Topic 3 Glossary

A

AAPT *(see Artificial Amniotic Sac and Placenta Technology*)

Artificial Amniotic Sac and Placenta Technology (AAPT)

This is technology designed to emulate the function of the placenta and amniotic sac to facilitate gestation outside of the human body. It, in theory, could facilitate part of the process of human development – supporting the transformation from immature fetal physiology to mature fetal physiology.

Artificial Placenta

A shorthand term for Artificial Amniotic Sac and Placenta Technology (AAPT).

Artificial Womb

This is a term that people sometimes use to describe an artificial placenta (artificial amniotic sac and placenta technology). However, it is much more precise to use the term artificial placenta as this better describes the function of the technology. See artificial amniotic sac and placenta technology for a detailed definition on the function of an artificial placenta. Some philosophers have also argued that we should not use this term because of its normative implications on the rights of pregnant people (this will be covered on the course).

Assigned Female at Birth (AFAB)

This phrase describes a person who has physiology (a body and body parts) that are considered biotypically female – this encompasses genetics (XX chromosomes), genitalia (a vagina), and a hormonal profile (associated with the menstrual cycle for example) that is considered female. A person who is assigned female at birth will likely be identified as a 'girl' at birth. That a person is assigned female at birth does not mean that they will identify as a woman. I use this phrase 'assigned female' in recognition of the fact that biology is complicated, and we group people under 'female' when their body/characteristics appear a certain way to us – biology is often a lot more complex!

C

Conception

This term describes the process in which a sperm fertilises an egg.

E

Ectogenesis

This is the old-fashioned term to describe the process of gestation outside of the body. In the ethical literature it is not considered more appropriate to use the term ‘ectogestation’ this is because (as Kingma and Finn point out) ‘ecto’ (means outside) and ‘genesis’ (means development) ectogenesis literally just means outside development – which all babies are doing! To describe the process of gestation outside the body, we therefore need a more specific term. See Ectogestation.

Ectogestation

This is the term used to describe gestation outside of the body (facilitated by machine). The term was coined by Kingma and Finn in 2020. Ectogestation can take two forms: complete (or full) ectogestation and partial ectogestation.

Complete (or Full) ectogestation

This term describes the process of gestation taking place entirely outside of the body – effectively growing babies from scratch in artificial conditions (from fertilisation to mature fetal physiology). This is a much more sci fi prospect than partial ectogestation.

Partial ectogestation

This term describes the partial gestation of a human entity outside the body – a partially developed human entity is removed from a pregnant person’s body and transferred to an artificial placenta for continued gestation. This is what current animal models of artificial placentas are trying to achieve. They support the development of an entity with immature fetal physiology to more mature fetal physiology (greater organ development and so on) so that the entity is much more developed and likely to be able to survive post-gestation.

Embryogenesis

This term describes the development and formation of the human embryo – it is how a fertilised egg becomes an embryo and then develops. It is a process of organ formation. This takes place during the first 8 weeks of gestation. This is a process that cannot be supported by artificial placenta models as they are currently designed because they are dependent on an entity already having fetal physiology.

F

Fetonate

This is a term used by the scientists developing an artificial placenta model in Philadelphia in the US to describe the subject of an artificial placenta. It is a contested term (see Gestateling).

G

Genetic progenitor

A genetic progenitor is a term used to describe someone who contributes a gamete (a sperm or egg) to the creation of an embryo. Sometimes people might refer to such an individual as a genetic parent.

Gestation

Gestation is the process in which a fertilised egg is transformed into a human entity with developed physiology that can (usually) survive in the external environment. This encompasses both embryogenesis (see embryogenesis) and fetal development.

Gestateling

This is a term coined by Romanis to describe the subject of an artificial placenta. The term literally beans 'subject of gestation' – with the suffix "-ling," describing something in terms of origin or qualities meaning that a gestateling is defined by the quality of undergoing gestation. It is a contested term (see Fetonate).

N

NICU (see Neonatal Intensive Care Unit)

Neonatal Intensive Care Unit

This is the term used to describe the unit in a hospital that specialises in the care of premature and/or seriously sick babies. It is characterised by intensive interventions including nasogastric feeding (to deliver food and remove food waste) and mechanical ventilation to aid breathing. It is associated with lots of health complications.

P

Pregnancy

Pregnancy is a state of being in which a person usually has a gestating part (the fetus).

V

Viability

This is the term often used to describe the ability of a human fetus to survive birth. The term was originally designed as a way of determining how well a human entity would survive sustained treatment in neonatal intensive care. The point of viability is often described as around 24 weeks' gestation as this is the point at which around 50% of fetuses would survive if prematurely delivered. It is a much-debated concept – particularly with regard to its role in abortion law.