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## **Breakthrough in foetal medicine at Royal North Shore Hospital**

NSW Minister for Health, John Della Bosca, has announced an exciting breakthrough in foetal medicine research at Royal North Shore Hospital.

Mr Della Bosca said researchers from the hospital's Kolling Institute of Medical Research had discovered a protein in the blood of expectant mothers which could identify babies at risk of being born malnourished.

The protein - angiopoietin-2 - can be measured in maternal blood as early as 10 weeks gestation.

"This is a significant breakthrough for expectant parents," Mr Della Bosca said.

"If we can identify the problem early in pregnancy, we can start looking at helping women with the protein to deliver healthy babies.

"Traditionally, detection of growth restriction has come comparatively late in pregnancy using a combination of clinical examination and ultrasound," the Minister said.

"At this stage the only effective treatment is to deliver the baby early in the hope it will survive – a difficult decision for parents and clinicians," the Minister said.

"With pregnancies which have placental problems, it becomes a balancing act between the baby's chance of survival from an early delivery and poor nourishment.

"Babies experiencing poor nourishment by the placenta are at risk of preterm birth, stillbirth, learning difficulties and heart disease in later life," Mr Della Bosca said.

Professor Jonathan Morris, Head of Maternal Foetal Medicine, Royal North Shore Hospital, said angiopoietin-2 is significantly lower in those mothers who subsequently delivered small babies due to placental problems.

"The Kolling researchers' discovery suggests problems which are traditionally identified in the third trimester of pregnancy have their origins much earlier," Professor Morris said.

"This has important implications for the prediction - and more importantly - the prevention of women giving birth to smaller babies."

Professor Morris said about 60 women were investigated in a study carried out in 2007.

The researchers now plan to confirm their groundbreaking finding by carrying out a larger study across NSW.

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“All going well, the study could ultimately inform doctors when they need to intervene and improve foetal growth by using existing methods such as blood thinning agents to promote blood flow through the placenta and also trial new methods,” he added.

Earlier this month, the Minister officially opened a new state-of-the-art \$99 million medical research and education centre – the Kolling Building at Royal North Shore Hospital.

Mr Della Bosca said the major research facility will help NSW lead the way in delivering improvements in health care and develop advances in medical science and practices.

“The Rees Government is providing our researchers, doctors and nurses with the tools and facilities they need to pioneer advances in health care and cater to the changing needs of our growing population,” the Minister said.

“The Institute is also a significant milestone in our commitment to rebuild and revitalise the Royal North Shore Hospital site.

“The building was jointly funded by the University of Sydney, and includes seven floors for medical research and new facilities for educating the doctors, nurses and health professionals of the future,” Mr Della Bosca added.