



International Academy of Anti-Aging Medicine

Stem Cells

Stem Cell Discoveries.

1) Praised as a break-through, researchers from Wisconsin and Japan reprogrammed skin cells from mice, and later on also from humans, to behave like embryonic stem cells. Four virus genes, inserted into adult skin cells, triggered the change. Does that bring us closer to cures? Definitely not! Who would want to have stem cells with 4 extra genes in them implanted in their bodies? Did telomere length improve? To check the safety alone of such an approach would require years of research. References: Nov. and Dec. 07 major news releases.

2) MORE IMPORTANT: Bringing us a big step closer to stem cell cures, Dr. Mitalipov of Oregon Health & Science University demonstrated on Rhesus monkeys that a nuclear transfer – using DNA from a skin cell – is possible and does yield stem cells. Do the same thing with the DNA from a human (possibly yours) skin cell, inserted into a denucleated human egg cell, triggered to start dividing, and, voila, stem cells with your DNA, totally compatible with your body and immune system. THAT IS THE WAY TO GO!

Reference: Online version of the journal “Nature,” November 2007.

For more details about nuclear transfer, see IAAM Stem Cell Research, on this page.

3) ACT (Advanced Cell Technology) researchers demonstrated that a single cell, plucked from an early-stage embryo, can lead to stem cells while the embryo continued to develop normally after the procedure. While this is interesting research, it misses a key point, namely that applications along these lines will NOT bring us closer to making person-specific stem cells (same DNA).

Ref.: Lanza, R., Online journal CELL, January 2008.

The above described work is similar to a method that is already used by fertility clinics to check for possible genetic abnormalities (disease-risks), PGD (pre-implantation genetic diagnosis). Before having an embryo implanted, according to the PGD procedure, a cell is removed from the embryo and checked for possible genetic risk factors. If they discover a risk, like Down’s Syndrome, diabetes, or 30 other diseases, what do they do with the embryo? Send it to an island where genetic mistakes grow and get a chance at life? Naturally not; they destroy it! But, according to Washington Stem cell regulations, killing an embryo is not permissible! So, Washington should really shut down all fertility clinics?!?!?

To what height or degree of ignorance can we take government regulations?

Very recently on June 6, 2006, Harvard University announced that they are initiating stem cell research to make their own lines of stem-cells. A few days later on June 11, 2006 in the *Los Angeles*

Times, we learned that “Stem Cell Labs Take Private Path.” Two privately funded New York laboratories are conducting their own stem cell research. Both of the above avenues of stem cell research are directed to finding better treatments for a wide spectrum of diseases, including but not limited to Lou Gehrig’s, Parkinsons, diabetes, cancer and anti-aging.

IAAM is following a similar path. Our laboratory is fully equipped and research has already begun (see pictures on our web-site). **At this time, we invite all interested parties to examine, question, and support the thrust of our efforts via contributions. Here are just three reasons why YOU should consider supporting the stem cell research efforts of IAAM:**

- 1) The present failing drug approach is a weak attempt at solving your medical problems; prescription drugs are a stop-gap measure, not a long-term, solution to critical diseases.**
- 2) Supporting us – definitely – brings you a BIG step closer if you’d ever need stem cells.**
- 3) Donations to IAAM are tax deductible. IAAM is a CA 501-C non-profit educational corporation.**

Why not rely on orthodox medicine to keep us healthy?

From an alternative, anti-aging point of view, what should be a routine protocol when visiting your doctor? Instead of just treating symptoms - - like “your cholesterol is high, I’ll give you a prescription for that” - - the doctor should evaluate your health practices and guide you towards the best actions (exercise, diet, stress management, supplements, etc.) to bring out-of-range values back to normal. For example: Exercise levels – minimum for optimum results – can be precisely defined; see enclosed “**Exercise, your best Ally in Aging Well (2.07),**” and “**Diet and Health Habits as Related to the Onset of Disease.**” Hans J. Kugler. *Journal of the International Academy of Preventive Medicine*, Vol.IV, No. 2, Winter 1977.

Mainstream medicine’s pharmaceutical drug approach has not only completely peaked out, it has actually led to a decline in our overall health - directly correlated to the increase in drug use, the overall US health rating has decreased to between 13th to 23rd place in the world, inferior even to citizens of some of the poorer nations –, but it has also reached a point where medicine itself has become the # 1 cause of death in America. For details and documentation read: “**Overdo\$ed America: The Broken Promise of American Medicine**” by John Abramson, MD, Harvard Medical School; see enclosed book review and “**Death by Medicine**” (8.06 Life Extension Report, full text accessible at COMMENTARY at E-books, at www.antiagingforme.com).

In Europe, stem cells (harvested from embryonic cell cultures) **have been used on humans** for several years now. Scientific publications and clinical feedback from European doctors have brought out two key findings:

- a) These stem cells give the body a tremendous boost; covering a wide spectrum from immune enhancement to general revitalization.
- b) However, it is becoming more and more obvious that these stem cells DO NOT fully settle down in the recipient’s body, forming neither new tissues nor new organ cells.

For stem cells to be truly effective, and to settle down in the recipient's body, THE STEM CELLS MUST HAVE THE RECIPIENT'S DNA. This can be done through a process called **NUCLEAR TRANSFER** which has already been demonstrated as highly effective in animal models. Scientists are now working on the precise details of the recipe for nuclear transfers for human cells. That's what our lab is set up to accomplish. Reprints of key papers – right pocket of folder – explain Nuclear Transfer and the regenerative potential of stem cells.

Real stem cell science is conservative! I'm a Republican, having run for office of US Congress, I am uncomfortable at the thought of harvesting stem cells from embryos. Scientists have learned a lot from studying such stem cells, but again, I underscore the fact that real stem cell science has already shown that this will NOT lead to effective treatments, and that making person-specific stem cells (nuclear transfers that utilize the person's own cells) is science that endures because it offers a viable means for superior treatments. Let me explain. Person-specific stem cells allow for the use of skin (or other) cells without a man and a woman, without fertilization, without growth in a womb.

Now, imagine for a moment that scientists had worked out all the details for making person-specific stem cells. Do you believe that you could go to your neighborhood hospital/clinic and ask them to make you a set of your own stem cells (with your own DNA)? Then come back a few days later and have them administered to you? Obviously not, considering the current political climate surrounding stem cells; if a need for stem cells should arise, it would be good to be connected to IAAM.

IAAM stem cell research is devoted to making person-specific stem cells. **To do so efficiently, we need your financial support. For example: \$ 50,000 can cover the cost of a research PhD for 6 months, full-time or one year part-time** (we have two who have indicated interest in working with us), and **\$ 25,000 pays the salary of a microbiologist/microscopist, BS, for 6 months;** the more scientists we can hire, the faster we advance. Furthermore, biological research materials are quite expensive, and the purchase of a "Nomarski Modulation" microscope (\$24,000) would accelerate nuclear transfer procedures. The speed of research is dictated exponentially according to the amount of money that is available. Please remember: **IAAM is a CA 501-C non-profit corporation; donations are tax-deductible.**