



### U.K. BIOETHICS

## Divided Committee Urges Less Restriction on Embryo Research

**CAMBRIDGE, U.K.**—The United Kingdom has some of the least restrictive rules in Europe governing research on human embryos. But in a wide-ranging and controversial report\* issued last week, the House of Commons Science and Technology Committee argues that they should be relaxed even further: The report says the government should consider lifting the current absolute ban on research involving genetic modification of human embryos and the creation of chimeric human-animal embryos, and that it should even reopen debate on human reproductive cloning.

Some of the recommendations go against mainstream public opinion and venture into territory where many scientists are reluctant to go. And the committee is itself bitterly divided over the report's approach and conclusions: Five of its 11 members signed a statement disavowing the report, saying that the majority adopted "an extreme libertarian approach," producing a report that is "unbalanced, light on ethics, goes too far in the direction of deregulation, and is dismissive of public opinion and much of the evidence."

The report is part of a reevaluation of the country's regulation of medical and scientific use of human embryos. Reproductive research in the United Kingdom is regulated by the 1990 Human Fertilisation and Embryology Act, drawn up before mammals had been cloned or human embryonic stem cell lines created. The U.K. Department of Health requested the report from the parliamentary committee, led by biologist Ian Gibson, now a Labour member of parliament. The report "asks politicians and the public to justify

any extra regulation or any legislative prohibitions in arguments of principle with potential harms to be based on evidence rather than myth or prejudice," Gibson said in a statement. Parliament would eventually consider any changes to the law.

Overall, the report argues that "alleged harm to society or to patients need[s] to be demonstrated" before research on reproduc-



**Division of opinion.** Ian Gibson says rules should be based on "evidence rather than myth or prejudice." (Inset) 4-day-old blastocyst.



tive technologies and their clinical use is "unduly impeded" by regulations. The panel offers more than 100 recommendations on specific issues. For example, it says that selection of embryos before implantation should be allowed solely on the basis of their sex. This flies in the face of British public opinion; 85% of the respondents in a 2002 poll said they were against sex selection for non-medical reasons.

The report says there is no justification "at present" for changing the rule that

research on embryos cannot be conducted beyond 14 days after fertilization. But it goes further, arguing that genetic modification of human embryos should be permitted during that 14-day period for research purposes—and perhaps sometime in the future for reproductive uses "under tightly controlled circumstances if and when the technology is further advanced." It also suggests that the government should consider relaxing the ban on the creation of hybrid or chimeric embryos if they are destroyed after 14 days. About such mixtures of human and animal cells or embryos, the report notes, "it could be argued they are less human, and therefore pose fewer ethical problems for research, than fully human embryos."

As for reproductive cloning, the report points out that it is not now safe and that ethics prohibits performing human experiments to work out the bugs. But the government needs to separate issues of feasibility from safety and ethical concerns and come up with principled arguments to maintain a total prohibition on reproductive cloning, the report says: "Without such arguments, an indefinite absolute ban could not be considered rational." One problem the report points to with an absolute ban is a gray area between reproductive and therapeutic cloning, such as the use of cloning techniques to create artificial gametes as an infertility treatment.

"I hope the report will encourage research," says geneticist Robin Lovell-Badge of the U.K.'s National Institute for Medical Research in London. He says the recommendation that research be permitted on human-animal chimeras is logical. "What is the difference between conducting experiments with human embryos up to 14 days and human-animal chimeras up to the same age?"

However, Stephen Minger, a stem cell researcher at King's College London, says "the views that are expressed [in the report] are very much different from those of researchers in stem cell work and reproductive medicine." About the recommendation on reproductive cloning, he says, "I'm a bit surprised that they say that's something we should consider. We already decided reproductive cloning should be banned." He adds: "I don't think it fosters public support to issue a report with so much dissension in it."

—MASON INMAN

\* [www.publications.parliament.uk/pa/cm200405/cmselect/cmsctech/77i.pdf](http://www.publications.parliament.uk/pa/cm200405/cmselect/cmsctech/77i.pdf)

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