

## **Ooplasmic Transfer Technology** <sup>[1]</sup>

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Ooplasmic transfer, also called cytoplasmic transfer, is an outside the body, in vitro fertilization (IVF) technique. Ooplasmic transfer in humans (*Homo sapiens*) is similar to in vitro fertilization (IVF), with a few additions. IVF is the process in which doctors manually combine an egg and sperm cells in a laboratory dish, as opposed to artificial insemination, which takes place in the female's body. For ooplasmic transfer, doctors withdraw cytoplasm from a donor's oocyte, and then they inject that cytoplasm with sperm into a patient's oocyte. Doctors perform ooplasmic transfer to replace mitochondria that have genetic defects, which can cause a variety of diseases. In 1982, Audrey Muggleton-Harris's group at MRC Laboratory Animals Center in Surrey, United Kingdom, developed the technique and reported the first successful mammalian ooplasmic transfer in mice (*Mus musculus*).

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