

HOSPITAL AND UNIVERSITY LAUNCH 'BETTER BIRTHS' APPEAL

LIVERPOOL, UK – 12 March 2009: Liverpool Women's NHS Foundation Trust and the University of Liverpool are launching an appeal to raise funds for a new centre dedicated to improving experiences in pregnancy and childbirth for women across the world.

Thousands of women experience complications during pregnancy or childbirth each year and almost a quarter of a million pregnancies result in miscarriage. The Better Births Appeal has so far raised £1 million for the construction of a centre that will bring together researchers and clinicians to improve understanding in areas such as premature labour, recurrent miscarriage and prolonged labour.

The University and Liverpool Women's have received generous donations from individuals, charities and trusts such as the Wolfson Foundation and the Eleanor Rathbone Charitable Trust, and are now looking for support from members of the public to help reach a target of £3 million to develop the new research centre.

Professor Susan Wray, from the University's Department of Physiology, said: "One of the areas the centre will focus on is the study of uterine physiology – the science of how the womb works. We have found that the level of lactic acid in the uterus and the bloodstream dictates the success of a natural birth.

"Production of lactic acid increases when contractions in the uterus muscle intensify during labour and this increase can prevent the uterus from contracting to its full potential. This can often lead to the baby being born by emergency caesarean section. We found that problems caused by an excess of acid may be overcome by temporarily 'resting' the uterus during labour."

Currently there is only one drug, called oxytocin, used to treat problems encountered during labour. This drug was developed in 1954 and is the only drug available to stimulate contractions during prolonged labour. Researchers aim to use expertise at the new centre to explore other possible pharmaceutical treatments to try and reduce the number of emergency caesarean operations.

Dr Siobhan Quenby, from the University's School of Reproductive Medicine and Consultant Obstetrician at Liverpool Women's said: "We are also studying uterine natural killer cells (uNK) – the most numerous white blood cells in the uterus that occur during pregnancy. Research has shown that women who have experienced three or more miscarriages have an increased number of uNK cells which may have a significant impact on a successful pregnancy. We are now in the process of conducting trials to understand whether the steroid, prednisolone, could reduce the number of uNK cells in the lining of the womb, allowing a baby to develop full-term."

Kathryn Thomson, Chief Executive of Liverpool Women's, added: "Liverpool has the largest women's hospital in Europe together with a wealth of expertise in reproductive medicine at the University, so the centre will be perfectly placed to further understanding into some of the difficulties women face in pregnancy and childbirth.

“The city also has one of the largest recurrent miscarriage clinics and the largest NHS-funded IVF service in Britain. We hope that the new centre will help not only women in the UK but those in developing countries, where death as a result of difficult labour is far more common.”

Notes to editors:

1. The University of Liverpool is a member of the Russell Group of leading research-intensive institutions in the UK. It attracts collaborative and contract research commissions from a wide range of national and international organisations valued at more than £93 million annually.

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