



## **Fertility hope for chemo patients as doctors grow eggs outside the body**

The dream of growing eggs from precursor cells in a test tube has come a step closer. This could help women and girls facing chemotherapy to have children later on, and even help conservationists breed at-risk species.

Most mammals produce only a few eggs at a time. If immature precursor cells could be matured outside the body, far more eggs could be obtained. Now Izuho Hatada's team at Gunma University in Japan has managed to grow mouse eggs from their very earliest stages and produce healthy offspring from them.

If Hatada's technique works with human eggs, it would provide a new way to preserve the fertility of female patients facing treatments such as radiotherapy or chemotherapy that damage their eggs. Eggs could be grown from slices of frozen ovaries. "This is specially significant for childhood cancer patients, because they don't have any mature eggs," he says. But this is still years away.

And there's a catch. Hatada's team managed to get some mouse eggs to start to mature by taking whole ovaries from fetuses and growing them for 28 days. But the eggs stalled at the final stage of development. To get them to complete their development, the researchers had to transfer their genetic material to mature eggs taken from adult mice – the same nuclear transfer technique used in cloning. That means any human treatments based on the technique would still have to rely on donor eggs, which are in short supply.

New Scientist, 3 August 2002

## **Alarm as US woos nurses from NHS**

The Government's plan to improve the national health service by appointing 35 000 extra nurses is threatened by an international recruitment war that may cause an exodus of staff from British hospitals, nurses' leaders warned last week.

The general secretary of the Royal College of Nursing, Beverly Malone, said that United States authorities were preparing a massive campaign to recruit 1 million nurses by 2010.

American hospitals, paying higher salaries, would be recruiting from countries such as the Philippines, South Africa and Australia, which have been sending thousands of nurses every year to boost staff in the NHS.

"We know the US is a competitive country. Its independent sector... will make every effort to recruit those nurses," said Dr Malone.

Guardian Weekly, 25–31 July 2002

## **Opponents of stem-cell patent win restrictions**

In a ruling issued on 24 July, the EPO's [European Patent Office] oppositions division narrowed the patent held by the University of Edinburgh's Centre for Genome Research, invalidating all claims involving animal and human embryonic stem cells.

The patent, which details techniques for isolating and propagating genetically engineered adult or embryonic stem cells, generated widespread complaints when it was granted in December 1999.

Starting in March 2000, 14 parties, including Greenpeace and the German, Italian and Dutch governments, filed objections. Most opposed the patent because it involved techniques for working with human embryonic cells. The DFG, Germany's main research funding agency, objected on technical grounds, claiming that the University of Edinburgh had not revealed enough technical information about the methods involved.

Shortly after the objections were filed, the university withdrew parts of the patent that covered technologies that could be used to alter the composition of the human germ line. But the EPO's ruling on the formal objections has gone further, leaving only claims covering adult stem cells intact.

The patent office says that its decision was partly based on ethical grounds – uses of human embryos are excluded from patentability according to EPO rules – and partly due to the patent's failure to disclose sufficient information for the techniques to be repeated by stem-cell experts.

Nature 2002;418:470

## **Doctors face hepatitis C tests**

The Department of Health plans to restrict doctors and other healthcare workers known to be infected with hepatitis C from carrying out invasive medical procedures. Healthcare workers who are about to start professional careers or training involving procedures that expose patients to risk of infection may also be tested for the infection.

BMJ 2002;325:406

## **Relation of childhood gastrointestinal disorders to autism**

Autism is a spectrum of developmental disorders characterised by impaired social interaction and communication. Several studies have shown that the prevalence and incidence of autism have risen steeply over the past decade.

Wakefield and colleagues suggested an association between chronic inflammatory intestinal disease and autism in 1998. They described 12 children with autism and gastrointestinal symptoms, including diarrhoea, pain, and food intolerance. Colonoscopy and biopsy showed ileal-lymphoid-nodular hyperplasia and non-specific colitis. The authors hypothesised that chronic intestinal disease and malabsorption may be causal factors in the development of autism. This has raised concerns about gastrointestinal disease as a risk factor for autism. Using a nested case-control design

we assessed the frequency of chronic inflammation of the gastrointestinal tract, coeliac disease, food intolerance, and recurrent gastrointestinal symptoms among children with a diagnosis of autism compared with children without autism. We used anonymised data from the UK General Practice Research Database.

No evidence was found that children with autism were more likely than children without autism to have had defined gastrointestinal disorders at any time before their diagnosis of autism.

BMJ 2002;325:419

## **WHO chief announces surprise move to stand down**

WHO Director-General Gro Harlem Brundtland dropped a bombshell on Aug 23 by announcing that she will not stand for re-election when her 5-years term expires next July. The former Norwegian prime minister said she has informed the chairman of the Executive Board – Burma's deputy health minister Kyaw Myint – that she would “not be a candidate for nomination” when the board makes its choice in January.

“My decision to complete my work as Director-General at the end of my current term reflects the fact that I have had leading positions in political and public office for nearly 30 years, and would be 69 at the end of a second term”, she stated.

Brundtland associates said she wanted to spend more time with her three children and nine grandchildren in Norway, and has become weary with the travel.

Lancet 2002;360:695