



## 'Beating the Biological Clock – Should You Freeze Your Eggs?'

### Report for the Anne McLaren Memorial Trust Fund

#### Background on the Progress Educational Trust

The **Progress Educational Trust (PET)** is an independent registered charity founded in 1992 to advance public understanding of science, law and ethics in the fields of human genetics, human reproduction, embryology and stem cell research. **PET** works to improve the choices for people affected by infertility and genetic conditions, and to promote the responsible application of science through education and debate.

#### Rationale for a debate on this topic

Identifying the most challenging topics, providing a forum, encouraging meaningful public debate and changing opinions is one of **PET**'s key strategies. Engaging with the public, academic, clinical, policymaking and educational communities and with the media – so that controversial areas in assisted conception, genetics and stem cell and embryo research are well understood, and have public support – is a fundamental objective.

After the Human Fertilisation and Embryology Act 2008 was passed, the cryopreservation of gametes was considered and the legislation was amended by the Human Fertilisation and Embryology (Statutory Storage Period for Embryos and Gametes) Regulations 2009.

The legal position now is that although gametes can be stored when there is no medical need to do so, they can only be stored for a maximum of 10 years. The storage period may be extended beyond 10 years, but only if a medical practitioner provides a written opinion that the person is or is likely to become prematurely infertile.

A number of clinics have started to offer this service to patients, and some have offered a 'freeze and share' service where women can freeze their eggs for free or at a reduced cost if they are prepared to donate eggs to another woman. UK clinics have reported an increase in demand for egg freezing, and **PET** has heard anecdotally that a growing number of women over 40 are deciding to freeze their eggs, when the chances of a successful pregnancy using these eggs is known to be low.

Recently, the idea of egg freezing hit the headlines when Apple and Facebook offered their US employees egg cryopreservation services for non-medical reasons. The companies hope to retain and attract females in top positions, by giving them the option of delaying starting a family and thereby promoting a culture that is attractive to young people.

This move has divided public opinion. Are these companies investing in women, and supporting them in planning the lives they want? Or are they sending the message that they think pregnancy is incompatible with working at Apple or Facebook?

The *Telegraph* reported in December 2014 that a US fertility expert, Dr Aimee Eyvazzadeh, had launched her own 'egg freezing parties' – a cocktails-and-canapés get-together of women looking for advice on delaying motherhood. She calls herself the 'egg whisperer', and her sales parties have led to comparisons with those that used to take place for Tupperware.

In February 2015, the *Japan Times* reported that the city of Urayasu became the first Japanese municipality to offer publicly funded egg freezing. At the same time, however, a panel of the Japan Society of Obstetrics and Gynaecology decided – in light of health risks and the relatively low pregnancy rate – *not* to recommend that young and healthy women preserve their frozen eggs for future pregnancy.

The American Society of Reproductive Medicine (ASRM), which sets standards for fertility clinics in the USA, lifted the 'experimental' label from egg freezing in 2012. But again, this organisation has declined to recommend the treatment for elective use until further research is conducted.

### **Why is this an important issue?**

Egg freezing for non-medical reasons gives rise to a large number of questions.

- How effective is the cryopreservation of eggs? What are the pregnancy success rates using frozen eggs?
- How many eggs would a woman need to freeze, to have a reasonable chance of pregnancy?
- What are the risks of egg freezing?
- Are women being miss-sold egg freezing as an insurance policy?
- Does egg freezing give women more control and greater reproductive autonomy?
- Should employers be encouraging women to delay motherhood?
- Does egg freezing suggest that the battle for gender equality has been won, or does it suggest the opposite?

### **About the event**

A public debate about egg freezing when there is no medical need was held on the evening of 21 October at University College London.

180 people attended this event. As a general observation, a significant number of the audience were female and under 46, and it was clear from the question and answer session that some people had a personal interest in the topic.

The event was chaired by Kate Brian with speakers Professor Barry Fuller, Dr Françoise Shenfield, Dr Imogen Goold and Professor Maureen McNeil. For further details of the speakers, see Appendix.

