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Cloning and embryo stem cells meet further but limited approvals

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Recent days have witnessed two victories for a more liberal approach to the ethics and laws governing assisted conception, and especially cloning and stem cells. Other countries passed new laws reinforcing earlier decisions. The first, and perhaps a very major advance, occurred at the United Nations. This has been the scene of an ethical battleground of giants over the past 12 months.

In 2003, a motion to prevent cloning worldwide was proposed to the UN by a Catholic country, Puerto Rico, and supported by the USA among other nations. A single vote led to the suspension of the motion for further discussions, in view of hesitations or opposition from Moslem and other nations. Proponents threatened to renew their motion in 2004, which led to numerous submissions from many governments and organizations on the pros and cons of the proposed motion. Strenuous objections were received from leading scientific and medical organizations in many countries. Objectors included the U.S. National Academy of Sciences. Proponents included President Bush who recently addressed the UN, demanding that the total moratorium on all forms of cloning and human embryo stem cells must be accepted since these advances in reproductive biomedicine affronted human dignity. It must be rare for such a conflict to arise between a country's president and its most senior scientific institution. In late November 2004, and despite immense pressure and support from the Vatican and many Catholic countries, the motion was thrown out, perhaps for ever, killed by 'frantic campaigning by such organizations as the Genetics Policy Institute that led to around half the member countries in UN rejecting the American way' (Ahuja, 2004). The US dropped its ambitions to introduce strict rules on prevention since the UN was split down the middle and any showdown would be futile. The motion has become now a watered-down 'declaration' that is seemingly not a treaty, is non-binding on member countries and is a triumph for nations determined to pursue good biomedicine. Credit goes to Belgium especially for pushing three alternatives and Italy for designing the compromise resolution. Britain's system of domestic bans on reproductive cloning and acceptance of therapeutic cloning offered a model that may prove attractive to other member nations.

The second major development occurred in Switzerland. On this occasion, the citizens rather than the politicians made it very clear how they stood in relation to embryo stem cells. Two-thirds of country-wide Swiss voters in a national referendum backed research on embryo stem cells and their application in medicine. This decision emerged after the government had urged voters to accept a motion banning cloning but at the same time

accepting research on human embryo stem cells. It represents the decision of an entire nation, and the majority is large by any standards. Despite early fears that devout cantons would vote against, these also voted in favour. The acceptance spelt the end of a previous motion dating from 2003, which was proposed by anti-abortion and religious groups. One factor in the decision was that Swiss scientists felt they were handicapped in relation to their European colleagues since the motion is still restrictive in some senses. Another major point concerned the continued survival of major pharmaceutical companies in a country very well stocked with them. Their research on new compounds may have been jeopardized by restrictive laws. Now that the vote has proved to be very positive, ethical and science committees may accept new research proposals, but may not condone preparing embryos specifically for research. Donated embryos must be younger than 7 days post-fertilization and include only those not needed for assisted conception.

Elsewhere, cloning has fared less well but stem cell research continues to advance. Therapeutic cloning is now acceptable in Belgium. The German National Ethics Council continues to oppose research leading to therapeutic cloning, and other German organizations may attempt to instigate a Europe-wide ban. In 2004, Britain issued its first licence to a laboratory to use therapeutic cloning to make embryo stem cells. Excess embryos generated during IVF may be used to prepare stem cells in Denmark, France and Spain, while Germany and Austria continue to restrict stem cell research to cell lines imported from abroad.

It is curious that such wide ethical divisions still separate individual European nations. The contrast across the EU is remarkable: as the UK issues its first permission for therapeutic cloning, Italy proposes strict laws even retrospectively to limit many aspects of IVF, as well as hostility to cloning and stem cells. National ethics are certainly not a factor leading to closer European integration: just the opposite. Will we soon witness Italian scientists and clinicians coming to UK for their research? Will US scientists move north to Canada or south to Mexico, or even arrive in liberal UK too? It is very questionable if the United Nations or even the European Parliament are the places where ethics should be decided, since localized national decisions have led to far-reaching consequences for many investigators. The situation is not very different in the USA, where state-funded laboratories face immense restrictions on embryo research while private clinics can go ahead unimpeded. Furthermore, California's Republican government has invested vast sums in stem cell research despite its prohibition by the national government. Scientific and clinical tourism to new countries may be encouraged by these differences within each of the two largest transatlantic powers. All this marks a considerable change in the usual pursuit of emigration, which is to seek a more congenial climate!

Reference

Ahuja A 2004 *The Times* (London), 29 November 2004.

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