



Statement on Cloning

Cloning is the process by which living organisms or tissue are reproduced via stem cells to produce genetically identical copies or clones.

A distinction is made between the following types of cloning:

- Reproductive cloning to create **genetically identical descendants** (animals, possibly humans, etc.)
- Therapeutic cloning to produce **genetically identical tissue** which could then be used to treat certain diseases.

Reproductive cloning has already proved possible with numerous species of animal; it has not yet been demonstrated in man.

The stem cells needed for cloning are obtained in the following ways:

- As **embryonic stem cells** following the union of ovum and sperm cell (conjugation, insemination).
- As **adult stem cells**, e.g. from the bone marrow or cord blood (without insemination; without prejudice to the individual donor).
- As **nucleus transfer** by combining a denucleated ovum with the nucleus of a body cell (introduction of a "finished" nucleus instead of conjugation).

Reproductive cloning is rejected by the Church for ethical reasons, regardless of the methods used, out of respect for the unique nature of human life.

Therapeutic cloning is only acceptable to the Church if embryonic stem cells are not used for this purpose (i.e. there is no fusion of ovum and sperm cell – conjugation; also applies to the methods using nucleus transfer) and a potentially animate life is not killed.

The use of adult stem cells won, for example, from bone marrow or cord blood is not problematical, as this does not involve animate life.

Due to the rapid increase in scientific findings and biotechnological skills, it is perfectly possible that this evaluation of cloning from the point of view of our faith may change rapidly.

Zürich, 21.12.2005