### **Benefits of sponsorship from the Anne McLaren Memorial Trust Fund**

#### *Prestigious association*

Sponsorship from a body associated with such an eminent scientist as the late **Dame Anne McLaren** gives an imprimatur of quality to the event. Prospective delegates who are unfamiliar with the quality of **PET's** work are given confidence that the event will be of a high standard.

#### *Speaker selection*

Top quality speakers are needed for a discussion event of this kind, to provide the audience with a sufficient range of experts to result in a meaningful and productive dialogue.

The Trust's support meant that **PET** was not overly constrained by the expense incurred by speakers' travel and accommodation costs.

#### *Increasing awareness of the Anne McLaren Memorial Trust Fund*

The event was promoted widely via email, the web and social media (including **Facebook** and **Twitter**) to an extensive range of universities, clinics, businesses and institutions across the UK.

The conference was listed prominently on the **PET** and **BioNews** websites, as well as on other websites including those of **Bioethics.com**, **Fertility Matters**, **HUM-MOLGEN**, **Meducation** and the **Wellcome Trust**

## Media

In the weeks leading up to the event, there was high-profile criticism of the reliability of egg cryopreservation and of the integrity of clinics which offer it.

Fertility figurehead **Professor Lord Robert Winston** was quoted in *The Times* saying that clinics which charge handsomely for cryopreservation are being 'highly exploitative'.

- **Clinics target IVF mothers**

<http://www.thetimes.co.uk/tto/health/news/article4554872.ece>

An accompanying editorial in *The Times* pointed out that '*the central fact*' about egg cryopreservation '*is that it almost never leads to a successful birth*'.

- **Oversold eggs**

<http://www.thetimes.co.uk/tto/opinion/leaders/article4554767.ece>

And Professor Winston told *Woman's Hour* on **BBC Radio 4** that '*the idea that you can store eggs by freezing I think is a scam*'.

- **Robert Winston and fertility treatment**

<http://www.bbc.co.uk/programmes/b068vy0r#playt=00m33s>

PET's event was strategically timed to take advantage of this media interest, and was the subject of high-profile coverage. This article in the *Observer* newspaper:

- **Egg freezing is the tempting option if you're desperate for a child: but can women be sure it's the right choice?**

<http://www.theguardian.com/society/2015/oct/24/egg-freezing-fertility-insurance-clinics-conference>

Reported the event as follows:

*'At a public conference last week in London organised by charity the **Progress Educational Trust**, it was clear just how confusing the issue has become. Called **'Beating the Biological Clock: Should You Freeze Your Eggs?'**, the event drew about **180** people, ranging from doctors, embryologists and counsellors to lawyers, policymakers and women thinking about undergoing the procedure.'*

The event also prompted no fewer than three other articles in the same edition of the *Observer*, including the front-page news story:

- **Women 'are being given false hope' over freezing eggs**

<http://www.theguardian.com/society/2015/oct/24/women-false-hope-freezing-eggs>

A lead editorial:

- **The Observer view on egg freezing**

<http://www.theguardian.com/commentisfree/2015/oct/25/observer-editorial-egg-freezing-fertility>

And an accompanying comment piece:

- **Social egg-freezing: empowering but not an insurance policy against childlessness**

<http://www.theguardian.com/society/2015/oct/24/social-egg-freezing-empowering-but-not-an-insurance-policy-against-childlessness>

The event was also attended by a journalist from the *British Medical Journal*, which reported on the proceedings in the following article:

- **Is too much hope placed in egg freezing?**  
<http://dx.doi.org/10.1136/bmj.h5955>

Finally, PET's Genetics Editor **Kirsty Oswald** wrote about the event for **BioNews**:

[http://www.bionews.org.uk/page\\_580313.asp](http://www.bionews.org.uk/page_580313.asp)

### **Further dissemination work**

Following the event, PET became an adviser to a project entitled 'Timeless' produced by the consultancy Liminal Space. The project explores how egg freezing may affect work, relationships and wider society in the future.

