



*Dedicated to Advancing Stem Cell Research*

**Coalition for the Advancement of Medical Research**

## **Talking Points Somatic Cell Nuclear Transfer (SCNT)**

**Somatic Cell Nuclear Transfer is about saving and improving lives, and is fundamentally different from human reproductive cloning. SCNT produces stem cells, not babies.**

- In Somatic Cell Nuclear Transfer (SCNT), the nucleus of a donor's unfertilized egg is removed and replaced with the nucleus of a patient's own cells. These types of cells are called somatic cells.
- The goal of SCNT is to develop stem cells that will not be rejected or destroyed by the patient's immune system.
- No sperm is used in this procedure and the cells are not implanted into a womb.
- The unfertilized egg cells are stored in a petri dish to become a source of stem cells that can be used to treat life-threatening medical conditions.
- SCNT aims to treat or cure patients by creating tailor-made, genetically identical cells that their bodies won't reject. In other words, SCNT could allow patients to be cured using their own DNA.

**There are many different kinds of cloning, most of which are commonly used medical tools.**

- The word "cloning" simply means making copies of a single molecule, cell, virus or bacterium.
- Over the last decade, various types of cloning have allowed scientists and researchers to:
  - Develop powerful new drugs;
  - Produce insulin and useful bacteria in the lab;
  - Track the origins of biological weapons;
  - Catch criminals and free innocent people.

**CAMR opposes reproductive cloning and implantation, which aims to create human beings by cloning human embryos.**

- Patient advocacy groups and leading scientists, including the National Academy of Sciences, and an overwhelming majority of the American people agree that human reproductive cloning should **not** be allowed.

**SCNT could lead to dramatic new treatments and cures for now-incurable diseases and medical conditions.**

- SCNT could be used to help nearly 100 million Americans suffering from cancer, Alzheimer's, Parkinson's, diabetes, heart disease, spinal cord injuries, ALS, and other devastating conditions for which treatments and cures must still be found.

**SCNT is widely supported in the U.S. and a federal ban on SCNT would have devastating results. A ban would:**

- "... have a chilling effect on all scientific research in the United States," say 40 Nobel Laureates;
- cut off hope to millions of Americans with life-threatening diseases;
- run counter to our nation's history as a leader in biomedical research;
- make it illegal for U.S. citizens to seek SCNT treatment abroad. This means that a patient who may have little hope left could be thrown in jail upon re-entry to the U.S. if they went to another country to have treatment using SCNT, send a scientist to jail for developing SCNT therapies in a Petri dish, and make it illegal for U.S. scientists to import SCNT therapies that were developed in other countries.

**State governments are promoting safe-havens for stem cell and therapeutic cloning research.**

- In absence of forward-thinking federal policy, CAMR supports state efforts to create safe havens for critical medical research such as stem cells and SCNT, but it is no substitute for a supportive federal policy.
- State legislation that is pro-stem cell and SCNT helps attract top scientists/researchers to pursue this field of study and increases research activity.
- Increased research activity helps bring us closer to scientific advances that could lead to cures.

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