UCD Centre for Human Reproduction

The UCD Centre for Human Reproduction was established in 2007 to conduct clinical research in obstetrics and gynaecology at the Coombe Women and Infants University Hospital. Our present research focus is on maternal obesity and nutrition, intrauterine fetal development and caesarean section.

1. Maternal obesity
(a) Due to concerns about rising levels of maternal obesity, new revised American recommendations on gestational weight gain (GWG) were published in 2009 for obese women. There are, however, considerable research gaps on the subject. Dr Amy O’Higgins is conducting an observational longitudinal study on 1,000 women attending for antenatal care.

(b) In association with Professor Layte and using data from the Growing Up in Ireland study, Professor Turner is studying the social and demographic factors which influence postpartum weight retention and the subsequent development of maternal obesity.

(c) In association with Dr Andrew Hogan and Professor Donal O’Shea, Dr Naimh Farah found that specific circulating cytokines such as IL-6, are increased in obese women in the third trimester.

(d) Previous meta-analysis reported a two-fold increase in CS rates in obese women. Dr Vicky O’Dwyer completed her MD on CS rates analysed according to maternal adiposity measured using both Body Mass Index and advanced Bioelectrical Impedance Analysis. Increases in CS rates are due to an increase in emergency CS in primigravidas.

2. Maternal nutrition
In association with Dr Bob McDonnell in the HSE (EUROCAT), a comprehensive 3 year national audit of Neural Tube Defects is being conducted. It is expected that the findings will inform future health policies.

3. Intrauterine fetal growth
Under the supervision of Dr Kennelly, Dr Clare O’Connor is conducting a longitudinal observational study examining the role of fetal pulse wave Doppler and ultrasound measurement of soft tissue markers in evaluating aberrant fetal growth.

4. Caesarean section
In association with Professor Richard Layte from the ESRI, Professor Turner is conducting a 20 year review of the factors that are causing caesarean section rates in Ireland and other developed countries to escalate. The study will combine obstetric outcomes from the Hospital Inpatient Enquiry (HIPE) and the National Perinatal Reporting Systems (NPRS).
For more information about the work of Prof Michael Turner and the UCD Centre for Human Reproduction, please visit the School’s award-winning website, available at www.ucd.ie/medicine