Gene mutation may explain multiple-birth pregnancies

The recent discovery (*Lancet* 2000;356:914) of a gene mutation thought to be responsible for multiple-birth pregnancies could mark the first step in developing a test to identify women at increased risk of having twins and triplets.

By using DNA tests on blood samples from a woman who has given birth to 2 sets of twins and has a family history of multiple pregnancies over 2 generations, Dr. Valter Feyles and colleagues from McMaster University identified a pair of gene defects that appear to increase the sensitivity of the re-



ceptor site where follicle-stimulating hormone (FSH) binds with the ovaries. This heightened sensitivity may cause the ovaries to release more than 1 egg during ovulation, causing a multiple pregnancy. The mutation was not found in blood samples taken from the 34 women in the control group, all of whom had just 1 baby per pregnancy and no family history of twinning.

If borne out in larger-scale studies, say researchers, the finding could lead to more effective treatment. "Early identification of women carrying the gene defect would allow doctors to adjust fertility medication to reduce risk of multiple-birth pregnancies," said Feyles. — *Greg Basky*, Saskatoon