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America misses yet another boat

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America is falling behind in the global race for new patents and pharmaceuticals based on stem cell research. The brain drain from America to countries with more liberal legislation is growing in leaps and bounds.

For two summers in a row, George Bush has vetoed the Democratically initiated bills to remove constraints on embryonic stem cell research and initiate federal funding of this vital research. While the debate centers on whether or not, as held by the fundamentalists, these fertilized embryos are "unique human lives with inherent dignity and matchless value", the rest of the world quite wittingly is taking advantage of the sleeping giant America, reveling in the Bush vetoes and lack of funding. They correctly see biotech as the next industrial boom after electronics and are investing heavily in embryonic stem cell research.

Countries that have allowed embryonic stem cell research are Australia, Brazil, Spain, Canada, Sweden, Belgium and the United Kingdom. Many of these also fund such research at the federal level, often through matching funds with industries. Three other countries worthy of note are Switzerland, South Korea and Singapore.

Switzerland solved the political problem by putting the matter before voters in the form of a national referendum. In 2004 voters approved the use of embryonic stem cells left over from in-vitro fertilization. Their law does, however, prohibit human cloning or the creation of embryos specifically for stem-cell research.

South Korea has made strong advancements in stem cell research, due to very flexible policies regarding research. They may well be on the way to leading the world in this field of scientific research. South Korean researchers, for example, have been able to rapidly and successfully produce stem cells that are a perfect genetic match to patients of all races and genders, in other words therapeutic cloning.

Neck-in-neck in the global race for stem cell research, in fact ahead in many scientists' eyes, is small, rich and enlightened Singapore. The centerpiece of Singapore's biotechnology effort is the Biopolis, a seven-building biomedical hive that opened in late 2003 at a cost of 500 million Singapore dollars. It houses their new stem cell bank, and they have been filling the organization with the most famous scientists in the world, many from America, who have been given lavish salaries and lofty titles.

In 2003, Singapore lured Jackie Y. Ying from MIT, where she had been the youngest tenured professor ever, to head up its Institute of Bioengineering and Nanotechnology. Earlier this year, Singapore scored another pair of Americans, the dean of UC San Diego's school of medicine, Edward W. Holmes and his wife, Judith L. Swain, who was the school's dean of translational medicine.

The list of leading scientists who are happy to work in this thriving environment goes on and on, many from Europe and Japan as well. History will show, when the Merck's, Pfizer's and Schering-Plough's, a few of the leading pharmaceutical companies lured to Biopolis by tax holidays and incentives, lead the world in this new research discipline, that America missed the boat due to its Christian fundamentalist president and his Republican Party.