The project involves a pop-up shop, a fictional beauty brand and a series of public events, one of which – entitled 'Should You Freeze Your Eggs?' – is being chaired by PET Director Sarah Norcross on 3 March 2016.

The Scottish Government has invited PET to produce a similar event on egg freezing in Edinburgh. This is likely to take place in June 2016.

### **Social media**

Social media activity before, during and after the event, plus relevant news and comment in the media, was compiled via **Storify** at:

<https://storify.com/BioNewsUK/egg-freezing>

### **Delegates**

Many clinics and hospitals across the UK sent representatives to the event including **Andrology Solutions**, **BMI Hampshire Clinic**, the **Centre for Reproductive and Genetic Health**, the **Centre for Reproductive Medicine**, **Centres for Assisted Reproduction**, **City Fertility**, **Concept Fertility Clinic**, the **Doctors Laboratory**, the **Fertility and Reproductive Medicine Laboratory**, **Fertility Focus Professional Services**, **Great Ormond Street Hospital**, **Guy's Hospital**, **Herts and Essex Fertility Centre**, **Homerton Fertility Centre**, the **Institute of Child Health**, **IVF Hammersmith**, **King's College Hospital**, **Leicester Royal Infirmary**, **Lister Fertility Clinic**, the **London Bridge Fertility, Gynaecology and Genetics Centre**, the **London Women's Clinic**, **Nuffield Health Woking Hospital**, **Rafan House**, **St Bartholomew's Hospital**, **St George's Hospital**, **St George's University of London** and **University College Hospital**.

Academics and students covering a range of disciplines also attended the event, from universities and academic institutions including the **Centre for Family Research**, the **European Institute of Oncology**, **King's College London**, the **London School of Economics and Political Science**, **University College London**, and the Universities of **Cambridge**, **Edinburgh** and **Oxford**.

Other attendees represented regulators (the **Human Tissue Authority** and **Monitor**), lawyers (**Hempsons Solicitors** and **Reynolds Porter Chamberlain**) and charities (**Breast Cancer Care**, the **British Pregnancy Advisory Service**, **Chana**, the **Donor Conception Network** and the **National Gamete Donation Trust**).

### **Feedback from delegates**

PET values feedback from delegates, and uses it to help with planning future events.

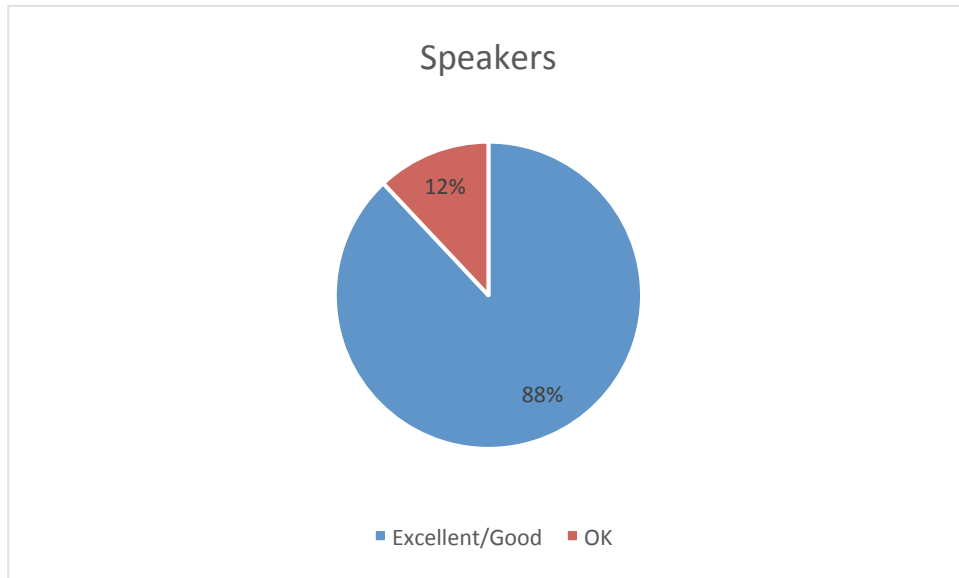
PET received **74** evaluation forms. Delegates were asked to choose from '**Excellent**', '**Good**', '**Average**', '**Poor**' and '**Awful**' when rating different elements of the day.

