

The 44th Annual Southern Ontario Reproductive Biology Meeting



Friday, May 13th 2016
Queen's University
Biosciences Complex, Atrium and Room 1101

Sponsored By
Department of Biomedical and Molecular Sciences
Department of Obstetrics and Gynaecology
Group for Research in Reproductive and Developmental Origins of Health,
Disability and Disease



DEPARTMENT OF
BIOMEDICAL AND
MOLECULAR SCIENCES



44th Annual Southern Ontario Reproductive Biology Meeting

Queen's University, Kingston ON

Biosciences Complex, Atrium and Room 1101

Friday, May 13th 2016

8:00-9:00am

Registration

Biosciences Atrium

9:00-9:10am

Welcome to SORB 2016

Biosciences, Room 1101

Anne Croy, DVM, Ph.D

Tier 1 Canada Research Chair in Reproduction, Development
and Sexual Function

Professor, Department of Biomedical and Molecular Sciences
Queen's University

9:10-9:40am

Keynote Speaker

Dr. Susan Ozanne

Professor of Developmental Endocrinology

Department of Clinical Biochemistry

University of Cambridge

Cambridge, UK

**Programming by over-nutrition during pregnancy: a developing
obesity crisis**

Oral Session I: *Biosciences Room 1101*

Chair: Dr. Barbara Vanderhyden, Ottawa Hospital Research Institute

9:45-10:00am

**Novel microRNAs (miRNA) as Biomarkers for Toxic Insult in the
Ovary.** Furlong, HC.1, Gannon, AM.1, Stämpfli, MR.2, Foster, WG.1.

1Department of Obstetrics and Gynecology, McMaster University.

2Department of Pathology and Molecular Medicine, McMaster
University, Hamilton, Ontario, Canada, L8S 4K1.

10:00-10:15am **Recombinant Human Oviductin Binds to Human Sperm and Enhances Sperm Fertilizing Competence.** Yuewen Zhao, Xiaojing Yang, Zongchao Jia, Robert L. Reid, Tamer M. Said, Alfonso P. Del Valle, Pierre Leclerc and Frederick W. K. Kan. Queen's University, Kingston, ON, Canada; The Toronto Institute for Reproductive Medicine, Toronto, ON, Canada; Laval University, Quebec City, QC, Canada.

10:15-10:30am **Characterization Of Hippo Signaling Pathway During Early Embryo Development In Bovine.** Iyoti Sharma, Pavneesh Madan. Department of Biomedical Sciences, Ontario Veterinary College, University Of Guelph, Guelph, Ontario, Canada.

10:30-10:45am **Regulatory mechanisms controlling miRNA abundance in the oocyte: miR-21 expression throughout bovine in vitro oocyte maturation.** Allison Tscherner, Graham Gilchrist and Jonathan LaMarre. Department of Biomedical Sciences, University of Guelph, Guelph, Canada.

10:45-11:15am **Morning Coffee Break**
Biosciences Atrium

Oral Session II: *Biosciences Room 1101*

Chair: Dr. Charles Graham, Queen's University

11:15-11:30am **Diethylhexyl phthalate increases deposition of 14C-bisphenol A in peripheral tissues of mice (*Mus musculus*).** Evan D. Borman, Denys deCatanzaro. Psychology, Neuroscience & Behaviour, McMaster University, Hamilton, Canada.

11:30-11:45am **Endocrine disruption via enzyme exhaustion: Triclosan and tetrabromobisphenol A elevate estradiol and bisphenol A concentrations in mice.** Tyler Pollock & Denys deCatanzaro. Department of Psychology, Neuroscience & Behaviour, McMaster University.

11:45am-12:00pm

Diet-induced maternal obesity alters the maternal gut microbiota and is associated with mid-gestation placental inflammation in a sex-dependent manner. Jessica G. Wallace^{1,3}, Tatiane Ribiero², Michael G. Surette⁵ and Deborah M. Sloboda^{1,3,4}. ¹Department of Biochemistry & Biomedical Sciences, McMaster University, Hamilton. ²Department of Cell Biology and Genetics, State University of Maringá, Brazil-Fellowship of CNPq Brazilian Research Agency. ³Departments of Obstetrics and Gynecology & Pediatrics, McMaster University, Hamilton. ⁴Farncombe Family Digestive Health Research Institute, McMaster University, Hamilton. ⁵Department of Medicine, McMaster University, Hamilton.

