

CURRICULUM VITAE

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Educational Qualifications:

Post Doctoral Research Fellow: Reproductive Molecular Endocrinology

Animal Reproduction Research Centre, Faculty of Veterinary Medicine, University of Montreal, Quebec, Canada.

PhD: Reproductive Physiology and Endocrinology

Department of Obstetrics and Gynecology, Faculty of Medicine, Laval University, Quebec, Canada.

MVSc: Veterinary Obstetrics and Gynecology

Department of Obstetrics and Gynecology, Madras Veterinary College, Madras, India.

BVSc: (equivalent to DVM): Veterinary Medicine and Animal Sciences

Madras Veterinary College, Madras, India.

Research: Reproductive Endocrinology/Physiology, Molecular Endocrinology, Endocrine Oncology and Cell Signaling.

Grant Support: United States Department of Agriculture, USDA, Canine Health Foundation / American Kennel Club (AKC/CHF), American Association of Feline Practitioners (AAFP), Winn Feline Foundation

Teaching: Endocrinology (VIBS604/BIMS489)

Publications:

1. Banu SK, Starzinski-Powitz A, Speights VO, Burghardt RC, **Arosh JA**. Induction of peritoneal endometriosis in nude mice using human immortalized endometriotic epithelial and stromal cells: A potential experimental tool to study molecular pathogenesis of endometriosis in human. Fertility and Sterility Epub ahead of print on Aug 21; 2008; PMID 18722604
2. Banu SK, Samuel JB, Burghardt R, **Arosh JA**, Aruldas MM. Lactational exposure to chromium (VI) impairs ovarian development, decreases steroid and pituitary hormones synthesis and delays puberty in developing Wistar rats. Toxicology & Applied Pharmacology, 2008; 232:180-189
3. Banu SK, Lee J, V.O. Speights, Starzinski-Powitz A, **Arosh JA**. Cyclooxygenase-2 regulates survival, migration and invasion of human endometriotic cells through multiple mechanisms. Endocrinology, 2008; 149(3) 1180-9.
4. Banu SK, Lee J, Starzinski-Powitz A, **Arosh JA**. Gene expression profiles and functional characterization of human immortalized endometriotic epithelial and stromal cells. Fertility and Sterility, Epub ahead of print on Nov 12; 2007; PMID 18001719

5. Banu SK, Lee J, Satterfield MC, Spencer TE, Bazer FW, **Arosh JA**. Molecular cloning and characterization of prostaglandin transporter in ovine endometrium: Evidence for multiple cell signaling cross-talk on transport of prostaglandin F2 alpha. *Endocrinology* 2008 ; 149(1) 219-31.
6. Banu SK, **Arosh JA**, Chapdelaine P, and Fortier MA. Expression and regulation of prostaglandin transporter-PGT in uterus and fetal membranes during different days of bovine pregnancy. *Biol Reprod* 2005, 73: 230-236.
7. **Arosh JA**, Banu SK, Kimmins S, Chapdelaine P, MacLaren LA and Fortier MA. Effect of interferon tau on prostaglandin biosynthesis, transport and signaling during maternal recognition of pregnancy in cattle: Evidence of polycrine action of PGE₂. *Endocrinology* 2004, 145:5280-93.
8. **Arosh JA**, Banu SK, Chapdelaine P, Madore E, and Fortier MA. Prostaglandin biosynthesis, transport and signaling in corpus luteum: a basis for autoregulation of luteal function. *Endocrinology* 2004, 145: 2551-2560.
9. **Arosh JA**, Banu SK, Chapdelaine P, and Fortier MA. Expression and regulation of COX-1 and 2 and FP, EP2, EP3 and EP4 in uterus and fetal membranes during different days of bovine pregnancy. *Endocrinology* 2004, 145:407-417.
10. Emond V, **Arosh JA**, Kimmins S, Fortier MA, Maclaren LA, Lambert RD. Expression of Cyclooxygenase and Granulocyte-Macrophage Colony Stimulating Factor in the endometrial epithelium of the cow is up regulated by intrauterine interferon tau. *Biol Reprod* 2004, 70:54-64
11. Sakhila K.Banu⁺⁺, **Arosh JA**⁺⁺, Pierre Chapdelaine and Michel A. Fortier. Molecular cloning and spatio-temporal expression of the prostaglandin transporter-PGT: A basis for the action of prostaglandins in the bovine reproductive system *PNAS* 2003, 100: 11747-11752 ⁺⁺**equal contribution**.
12. **Arosh JA**, Banu SK, Chapdelaine P, Emond V¹, Kim JJ, MacLaren LA and Fortier MA. Molecular cloning and Characterization of Bovine Prostaglandin E₂ receptors EP2 and EP4: Expression and Regulation in Endometrium and Myometrium during the Estrous Cycle and Early Pregnancy. *Endocrinology* 2003, 144: 3076-3091
13. Madore E, Harvey N, Parent J, Chapdelaine P, **Arosh JA**, Fortier MA. An aldose reductase activity stands out as the functional enzyme responsible for the production of PGF_{2α} in the endometrium. *J Biol Chem* 2003, 278:11205-11212.
14. **Arosh JA**, Parent J, Chapdelaine P, Sirois J, Fortier MA Expression of cyclooxygenases 1 and 2 and prostaglandin E synthase in bovine endometrial tissue during the estrous cycle. *Biol Reprod* 2002; 67:161-169
15. K. Sakhila Banu, **Arosh JA**, P. Govindarajulu and M. Michael Aruldas. Testosterone and estradiol differentially regulate thyroid growth in Wistar rats from immature to adult age. *Endocrine Research* 2001; 27: 447-463.
16. **Arosh JA**, K. Sakhila Banu, T.G. Devanathan and D. Kathiresan. The effect of SMB on follicular dynamics during superovulation in crossbred cows. *Indian Journal of Animal Reproduction* 2001; 22:103-108.
17. **Arosh JA**, K. Sakhila Banu, T.G. Devanathan and D. Kathiresan. Oestradiol profile and ovarian response, embryo recovery and quality of embryos in prostaglandin F2 alpha and syncro-mate B induced superovulated crossbred cows. *Indian Journal of Animal Sciences* 2001; 71: 421-424.
18. **Arosh JA**, K. Sakhila Banu, T.G. Devanathan and D. Kathiresan. The pattern of superoestrus and its influence on ovarian response, embryo recovery and quality of embryos in prostaglandin F2 alpha and syncro-mate B induced superovulated crossbred cows. *Indian Journal of Animal Sciences* 2001;71: 425-429
19. **Arosh JA**, K.Sakhila Banu, T.G. Devanathan and D. Kathiresan. Progesterone, estradiol, luteinizing hormone and follicle stimulating hormone profiles and their relationship with embryo production and quality of embryos in crossbred cows treated with prostaglandin F2 alpha and Folltropin. *Indian Journal of Animal Sciences* 2001; 71: 910-914.

