

Titles of Abstracts

SHORT PRESENTATIONS: (1-5)

1. HPO axis and development of ovary-neutral selective estrogen receptor modulators (SERMs).

Vargheese Chennathukuzhi, Molecular & Integrative Physiology University of Kansas Medical Center, Kansas City, KS

2. Effect of gamendazole on expression of heat shock proteins HSP70 and HSP90 in Rat testis and primary Sertoli cells

Lesya Holets^{1,2}, Sudhakar Jakkara^{3,4}, Ramappa Chakrasali^{3,4}, Gunda I. Georg^{1,3,4} and Joseph S. Tash^{1,2} ¹Interdisciplinary Center for Male Contraceptive Research & Drug Development. ²Department of Molecular and Integrative Physiology, University of Kansas Medical Center, Kansas City, KS. ³Dept. of Medicinal Chemistry and Institute for Therapeutics, Discovery & Development, University of Minnesota, Minneapolis, MN. ⁴Dept. of Medicinal Chemistry, University of Kansas, Lawrence, KS

3. MicroRNA-21 is a regulator of LH actions in granulosa cells

Lane Christenson, Martha Carletti, Xiaoman Hong, Molecular & Integrative Physiology University of Kansas Medical Center, Kansas City, KS

4. The epigenetic program of preimplantation mouse embryos is altered by assisted reproductive technology procedures

Rocio M. Rivera, Mammalian Embryology/Developmental Epigenetics, Animal Science Research Center, Division Of Animal Sciences, University of Missouri, Columbia, MO

5. Identification of novel targets of transcription factor DMRT1

Tatiana Karpova, Daren Rice, Leslie L. Heckert, Department of Molecular and Integrative Physiology, University of Kansas Medical Center, Kansas City, KS

POSTERS: (6-28)

6. Altered micro-RNA expression patterns during the initiation and promotion stages of neonatal diethylstilbesterol-induced dysplasia/neoplasia in the hamster uterus.

Ramesh Padmanabhan¹, Isabel R. Hendry¹ and William J. Hendry¹. ¹Department of Biological Sciences, Wichita State University, Wichita, KS

7. Protein tyrosine kinase signaling during sperm-egg interaction and meiosis resumption.

Lynda K. McGinnis, Jinping Luo and William H. Kinsey. Center for Reproduction Sciences University of Kansas Medical Center. Kansas City, KS 66160 USA

8. Micro RNA-21 enhances global translation.

Martha Z. Carletti and Lane K. Christenson. ¹.Department of Molecular and Integrative Physiology, University of Kansas Medical Center, Kansas City, KS.

9. The metabolic role of adiponectin extends to the placenta, and occurs through multiple signaling pathways.

Emily A. McDonald and Michael W. Wolfe. Department of Molecular and Integrative Physiology, University of Kansas Medical Center, Kansas City, KS.

10. Fetal antigen induces tolerance in maternal CD4⁺ T cells.

Antoine Perchellet and Margaret Petroff. Department of Anatomy and Cell Biology, University of Kansas Medical Center, Kansas City, KS 66160.

11. Fertility defects in the mouse oocyte resulting from loss of Fyn kinase activity.

Jinping Luo, Lynda McGinnis, and William H. Kinsey. Department of Anatomy and Cell Biology. University of Kansas Medical Center

12. Molecular Analysis of Testicular Defects in *Fshb* and *Ccnd2* Double Mutant Mice.

Huizhen Wang¹, Phillip Stevenson¹, Sumedha Gunewerdana² and T. Rajendra Kumar^{1,3}. ¹Center for Reproductive Sciences, ¹Department of Molecular and Integrative Physiology, and ²KIDDRC, and ³Pathology and Laboratory Medicine; University of Kansas Medical Center, Kansas City, KS 66160.

13. Bone Morphogenetic Protein 4 as a mediator of estrogen-induced sensory axon plasticity.

Aritra Bhattacharjee and Peter Smith. University of Kansas Medical Center, Kansas City, KS 66160.

14. Loss of microRNA leads to abnormal function and development of the adult mouse uterus.

Lacey J. Luense, Xiaoman Hong, Sara B. Brown, Warren B. Nothnick and Lane K. Christenson. University of Kansas Medical Center, Kansas City, KS, 66160

15. Transgenic mouse with augmented expression of the Na,K-ATPase $\alpha 4$ isoform exhibit increased sperm motility.

Tamara Jimenez, Gladis Sánchez and Gustavo Blanco. University of Kansas Medical Center, Kansas City, KS 66160

16. Activin/Nodal signaling regulates the BMP pathway in mouse embryonic stem cells.

Katherine E. Galvin^{1,2} and Jay L. Vivian^{1,2}. ¹Department of Pathology and Laboratory Medicine and Division of Cancer and Developmental Biology, ²Institute of Maternal-Fetal Biology, University of Kansas Medical Center, Kansas City, Kansas.

