[youtube:http://www.youtube.com/watch?v=ZfLyOGQ3TpA auto]

A South Korean medical research team said on 16 December 1998 that they had succeeded in cultivating a human embryo using human cells, but claimed they had already been beaten by the British. Researchers at the infertility clinic of Kyunghee University Hospital in Seoul said they had grown a early human embryo in using an unfertilised egg and a cell donated by a woman in her 30s. This follows an announcement four weeks earlier that another scientist had cloned himself using a cows egg in experiments kept secret for three years.

Lee Bo-yon, a researcher with the hospital's infertility clinic, told Reuters that the human embryo in the Kyunghee University experiment divided into four cells before the operation was aborted. "If implanted into a uterine wall of a carrier, we can assume that a human child would be formed and that it would have the same gene characteristics as that of the donor." Note: There is a 1% chance that such an event could have occurred as a result of manipulation alone - as seen very occasionally in IVF clinics, however the overwhelming probability is that that a human clone was successfully created.

Lee said the research team would not take the cloning experiment further until there was a social, legal and moral consensus to support it. Lee said the experiment was, to his knowledge, one of the first to use only human cells in a cloning experiment. However, others around the world such as Dr Richard Seed are ready to so so, with financial backing

"To our knowledge the xxxxxx xxxxxxx (in Britain - name deleted for UK libel reasons) has already succeeded in this experiment, making us the second," Lee said, but added that he had not been able to confirm that himself.

Lee said the experiment he conducted with Kim Sung-bo, used the same technique as that of Teruhiko Wakayama of the University of Hawaii with mice.

In July, Wakayama and Ryuzo Yanagimachi said they had produced 50 cloned mice from different adults. The "Honolulu Technique" is different from technology used to create Dolly in 1996.

Dolly's makers (Roslin Institute) used an electric current to fuse a cell from a sheep's mammary gland with the egg from another sheep that had the nucleus removed. The Hawaiians said they scraped the DNA material out of the nucleus from a mouse egg and injected into it the nucleus of another mouse. They then "chemically activated" the egg into behaving like a newly fertilised egg and start growing.

The embryo was transferred into a surrogate mum, who gave birth to cloned mice. They then cloned the clone, and cloned that clone, with the result that one mouse was both grandmother and the identical twin of the other.

South Korea, like other countries, is grappling with the issue. The National Assembly has yet to pass legislation on human cloning, in common with over 170 other nations. Some Korean lawmakers have said they would support limiting the research and development budgets of state-supported researchers if they continued cloning experiments. Source: Reuters

Comment by Dr Patrick Dixon:

"I predicted all this in the Genetic Revolution as well as in my latest book Futurewise. British cloning experts have often been very slow to announce their recent work, and Britain is a world centre for cloning technology. Dolly was a full grown sheep when the press first saw her, and work began to make her at least two years earlier. Over ten years ago I met a leading British embryologist who was already attempting human cloning, in defiance of public revulsion. His work has remained secret. This pattern of secrecy was also seen last month in the US when Jose Cibelli announced that he head cloned nimself by combining one of his cells with an empty cows egg - in work conducted three years earlier, before Dolly was even born. Secrecy breeds mistrust. British scientists may have difficulty persuading people around the world to believe their denials. I predict that any involved in such work will prefer to wait for official government before making an announcement about work already done.

"Such experiments in humans, though legal in Britain, have required a licence since 1990. However, just last week, the official advisory bodies HFEA and HGAC recommended a green light for making large numbers of human cloned embryos to be used in human tissue factories with a ban on implantation and births. Their conclusions were widely anticipated and leaks may have given encouraged maverick cloners to press ahead, worried about being left behind in the global human cloning race. However, surveys show public unease, both about the implantation of human cloned embryos to make babies and the destruction of these early embryos to make human tissue factories."