and support group representatives.

## Speaker biography

Dr Cathy Herbrand is a Vice-Chancellor's 2020 Senior Lecturer at the Centre for Reproduction Research, De Montfort University. She was awarded her PhD in Sociology from the Université libre de Bruxelles, and has previously held posts at King's College London, London School of Economics and Political Science, and the University of Ottawa. Her research interests lie in the sociological and anthropological study of family, biotechnologies and genetics, with a particular focus on reproductive decision-making, multi-parenthood and gender issues. Specifically she has undertaken studies of multi-parenthood amongst gay and lesbian families, reproductive choices in the context of mitochondrial disorders, and cross-border surrogacy, and is a co-investigator on an ESRC funded interdisciplinary study of egg donation in the UK, Belgium and Spain.