17. Synergistic activation of Akt by IGF-1 and FSH is correlated with the altered expression of several granulosa cell paracrine factors that affect follicle progression or ovulation.

Elizabeth M. Mack, Jacqueline E. Smith, and Jennifer R. Wood. Department of Animal Science, University of Nebraska-Lincoln, Lincoln, NE

18. Aff1 function in early development.

Naveen Neradugomma, Emily Travis, Jessica N. Copeland, Katherine Galvin, Daniel Wagner and Jay L. Vivian. University of Kansas Medical Centre, Kansas, KS. Rice University, Houston, TX.

19. Overexpression of PGF in the early embryo disrupts vascular differentiation.

Jessica N. Copeland and Jay L. Vivian. Department of Pathology and Laboratory Medicine, Institute of Maternal-Fetal Biology, University of Kansas Medical Center, Kansas City, KS.

20. IGF-1 dependent changes in histone H3 modifications are associated with Akt signaling and the expression of cell survival and immediate early genes.

Zhufeng Yang, Jacqueline E. Smith, Taylor Yaw, and Jennifer R. Wood. Department of Animal Science, University of Nebraska-Lincoln, Lincoln, NE, USA

21. Sertoli and Granulosa cell-specific Vascular Endothelial Growth Factor (VEGF) loss using pDMRT-1 Cre alters gonadal morphogenesis and function.

Ningxia Lu, Debra T Clopton, William E Pohlmeier and Andrea S Cupp. Department of Animal Science, University of Nebraska-Lincoln, Lincoln NE.

22. Possible Derivation of Induced Trophoblast Stem Cells (piTSC) from Swine.

Haruyo Matsuyama, Andrei Alexenko, Bhanu Telugu and Toshihiko Ezashi. Genetics Area Program and Division of Animal Sciences, University of Missouri, Columbia MO 65211

23. Derivation of Induced Pluripotent Stem Cells from Pig Somatic Cells.

Toshihiko Ezashi¹, Bhanu Prakash V.L. Telugu¹, Andrei Alexenko¹, Shrikesh C. Sachdev², Sunilima Sinha¹ and R. Michael Roberts^{1,2}. Divisions of ¹Animal Sciences and ²Biochemistry, University of Missouri, Columbia, MO.

24. LIF-Dependent, Porcine Induced Pluripotent Stem Cells Derived by Episomal, Non-Integrating Vectors.

Bhanu Prakash V.L. Telugu¹, Toshihiko Ezashi¹, Sunilima Sinha¹ and R. Michael Roberts^{1,2}. ¹Division of Animal Sciences; ²Department of Biochemistry, University of Missouri, Columbia.

25. Evolution of the *IFNT* and their Emergence from *IFNW*.

Angela Walker¹ and R. M. Roberts¹. ¹Department of Veterinary Pathobiology, ²Department of Animal Science, University of Missouri, Columbia, MO

26. The influence of environmental exposure on asymmetric cytokinesis in the rat embryos.

Gokhan Akkoyunlu^{1,2}, Sara Brown¹, Brian K. Petroff¹, and David F. Albertini¹. ¹Department of Molecular and Integrative Physiology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160, USA. ²Department of Histology and Embryology, Faculty of Medicine, Akdeniz University, 07070 Antalya, Turkey

27. GATA3 is selectively expressed in the trophectoderm of peri-implantation embryo and directly regulates *Cdx2* gene expression.

Pratik Home¹, Soma Ray¹, Debasree Dutta¹, Illya Bronshteyn², Melissa Larson², and Soumen Paul¹. ¹ Institute of Maternal-Fetal Biology, Department of Pathology & Laboratory Medicine, ²Transgenic and Gene-targeting Institutional Facility. University of Kansas Medical Center, Kansas City, KS 66160

28. Signaling mechanism of GPR30-mediated estrogen action on the formation of primordial follicles: involvement of Akt and MAPK pathways.

Cheng Wang¹ and Shyamal K. Roy^{1,2}, Departments of Obstetrics and Gynecology¹ and Cellular and Integrative Physiology², University of Nebraska Medical center, Omaha, NE 68198

29. Expression of EBP1 in the hamster ovary during perinatal development.

Anindit Mukherjee¹, and Shyamal K. Roy^{1,2}, Departments of Cellular and Integrative Physiology^{1,2}, and OB/GYN². University of Kansas Medical Center, Kansas City, KS.