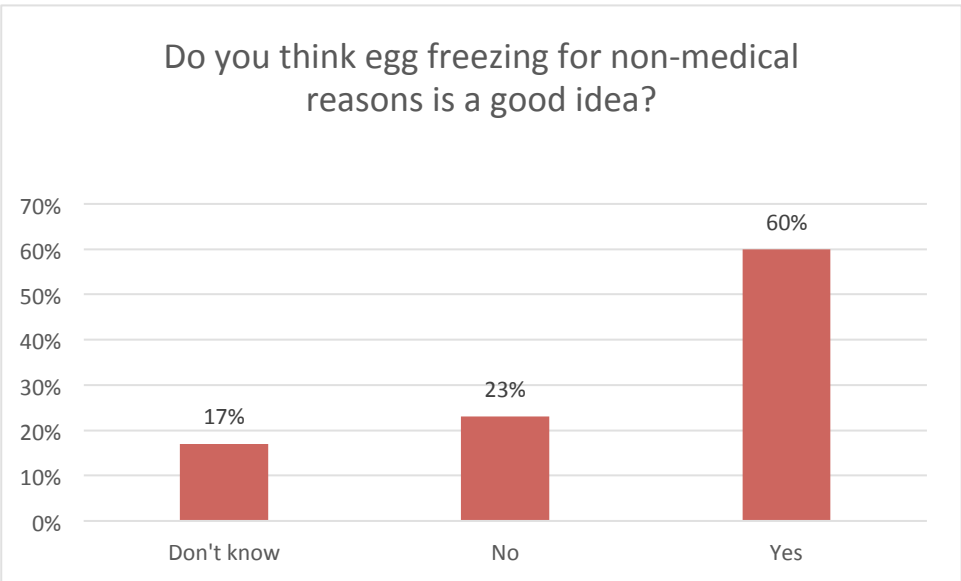
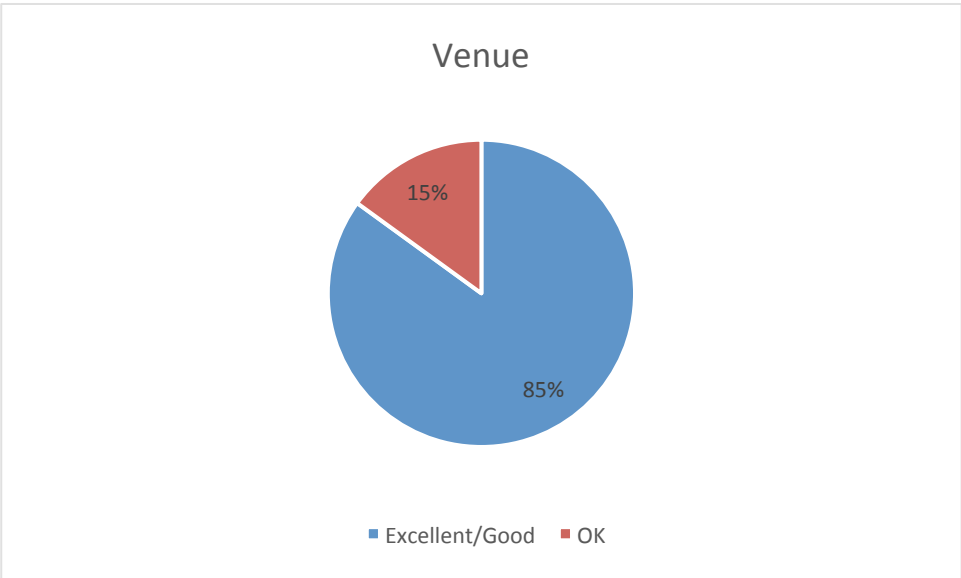
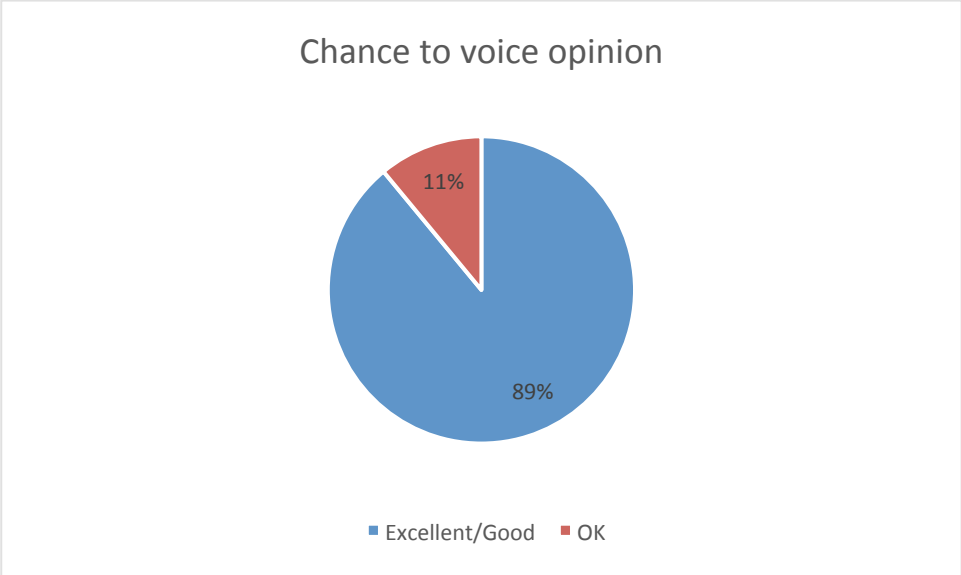
In summary, the majority of delegates thought that the speakers, the sessions, the event as a whole and the chance to voice their opinion was either '**Excellent**' or '**Good**'.