20. **Arosh JA**, Kathiresan D, Subramanian A, Devanathan TG. Effects of norgestomet on follicular development and hormonal profiles during diestrus and proestrus of estrous cycle in crossbred cows. *Indian Journal of Animal Sciences* 2001; 71:915-918.
21. Kathiresan D, **Arosh JA**, Devanathan TG, Subramanian A, Mahalinga Nainar A, Nachimuthu K Dose of norgestomet and its effect on the secretory pattern of luteinizing hormone and estradiol in kangeyam cows.. *Indian Journal of Animal Reproduction*. 2001;21: 27-30
22. **Arosh JA**, Devanathan TG, Kathiresan. Superovulatory response and quality of embryos in prostaglandin F2 alpha and syncromate- B with folltropin treated crossbred cows. *Indian Journal of Animal Reproduction* 2000; 21: 92 –95.
23. **Arosh JA**, Shakila K, Devanathan TG, Kathiresan D. Follicle stimulating hormonal profile and its correlation with ovarian response, embryo recovery and quality of embryos in prostaglandin F2 alpha and syncromate –B induced superovulated crossbred cows. *Indian Journal of Animal Sciences* 2000; 70: 679 –683
24. **Arosh JA**, Shakila K, Devanathan TG, Kathiresan D. Luteinizing hormone profile and its correlation with ovarian response, embryo recovery and quality of embryos in prostaglandin F2 alpha and syncro mate –B induced superovulated crossbred cows. *Indian Journal of Animal Sciences* 2000; 70: 576 -581
25. **Joe Arosh A**, Shakila K, Devanathan TG, Kathiresan D. Progesterone profile and ovarian response, embryo recovery and quality of embryos in prostaglandin F2 alpha and syncro mate –B induced superovulated crossbred cows. *Indian Journal of Animal Sciences* 2000; 70: 254 –257.
26. **Arosh JA**, Narayanan K, Selvaraju M, Balasubramanian S, Kathiresan D, Devanathan TG. Unilateral tubo-ovarian cyst with bilateral ovaribursal adhesion and perimetritis in a buffalo. *Indian Journal of Animal Sciences* 2000; 70: 43-44
27. **Arosh JA**, Madhan Mohan C, Balasubramanian S, Lalitha PS, Ramadoss P. Immunoglobulin G in buffalo amniotic fluid - A pilot study. *Indian Veterinary Journal* 1999; 76: 875 –877.
28. **Arosh JA** ,Devanathan TG, Kathiresan D, Siva R, Rajasekaran J. Biochemical constituents of foetal fluid during late gestation in nondescript bitch. *Indian Journal of Animal Reproduction* 1999; 20: 75-76
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31. Kathiresan D, **Arosh JA**, Devanathan TG, Rajasekaran J, Nachimuthu K. Dosage of Norgestomet and its influence over secretory pattern of luteinizing hormone profile and estradiol in Kangeyam cows. *Proceedings of IInd Pan Commonwealth Veterinary Conference* 1998; 925- 930
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35. Madhan Mohan C, **Arosh JA**, Jeyakumar S, Balasubramanian S Prakash Babu R. Electrophoretic analysis of follicular proteins in buffalo ovaries. *Indian Journal of Animal Sciences* 1997; 67: 284 –285.
36. Madhan Mohan C, **Arosh JA**, Balasubramanian S, Mahalinga Nainar A. Functional six quarter udder in a cow – A case study. *Indian Veterinary Journal* 1997; 74: 161–63.