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Chinese scientists attempt to create 'designer babies'

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Singapore: For the first time in science, Chinese scientists have carried out an experiment that alters the DNA of embryos, prompting a call for a worldwide ban on the creation of designer babies. According to research published in the journal*Protein & Cell online*, researchers used a molecular cut and paste technique to edit DNA at specific locations in order to remove and replace a problem gene.

The study was led by Prof. Junjiu Huang of Sun Yat-sen University in Guangzhou and it aimed at modifying the gene responsible for beta-thalassaemia, a potentially fatal inherited blood disorder. Prof. Huang said that both*Nature* and *Science* journals had rejected the paper for ethical concerns.

The controversial technique called CRISPR/Cas9 represents a biological version of a word-processing program's "find and replace" function. Scientists introduce enzymes that first bind to a mutated gene, such as one associated with disease, and then replace or repair it.

Global scientists have warned that such experiments on genome of embryos may have unknown effects on future generations, as the changes are passed to the offspring. Huang's experiment however did not succeed as out of 86 one-cell embryos edited only a fraction were found to contain the replaced gene material.

Commenting on the development, Dr David King, director of the watchdog group Genetics Alert, said, "This news emphasizes the need for an immediate global ban on the creation of GM designer babies." Prof. Huang, said in an interview to Nature

News, that four more groups in China were conducting similar experiments.