Freeform responses to the question '**Were you satisfied with the range of speakers' views?**' included:

- *Yes. Enjoyed variety of scientific/feminist/legal views.*
- *Yes, very good and interesting views. Really made me think as a MSc student of a reproductive science and women's health course.*
- *Yes - the mixture of views on a conflicting subject was appealing.*

See the charts below for a breakdown of the feedback.





## Do you think egg freezing for non-medical reasons is a good idea?

### Typical freeform answers

#### Yes

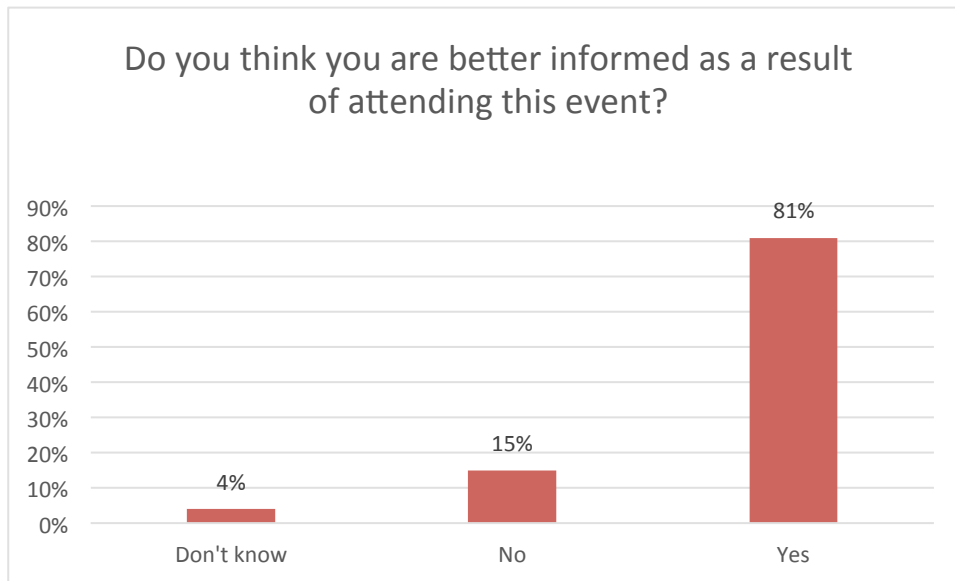
- Gives women choice/autonomy.
- It gives women an option where they may not have one - but it's not a solution to a societal problem.
- Provides an option even with low potential for success.

