



## **The National MS Society Supports Development of Legislation to Clarify and Permanently Protect Federal Funding of Embryonic Stem Cell Research**

The National MS Society has made a commitment to pursue promising avenues that will lead to solutions that stop disease progression, restore function, and ultimately prevent future generations from ever receiving an MS diagnosis. This commitment is reflected in our decision to support the conduct of scientifically meritorious medical research, including research using human cells, in accordance with federal, state and local laws, and with adherence to the strictest ethical and procedural guidelines. This decision was not reached without intense scrutiny and discussion among volunteers, people living with MS, ethicists, researchers and scientists, and MS neurologists.

However, in August 2010, a federal judge issued a preliminary injunction halting all federal funding for human embryonic stem cell research (ESCR). This was a huge setback on the achievements that MS Activists have fought hard to attain in our efforts to move us closer to a world free of MS. The National MS Society believes that it is imperative to restore federal funding for this promising research and supports the development of legislation that will clarify Congressional intent and permanently protect federal funding of ESCR.

Ultimately, more research is needed to better understand which stem cells, and from what sources, could hold significant promise for repairing damage and restoring function, as well as provide a better understanding of the underlying disease cause.

The Society respects the beliefs of everyone in the movement, including those whose beliefs do not support research using embryonic stem cells.



### **Background on the Society's Involvement in Stem Cell Research:**

For several years, federal policies in the United States impeded stem cell research efforts by severely limiting the number of approved embryonic stem cell lines that could be used in federally funded research and prohibiting the donation of unused embryos for research purposes by people utilizing the services of in vitro fertilization clinics. The removal of those barriers in 2009 brought new hope to the millions of people living with chronic and debilitating diseases or disabilities.

MS Activists have worked for many years to ensure that all avenues of scientifically meritorious research are open for exploration under the strictest ethical and procedural guidelines. With the help of MS Activists, Congress twice comfortably passed bi-partisan legislation permitting federal funding of ESCR, but both bills received presidential vetoes. In 2009, an Executive Order lifted previous restrictions on federal funding of ESCR.

However, in August 2010, a federal judge issued a preliminary injunction halting all federal funding for human embryonic stem cell research (ESCR). This recent and unexpected court order has reversed progress on our efforts. While legal battles in the court system are currently underway, the only way to guarantee a permanent solution is to pass bi-partisan legislation. Congress must make a legislative fix to this roadblock a priority immediately.

### **Stem Cell Summit**

In 2005, the National MS Society convened a Task Force on Stem Cell Research, which confirmed the Society's long-standing policy suggesting that research using all types of stem cells holds great promise, potential, and hope for people affected by MS. Among its recommendations, the task force recommended that the Society hold a scientific symposium in early 2007 involving leading stem cell experts from around the world to further explore the viability of all types of stem cell research for the treatment, prevention and cure of MS. This stem cell summit was held on January 16-19, 2007 in San Francisco, California. Over 75 experts in the areas of stem cells and MS participated in the Summit.



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A scholarly review of this meeting along with recommendations on priorities for moving this important research forward were published by the journal Multiple Sclerosis (2008, Vol. 14, No. 4, 541-546).

The recommendations stemming from the summit included the need for better non-invasive tools to track the location and fate of transplanted stem cells, the need for reliable and sensitive measures of regeneration and replacement of damaged tissues, and the need for guidelines for clinical trials in MS repair. In addition, more research is needed to understand which stem cells, from what sources, hold the greatest promise for each line of inquiry and for repair in MS.

### **Fast-Paced Progress**

Researchers worldwide, including the National MS Society's Nervous System Repair and Protection Initiative involving four international teams of collaborators, are making headway in many of these and other areas crucial to this effort. Progress and intelligence reported by the Society's Repair investigators during a January 2009 meeting made it clear that clinical trials are already proceeding or in planning stages using various types of cell therapy, underscoring the urgency of understanding and promulgating next steps for clinical trials of stem cells in MS. A May 20, 2009 Stem Cell meeting organized by the MS Society in the UK and USA, and supported by the MS Society of Canada, Italy, France, Australia and the MS International Federation, was a response to this urgent need for guidance to the MS research community. The result was international consensus on the future of stem cell transplantation research for people with MS, paving the way for more coordinated global research efforts and potentially better, and quicker, patient access to stem cell clinical trials. The guidelines are published in the May 2010 issue of Nature Reviews Neurology.



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### **Recent Research Developments**

The news that researchers have succeeded in turning certain adult cells, such as skin cells, into what appear to be embryonic-like stem cells is without a doubt an advancement that may one day in the future have implications for the treatment of neurological disease like MS. However, the researchers themselves point out that they have a great deal more work to do to overcome some issues before their method could produce cells suitable for therapeutic use in people, and therefore stress the importance on continuing other types of stem cell research, including embryonic. These are hopeful steps forward, but it would be premature to stop research using embryonic stem cells because of all the technical and safety issues that must be overcome before researchers will know whether this new stem cell method will be a viable alternative.

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