

## FIELD OF SPECIALIZATION

# Reproduction and Developmental Sciences

Research in this field spans clinical and basic science, with a focus on fertilization and embryo implantation, perinatal health, women's health, pregnancy complications, sexual dysfunction, and fetal and maternal programming. Studies are conducted at the level of select patient populations, whole animal models, and in vitro systems.

### CAREERS

Career opportunities range from research technician, scientist, administrator in academia, private sector (biotechnology pharmaceutical industry, consulting firms), or in the government sector (Health Canada, Ministry of the Environment and Agriculture).

### COURSES

The Biomedical and Molecular Sciences MSc requires, at minimum, the completion of 12 credit units at the graduate level. BMED 860\* (3 credit units, Fundamentals of Academic Research and Research Proposal) and BMED 897\* (3 credit units, Biomedical Sciences Seminar Program). Additional required credit units for the Reproduction and Developmental Sciences Field of Specialization are: MSc Students in this field must complete 6 credit units from any of the graduate courses offered by the Department in consultation with the supervisor.

### FACULTY

- B.A. Croy:** Functions, mechanisms of activation and lineage relationships of immune competent cell populations that home to the maternal-fetal interface during mammalian pregnancy
- R. Easteal:** Learning Modalities, working memory and interactive teaching
- C.H. Graham:** Cancer progression and the biology of the human placenta
- F.W.K. Kan:** Regulatory role of glycoproteins secreted by the oviduct in sperm-egg interaction and reproductive functions
- M. Koti:** Inflammation and chemotherapy resistance in ovarian cancer
- L. Mackenzie:** Pedagogy in anatomical sciences
- R.J. Oko:** Developmental biology of specialized mammalian sperm head and tail components and their roles during fertilization
- T.R.S. Ozolins:** Developmental toxicology: ventricular septation defects (VDS)
- S.C. Pang:** Structure and function of the cardiovascular system in health and disease
- C. Reifel:** The study of human congenital malformations in a collection of human fetuses displaying a wide range of rare developmental anomalies
- G.N. Smith:** Adverse obstetrical events
- C. Tayade:** Understanding the pathophysiology of endometriosis
- L. M. Winn:** Developmental toxicology