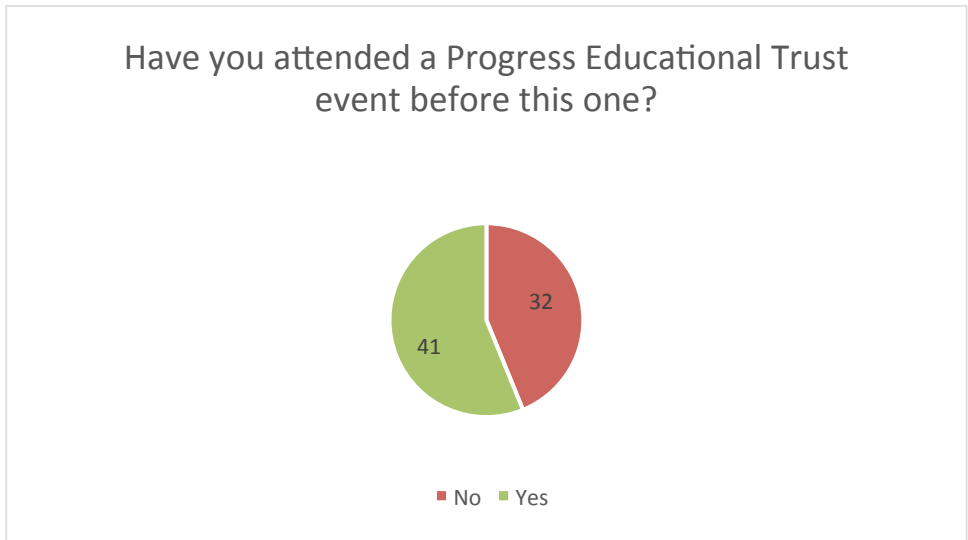
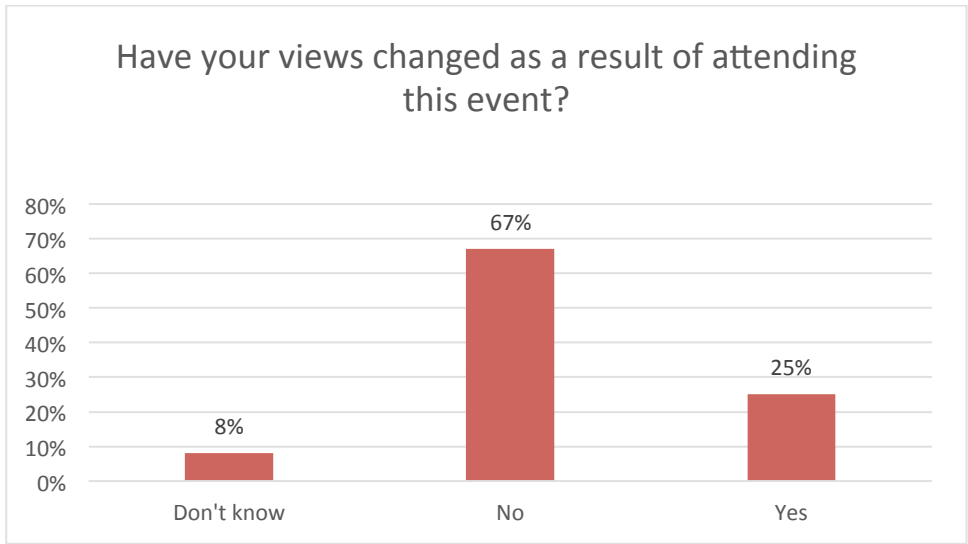
#### No

- As a person working in the fertility sector, I have seen firsthand the level of success that is possible currently.
- Success rate is too low, so defeats the purpose. More research and testing is needed. Except with women who have medical reasons (eg, cancer).
- I think women are being lulled into a false sense of security/insurance that they will become mothers because they chose to freeze. It is a bit like working women/mothers can have it all. As a working mother/wife you can't have it all!

