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In the news

STEM-CELL CONFLICTS

Stem cells have been in the news recently, because of several attempts to produce stem cells for therapeutic purposes. One study, published in *Nature*, reported the identification of a source of reprogrammable cells in the testes of adult mice.

This finding drew immediate attention because it promises, at least for men, a simple and more ethically acceptable method for harvesting therapeutic stem cells. These reprogrammable cells are derived from sperm-producing stem cells, but could they give rise to other cell types, as embryonic stem cells can?

Gerd Hasenfuss' team at the Georg August University of Göttingen, Germany, extracted, cultured and multiplied the cells 700-fold. They converted these cells into an embryo-like state in 4 out of 15 cases. *In vitro*, the converted cells gave rise to heart, brain and skin cells. Most importantly, when they were injected into an early embryo, they contributed to various organs of the resulting mouse.

But some researchers are sceptical. Takashi Shinohara, a mouse germ-cell expert at Japan's Kyoto University, was the first to isolate reprogrammable cells from mouse testes using young pups. In contrast to the findings of Hasenfuss' team, he found that stem cells that were injected into embryos were not integrated into various tissues. "Perhaps they have some different kind", he says, "but I don't think that type of cell exists." (news@nature.com, 29 March 2006).

Could these cells work as efficiently as stem cells that are derived from human embryos? "This could put the embryonic stem-cell people out of business," says Peter Donovan, a stem-cell expert at the University of California, Irvine, USA. "But it remains to be seen whether they work in humans." (news@nature.com, 29 March 2006).

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