



Graduate Studies: Mellissa Mann's Laboratory – Children's Health Research Institute, London, Ontario mmann22@uwo.ca

Our research focuses on mechanisms that maintain genomic imprinting in the mammalian embryo. Genomic imprinting is defined as a mechanism of transcriptional regulation that restricts expression to one parental allele. Recently, the efficacy and safety of human assisted reproductive technologies (ARTs) have come under questioning. Accumulating evidence suggests that children conceived by ARTs may be at increased risk for developing genomic imprinting disorders. This may be related to the fact that the timing of ART usage coincides with crucial events that regulate genomic imprinting during oocyte growth and early embryo development. Our research proposal will use a mouse model system to investigate the effects of specific ART procedures on genomic imprinting and development. The proposed study will further our understanding of mechanisms that regulate genomic imprinting during normal embryonic and fetal development, and will provide the biologic basis for crucial considerations relevant to the treatment of human infertility by ARTs. <http://publish.uwo.ca/~mmann22>

There is an opportunity for the immediate recruitment of graduate students to our research program (ie January 2007). Possible graduate projects include: investigate the effects of human culture media on genomic imprinting, determine whether imprinting perturbations arise following superovulation, determine when loss of imprinting occurs during *in vitro* development as well as investigating the long-term effects of embryo culture.

For further information regarding the Children's Health Research Institute and Programs within the Departments of Obstetrics & Gynaecology, and Biochemistry at The University of Western Ontario please direct yourself to the following websites.

<http://www.chri.org/>
<http://www.uwo.ca/obsgyn/>
<http://www.biochem.uwo.ca/>

For information on living in London Ontario please check the following Websites

<http://www.london.ca/>
<http://info.london.on.ca/>

We are looking forward to hearing from you.