

Stem cell scientist outlines his top five challenges for embryonic stem cell nuclear transfer

It was intriguing last week to read about another advance in somatic cell nuclear transfer (SCNT)-based therapeutic cloning of human embryonic stem cells (hESC). The first such work was published last year by Mitalipov's group from OHSU.

This second paper to produce so-called nuclear transfer hESC (NT-hESC) made the important advance to show that it could be done using adult and even old human somatic cells. This is a reproducible technology, which is very important.

However, key challenges and concerns remain for human therapeutic cloning and for potential clinical application of NT-hESC. Below is my list of the top 5 challenges.

- NT-hESC must be indisputably better than human iPS cells and IVF hESCs to be relevant clinically.
- The head start of other human pluripotent stem cells.
- Human egg procurement challenges.

Read the full, original story: [Top 5 challenges for SCNT cloned human embryonic stem cells](#)