President Bush's August 9, 2001 Announcement on Stem Cell Research

The Bush Administration's decision to limit support of embryonic stem cell research has been labelled controversial by both supporters and adversaries. Bush commented that, "Embryonic stem cell research offers both great promise and great peril." Although Bush does appear to support science and technology of stem cell research, he has highlighted ethical questions that must be addressed as a result of recent scientific findings. In furthering medical research, Bush believes the S&T community needs to simultaneously address the moral issues.

The NIH had provided the Administration with information on 60 genetically diverse stem cell lines that existed prior to August 9, 2001 -- having been created from embryos destroyed before that date. As stem cell lines have the ability to regenerate themselves indefinitely, thus creating ongoing opportunities for research, the Administration concluded that theyshould allow federal funds to be used for research on these existing stem cell lines, where the life and death decision had already been made. The President stated that he would budget $250 million of federal funding for research pertaining to these existing stem cell lines, umbilical cord placenta, adult and animal stem cells. The Administration set conditions for federal funding using these existing stem cell lines, such as informed consent of donors and the prohibition of financial gain by donors. No federal funds will be allocated for the creation of human embryos for research (cloning), nor the use of stem cell lines from newly destroyed embryos. To ensure the Administration is provided with adequate ethical and scientific advice on the topic of stem cell research, Bush created the President's Council on Bioethics with Dr. Leon Kass as Chair.

S&T Policies in the President's FY 2003 Proposed Budget

President Bush presented the Administration's budget proposal for FY 2003 (starts October 1, 2002) where the multi-agency initiatives that Bush proposes should receive support are: antiterrorism, nano-technology, networking and information technology and global change research. Over the next six months, OMB, The Office of S&T Policy and the Office of Homeland Security will be working through the National Science and Technology Council (NSTC), to develop a coordinated, inter-agency R&D plan for antiterrorism. This policy identifies many antiterrorism R&D priorities (such as rapid detection and verification of biological threats). The NSTC plan will chart a comprehensive and integrated course for these efforts as well as provide cross-agency budgetary information.

Program Developments at the National Science Foundation (NSF):

The NSF S&T strategy for FY 2003 provides good insight into the direction of S&T strategy in the US, as the NSF provides the glue that holds most S&T advances in the US together. Few disciplines are self-reliant. Thus, the NSF - through its grantee program which funds 40% of all science, excluding biotechnology, in the US university system - provides leadership and direction in university research. The President's FY 2003 budget request for NSF emphasizes investments in six interdependent priority areas:

I. Biocomplexity in the Environment
II. Information Technology Research
III. Nanoscale Science and Engineering
IV. Learning for the 21st Century Workforce
V. Mathematical and Computing Sciences
VI. Social, Behavioural and Economic Sciences

A fundamental change that will affect most S&T programs is the distributed computing project of NSF. This will see future computing power greater than the most powerful computers today (but comprising many small, powerful, connected computer systems), available through very high-