US Scientists Discover Way to Delay Premature Birth

24/12/2015

The study, conducted by Stanford University and the University of Nevada, located the molecule that induces contractions in a pregnant woman, making it possible to design an inhibitor to interrupt them and postpone labor.

The scientific advancement is significant as there is no specific method currently available to prevent or deal with preterm births, which often causes death or disability in many new-born children annually.

Researchers found labor is triggered by a channel of calcium, a protein found in cellular membrane and that controls the flow of calcium into the cell interior.

The discovery of this calcium canal in the muscle cells found in the walls of the uterus and responsible for activating the contractions, will help doctors target the inhibitor more accurately to stop them.

During the study, the researchers realized the channel had a more pronounced presence in pregnant women as compared to non-pregnant ones, and that the indices grew as the pregnancy progressed.

As calcium channels have been known for their ability to drive and maintain heart rate, it is logical they also help prepare the woman's body for giving birth, found the research team led by scientist Lihua Ying.

An inhibitor was then developed and has been already successfully put to test in two types of mice, resulting in longer gestation and avoiding preterm birth.