

LifeCell – Daily News Update

July 23, 2009

Direct News:

Publication	expressindia.com
Headline	<u>Firms bank on emotions, stem cell banking is in vogue</u>
Gist of the article	<p>The aim to popularise the concept of stem cell banking is making the companies set foot in towns like Ludhiana too as several parents in the higher strata of the society are showing keen interest in storing their offsprings' stem cells for future purposes, even though cord blood banking is still in its nascent stage in the country.</p> <p>Three main companies – Cryobank, LifeCell and Reliance – that deal in storage of stem cells are offering their services in the city. According to Dr Vineet Kaur, president, Ludhiana Obstetrical and Gynecological Society (LOGS), about 10 to 20 per cent of people in the higher strata of the society are opting for cord blood stem cells banking.</p> <p>“Some of the parents already know about cord blood banking and query about the option and the benefits of cord blood banking. Others are already registered with the firms who provide them with collection kits beforehand and the cord blood stems cells are then taken to their central labs,” she explains.</p> <p>She, however, advises the parents to get complete information about the benefits of cord blood banking from their doctor. “It can be required in high risk families where there is a history of blood cancer but in low risk families it may not be needed at all.” The probability of using the stored stem cells is one in 3,000 cases. This means one in 3,000 parents who have got their children’s cord blood banked will actually need to use it.</p> <p>Dr Joseph John, haemato-oncologist at the Christian Medical College and Hospital, said there were few chances that cord blood stem cells would be used but it could be highly beneficial in certain disease-specific conditions. “For example, in case of leukaemia (blood cancer), it can play a useful role in the treatment of the disease. The stored cord blood stem cells can also be effectively used in thalassaemia too.”</p> <p>“I will recommend that if the first child of a couple is thalassaemic, they can go in for cord blood stem cell banking of their second child so that if the HLAs of the siblings match, they can help in the bone marrow transplant of the first child later on,” he said.</p> <p>LifeCell International, which is a Chennai-based firm that has set up its collection centre in Ludhiana, has also announced to offer cord tissue banking service in the city.</p> <p>Dr Ajit Kumar, chief scientific officer of LifeCell who was in the city to participate in a continuing medical education organised by LifeCell in association with LOGS, said the company would collect stem cells from the city and store them at their Chennai</p>

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Key Industry News:

Publication	upi.com
Headline	Possible embryonic stem cell option
Gist of the article	<p>Sperm cell precursors can be converted into other cell types, providing a possible alternative to the medical use of embryonic stem cells, U.S. researchers say.</p> <p>The University of Illinois research, described in the journal Stem Cells, improves on earlier research that showed that a kind of germ cell that leads to the production of sperm could eventually give rise to a few cells that looked and acted like embryonic stem cells.</p> <p>But the earlier process with the spermatogonial stem cells took months, and only a small portion of the cells evolved into "embryonic stemlike" cells, veterinary biosciences Professor Paul Cooke and postdoctoral researcher Liz Simon said.</p> <p>In their new research, Simon placed spermatogonial stem cells from inbred mice on the connective tissue in embryos and grafted the combination into living mice.</p> <p>They found that the spermatogonial stem cells, under the right conditions, formed new tissues that had all the physical characteristics of prostate, skin or uterus and produced the telltale markers of those tissue types, they said.</p> <p>The original cells stopped looking and behaving like spermatogonial stem cells, Cooke said.</p> <p>Cooke said he hopes a more streamlined approach can be developed to produce new skin cells or other tissues when needed -- for example, to replace skin damaged in a burn.</p> <p>His team is also investigating the use of ovarian stem cells instead of spermatogonial stem cells to see if they can get the same results with ovarian tissue.</p>

Publication	socialistworker.co.uk
Headline	Stem cells and the 'end of men'
Gist of the article	<p>Stem cells are in the news again with two stories hitting the headlines recently. The first was a report that sperm could be produced artificially from embryonic stem cells. Then last week came the revelation that ordinary skin cells can be reprogrammed to grow into a brand new individual.</p> <p>I have to declare a personal interest in the artificial sperm story, as I helped to identify the cells as sperm-like because they contain a protein only found in sperm.</p> <p>What I didn't expect was the mass of newspaper articles that seized upon the report as evidence of the "end of men".</p> <p>In reality we are still far from a situation where any sane person would want to create a human baby with such artificial sperm.</p>

	<p>It's true that baby mice were recently made this way, but all had serious abnormalities. However, the technology may eventually be perfected and could then be used to help men who are infertile because they fail to produce sperm in the normal way.</p> <p>It might also allow gay or lesbian couples to have a baby that was biologically related to both partners – and it is this that most upsets right wing newspapers like the Daily Mail.</p> <p>Personally I would be happy with such a possibility if it could be done safely.</p> <p>There are those who argue that such a practice would be unnatural. But so are practically all other aspects of human life, from the food on our tables and the clothes we wear to the vehicles we drive.</p> <p>Of course procreation was supposed to be different, a process either dependent on God's will, or at least some mysterious vital force.</p>
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Publication	timesofindia.indiatimes.com
Headline	<u>Stem cell therapy gives folk singer his voice back</u>
Gist of the article	<p>It's heartening to see Baba Anand (65), the noted folk singer of the state, who had fallen seriously ill one-and-a-half-years ago,</p> <p>singing straight from his heart again. Thanks to Institute of Kidney Disease and Research Centre (IKDRC), Anand's recovery has been quick enough. The centre pioneered in locally producing cardiac stem line from fat extracted from the singer's abdominal wall and improved his heart function by treating him with stem cell therapy!</p> <p>Director of IKDRC Dr HL Trivedi said the hospital locally manufactured cardiomyocytes or cardiac stem cells from the fat of Anand. The singer has shown a significant 10 per cent improvement in his heart pulsation in just 10 days.</p> <p>"This is a very encouraging sign for us. We want to take stem cell research forward by using it on patients suffering from serious health problems, especially heart ailments," said Trivedi.</p> <p>Trivedi said Anand was brought to IKDRC after he suffered severe fungal infection in his throat and chest. He also suffered from kidney and heart problem.</p> <p>The veteran singer was treated for nearly three months and sent home after his condition stabilised. He, however, continued to suffer from a weak heart which led to weakness in his body. Anand was also finding it difficult to sing.</p> <p>"Anand's heart pulsation was 30 per cent which was half the normal rate. We decided to treat him with stem cell therapy wherein mesenchymal cells were developed from the fat taken out from his abdominal wall. These were then grown on a special media to develop into cardiomyocytes and processed with stem cells with CD 34 markers, which are obtained from the bone marrow.</p>

"Nearly 100 cc of this mix of stem cells was injected into his heart circulation in the right artery. The results are encouraging as he his heart pulsation is 40 per cent," said Trivedi.

Trivedi said this therapy is expected to help Anand for the next three months after which doctors will consider giving him yet another dose of stem cells to further improve the singer's heart functioning.

"I feel good that I can sing," said Anand.