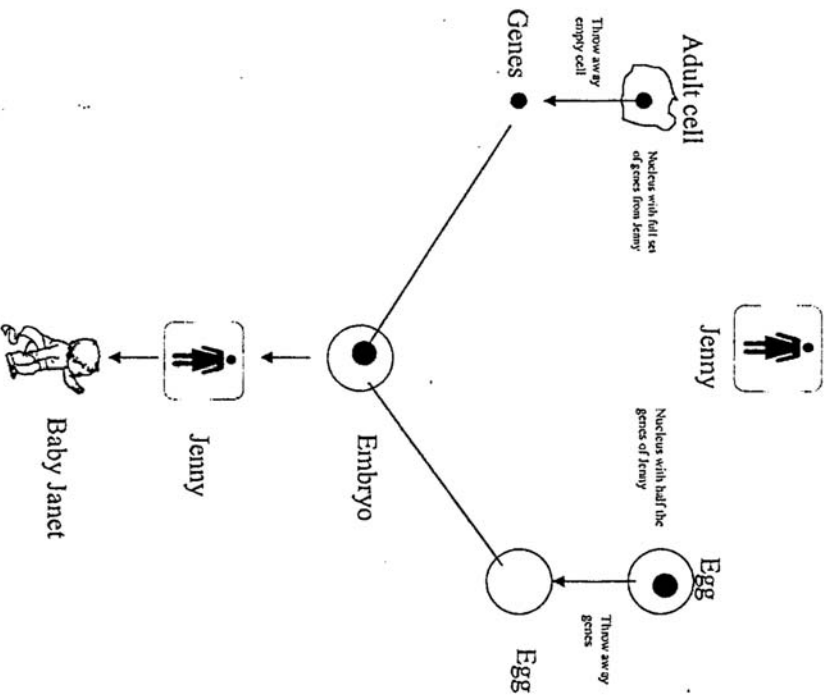


4

WELCOME TRUST SOCIAL RESEARCH PROJECT PERSPECTIVES ON HUMAN CLONING

Human Cloning - From One Woman



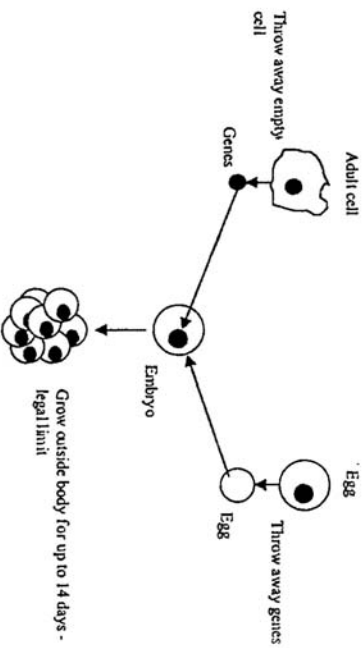
- Janet has the same genes as Jenny - identical twin of Jenny
- Jenny is the genetic mother of Janet
- Jenny is the carrier mother of Janet

Possible Research Applications of Cloning Which do not Create Identical Human Beings

- Advances in medical research are very difficult to predict but animal and human cloning could improve basic understanding of biology.
- Ageing process - DNA damage in adult cells
- Cancer - could lead to therapies

Replacing Cells, Tissues and Organs

- Cloned cells would reduce risks of rejection



It might in the future be possible to treat embryo cells outside the body to develop into:

- cells such as bone marrow
- tissues such as skin - more complex
- organs such as kidneys

Other Research

Currently, the deprogramming of adult cells requires the incubating of the nucleus in an unfertilised egg - the creation of a cloned embryo. Further research may lead to new ways of converting adult cells into other cell types. What differences would there be if cells, tissues and organs could be grown without the need to first create an embryo as a source of cells?