#### Don't know

- The event has made me realise the subject is even more complex than I previously thought.





This demonstrates that **PET** is continuing to reach new audiences for its events.



## Appendix: Biographies

### Panel speakers



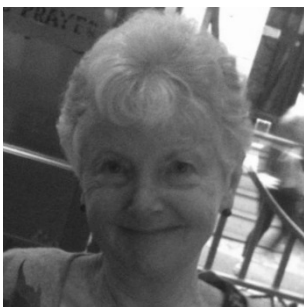
**Barry Fuller** is Professor of Surgical Sciences and Low-Temperature Medicine at University College London, based at the Royal Free Hospital. After obtaining a PhD at the Medical Research Council's Unit of Medical Cryobiology, he pursued a career in basic and applied cryobiology, studying low-temperature phenomena and their delivery into clinical services. He has worked across the range of low temperatures, from hypothermia in transplant organ preservation to deep cryogenic preservation of cells and tissues including oocytes (eggs), ovarian tissue and embryos. He is a Fellow and former President of the Society for Cryobiology.



**Dr Françoise Shenfield** is a Clinical Lecturer in Reproductive Health and Honorary Lecturer in Medical Ethics at University College London's Institute for Women's Health, and she has worked in the field of fertility treatment for more than 30 years. She has held various positions at the European Society of Human Reproduction and Embryology, where she is currently Coordinator of the Special Interest Group on Socio-Cultural Aspects of (In)Fertility, and also Deputy Coordinator of all Special Interest Groups and Taskforces. She is a former Member of the Human Fertilisation and Embryology Authority.



**Dr Imogen Goold** is Associate Professor of Law at the University of Oxford. She has a PhD in Law and Modern History from the University of Tasmania, where she researched the use of property law to regulate human body parts, and a Master's degree in Bioethics from Monash University. She has worked at the Centre for Law and Genetics, the Australian Law Reform Commission and the World Health Organisation. She is coauthor of the book *Great Debates in Medical Law and Ethics*, author of the forthcoming book *Flesh and Blood: Owning Our Bodies and Their Parts*, and a contributor to the *Oxford Handbook of Reproductive Ethics*.



**Maureen McNeil** is an Emeritus Professor in the Sociology Department at Lancaster University, where she was previously Director of the Institute for Women's Studies. Her previous posts also include Associate Director of the Economic and Social Research Council's Centre for Economic and Social Aspects of Genomics. Her research and teaching have been at the intersection of Science and Technology Studies, Gender Studies and Cultural Studies, with a long-term focus on reproductive theories, narratives and practices. She is author of the book *Feminist Cultural Studies of Science and Technology*, and coauthor of the book *Human Cloning in the Media: From Science Fiction to Science Practice*.

### Chair



**Kate Brian** is London Representative for the charity Infertility Network UK, and Editor of the *Journal of Fertility Counselling*. She is also a Member of the Human Fertilisation and Embryology Authority, and is on the Advisory Council of the National Gamete Donation Trust and the Steering Committee of Fertility Fairness. She is a print and broadcast journalist, and has worked for the BBC (on programmes including *Panorama*) and for ITN (on programmes including *Channel 4 News*). She is author of books including *Precious Babies: Pregnancy, Birth and Parenting after Infertility*, *The Complete Guide to IVF: An Insider's Guide to Fertility Clinics and Treatments*, and *The Complete Guide to Female Fertility*.