12:00-12:15pm

Maternal obesity influences placental immune regulation through TNF. Kennedy¹, Ribeiro⁴, Gohir¹, Wallace¹, Naidoo⁵, Bowdish⁵, Sloboda^{1,2,3}. ¹ Department of Biochemistry & Biomedical Sciences, McMaster University, Hamilton. ² Departments of Obstetrics and Gynecology & Pediatrics, McMaster University, Hamilton. ³ Farncombe Family Digestive Health Research Institute, McMaster University, Hamilton. ⁴ Department of Cell Biology and Genetics, State University of Maringá, Maringá/PR, Brazil-Fellowship of CNPq- Brazilian Research Agency. ⁵ Department of Pathology and Molecular Medicine, McMaster University, Hamilton, Canada.

12:15-1:30pm

Lunch and Poster Set-up
Biosciences Atrium

1:30-2:00pm

Dr. B Anne Croy
Tier 1 Canada Research Chair in Reproduction, Development and Sexual Function
Professor, Department of Biomedical and Molecular Sciences
Queen's University
Kingston, ON

Jim Raeside: Supporter of Career Development

Oral Session III: Biosciences Room 1101

Chair: Dr. Pavneesh Madan, University of Guelph

- 2:00-2:15pm **FGL2 is involved in the regulation of inflammatory response and leukocyte activation within the preeclamptic placenta.** Charette P1,3, Cook DP1,3, 3 Bainbridge SA1 and Vanderhyden BC1- Department of Cellular and Molecular Medicine¹ and Department of Obstetrics and Gynecology², University of Ottawa; Centre for Cancer Therapeutics³, Ottawa Hospital Research Institute.
- 2:15-2:30pm **Heterogeneity of Uterine Natural Killer Cell Partnerships in Early Mouse Decidua.** Allison M. Felker and B. Anne Croy. Department of Biomedical and Molecular Sciences, Queen's University, Kingston, ON.
- 2:30-2:45pm **Characterization of hematopoiesis in mouse placenta: Temporal assessment and distribution profile of immature hematopoietic cells over mid-gestation.** Nathalia A Portilho^{1,2} (Ph.D. Candidate), Priscila T Guedes², Marcelo Pelajo-Machado², B Anne Croy¹. ¹Department of Biomedical and Molecular Research, Queen's University and ²Laboratory of Pathology, Oswaldo Cruz Institute/Fiocruz.
- 2:45-3:00pm **A novel role of CXCL10 in the tumour immune microenvironment of high-grade serous ovarian cancer.** Katrina Au (M Sc. 2016)¹, Peter Truesdell², Nichole Peterson³, Julie-Ann Francis³, Andrew Craig^{1,2}, Madhuri Koti^{1,2,3}. ¹ Department of Biomedical & Molecular Sciences, Queen's University, Kingston, Canada. ² Cancer Biology & Genetics, Queen's University, Kingston, Canada. ³ Department of Obstetrics and Gynaecology, Kingston General Hospital, Kingston, Canada.
- 3:00-3:15pm **RNA binding protein expression in a murine model of recurrent pregnancy associated loss.** Kasra Khalaj¹, Rayana Leal Luna², Maria Eduarda Rocha de Franca², Wilma Helena de Oliveira², Christina Alves Peixoto², and Chandrakant Tayade¹ ¹ Department of Biomedical and Molecular Sciences, Queen's University, Kingston, Ontario, Canada, K7L 3N6. ² Ultrastructure Laboratory, Aggeu Magalhães Research Center of the Oswaldo Cruz Foundation in Recife - FIOCRUZ, CEP 50670-420, Recife, PE, Brazil.

3:15-3:30pm

Evaluating the role of IL-33 in the pathogenesis of endometriosis
Stephany P. Monsanto¹, Jessica Miller¹, SooHyun Ahn¹, Steven L. Young³, Bruce A. Lessey⁴, and Chandrakant Tayade^{1,2}. 1 Department of Biomedical and Molecular Sciences, Queen's University, Kingston, Ontario, Canada, K7L 3N6. 2 Department of Biomedical Sciences, Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada, N1G 2W1. 3 Department of Obstetrics and Gynecology, University of North Carolina, Chapel Hill, NC 27514, USA. 4 Department of Obstetrics and Gynecology, Greenville Health System, Greenville, South Carolina, United States, 29605.

3:30-5:00pm

Afternoon Coffee Break and Poster Session
Biosciences Atrium

5:00-6:00pm

Reception and Awards Presentations
Biosciences Atrium