

Genetics of life's 1st 15 minutes studied

October 27 2005

European scientists say they've identified the gene responsible for controlling a first key step in the creation of life.

The gene, known as HIRA, "chaperones" the early processes that occur once a sperm cell enters an egg, giving it a crucial role in the most fundamental process in sexually reproducing animals.

The researchers say the absence or mutation of the gene in the maternal genome explains why eggs fail to produce an early embryo despite the presence of "healthy" sperm.

Although the scientists used a fruit fly to discover the basic genetic processes of sex, they said the same genetic processes are present in all sexually reproducing animals, including humans.

"All sexually reproducing animals do the same kind of DNA 'dance' when the DNA from the mother's egg cell and the father's sperm cell meet for the first time," said Tim Karr of the University of Bath, who worked with Benjamin Loppin and Pierre Couble from the Center of Molecular and Cellular Genetics in France.

The study is detailed in the journal Nature.

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