Researchers discover a gene that regulates and blocks ovulation

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A group of Canadian and European researchers have unlocked the mystery of a gene with the potential to both regulate and block ovulation. The new study – a collaboration between the Université de Montréal in Canada and the Institut de génétique et biologie moléculaire et cellulaire of the Université de Louis Pasteur, Strasbourg, France – is published in the latest issue of the journal *Genes & Development*.

"Our findings demonstrate that the Lrh1 gene is essential in regulating ovulation," said Bruce D. Murphy, director the Animal Research Centre at the Faculty of Veterinary Medicine and an adjunct professor of and obstetrics and gynaecology at the Faculty of Medicine of the Université de Montréal. "Until this point, the role of Lrh1 in female fertility was unclear, but we have found the gene regulates multiple mechanisms of ovulation and may affect fertilization."

To reach their conclusions, the research team developed a new type of genetically modified mouse whose Lrh1 gene was selectively blocked in the ovary. They found that deletion of the Lrh1 gene effectively stopped ovulation.

"This discovery means we can envision new contraceptives that selectively stop ovulation," said Dr. Murphy. "If created, these new contraceptives would be more effective and produce less side-effects than current steroid-based forms of birth control."

Source: University of Montreal

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