To the Honorable Barack H. Obama, President-Elect of the United States

Ten years ago the discovery of human embryonic stem cells touched off one of the most controversial and yet promising technologies of our generation. These cells likely possess the capacity to differentiate into all of the cell types of the human body. They offer possibilities to produce new lifesaving therapies by supplying heart muscle cells, dopaminergic neurons, and pancreatic cells that could be used to rebuild the heart after a heart attack, the brain of a patient with Parkinson's disease, or glucose regulation in children with diabetes. The landscape of diseases and medical research problems potentially benefiting from this research is broad and significant. However, for the last 10 years research in this field has been slowed by restrictive federal funding policies and consequent reservations in the private sector about committing investment dollars in a field where the United States has no clear policy.

In the coming decade our nation is facing significant economic and social challenges, not the least of which are strains on our health care system arising from the mounting health care costs associated with the aging of the post WWII baby boom generation. As reported by analysts associated with the stem cell initiative in California (http://www.cirm.ca.gov/pub/pdf/EcoEval_091008_rpt.pdf) research monies spent now to address novel and powerful new therapeutic modalities such as those arising from stem cell research have numerous potential economic benefits for the United States, leading to advances in our understanding of not only methods of fashioning valuable new therapies from stem cells but also deep insights into cancer stem cells, developmental disorders, and the networks that regulate gene expression.

While we recognize that legitimate ethical issues have been raised by this research, it is important to understand that novel technologies show the potential to produce "induced pluripotent stem (iPS) cells" wherein no embryos or egg cells are utilized. In addition, the majority of US citizens support hES cell research where the embryos were destined to be discarded. Lastly, for the past 40 years many of the common human virus vaccines including those directed

to measles, rubella, hepatitis A, rabies and poliovirus have been derived from cells derived from human aborted fetal tissue, and these vaccines have provided benefit to tens of millions of people. Thus, there is a clear path to advancing the field of regenerative medicine in a manner consistent with the values of the majority of Americans.

In 1961 President Kennedy displayed the vision of his generation by focusing the financial resources of the United States toward landing a man on the moon within a decade. A similar visionary program in our time should be a 10-year program involving academia and industry with a goal to translate the discovery of human embryonic stem cells into actual safe and efficacious therapies to save human life. We encourage you to make this a priority for your administration. We could clearly demonstrate the humanitarian spirit of our country by leading the world in applying the best of mankind's technologies in the alleviation of human suffering including the millions of American patients who so desperately need them.

Yours respectfully,

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