

Andrei Alexenko

Research Assistant Professor

Positions and Honors

Positions and Employment

- 1981-1986: Postgraduate Research Assistant, Shemyakin Institute of Bioorganic Chemistry, USSR Academy of Sciences, Moscow, Russia.
- 1986-1994: Research Scientist, Institute of Genetics & Selection of Industrial Microorganisms, Moscow, Russia.
- 1994-2001: Postdoctoral Research Associate, University of Missouri-Columbia, Columbia, MO.
- 2001-present: Research Assistant Professor, University of Missouri-Columbia, Columbia, MO.

Memberships and Honors

- Member, American Society for Biochemistry and Molecular Biology (ASBMB)
- Member, International Society for Interferon and Cytokine Research (ISICR)
- Member, Society for the Study of Reproduction (SSR)
- Food for the 21st Century Postdoctoral Fellowship, University of Missouri-Columbia, 1994-1996
- ISICR Travel Award, 1995
- ISICR Travel Award, 2001

B. Publications

Ezashi T, Telugu BPVL, **Alexenko AP**, Sachdev S, Sinha S, and Roberts RM, (2009) Derivation of Induced Pluripotent Stem Cells from Pig Somatic Cells. *Proc Nat Acad Sci.USA*, 106 (27), 10993-10999

Alexenko AP, Mao J, Ellersieck MR, Davis AM, Whyte JJ, Rosenfeld CS, and Roberts RM. (2007) The Contrasting Effects of ad libitum and Restricted Feeding of a Diet Very High in Saturated Fats on Sex Ratio and Metabolic Hormones in Mice. *Biol. Reprod.* 77, 599-604.

Whyte JJ, **Alexenko AP**, Davis AM, Ellersieck MR, Fountain ED, and Rosenfeld CS (2007) Maternal Diet Composition Alerts Serum Steroid and Free Fatty Acid Concentrations and Vaginal pH Mice. *J. Endocrinol.* 192, 75-81.

Parent J, Villeneuve C, **Alexenko AP**, Ealy AD, and Fortier MA (2003) Influence of Different Isoforms of Recombinant Trophoblastic Interferons (rIFN- τ) on Prostaglandin Production in Cultured Endometrial Cells. *Biol. Reprod.* 68, 1035-1043.

Rosenfeld CS, Han C-S, **Alexenko AP**, Spencer TE, and Roberts RM (2002) The Expression of Interferon Receptor Subunits, IFNAR1 and IFNAR2, in the Ovine Uterus. *Biol. Reprod.* 67, 847-853.

Ealy AD, Larson SF, Liu L, **Alexenko AP**, Winkelman GL, Kubisch HM, Bixby JA, and Roberts RM (2001) Polymorphic forms of expressed bovine interferon-tau genes: Relative transcript abundance during early placental development, promoter sequences of genes and biological activity of protein products. *Endocrinol.* 142, 2906-2915.

Alexenko AP, Ealy AD, Bixby JA, and Roberts RM (2000) A Classification for the Interferon- τ . *J. Interferon Cytokine Res.* 20, 817-822.

Arnold DR, Binelli M, Vonk J, **Alexenko AP**, Drost M, Wilcox CJ, and Thatcher WW (2000) Intracellular Regulation of Endometrial PGF_{2 α} and PGE₂ Production in Dairy Cows During Early Pregnancy and Following Treatment with Recombinant Interferon- τ . *Domest. Anim. Endocrinol.* 18, 199-216.

Alexenko AP, Ealy AD, and Roberts RM (1999) The Cross-Species Antiviral Activities of Different IFN- τ Subtypes on Bovine, Murine and Human Cells: Contradictory Evidence for Therapeutic Potential. *J. Interferon Cytokine Res.* 19, 1335-1341.

Winkelman GL, Roberts RM, Peterson AJ, **Alexenko AP**, and Ealy AD (1999) Identification of the Expressed Forms of Ovine Interferon-Tau in the Periimplantation Conceptus: Sequence Relationships and Comparative Biological Activities. *Biol. Reprod.* 61, 1592-1600.

Roberts RM, Ealy AD, **Alexenko AP**, Han C-S, and Ezashi T (1999) Trophoblast Interferons. *Placenta* 20, 259-264.

Ealy AD, **Alexenko AP**, Keisler DH, and Roberts RM (1998) Loss of the Signature Six Carboxyl Amino Acid Tail from Ovine Interferon-tau does not Affect Biological Activity. *Biol. Reprod.* 58, 1463-1468.

Ealy AD, Green JA, **Alexenko AP**, Keisler DH, and Roberts RM (1998) Different Ovine Interferon-tau Genes are not Expressed Identically and Their Protein Products Display Different Activities. *Biol. Reprod.* 58, 566-573.

Alexenko AP, Leaman DW, Li J, and Roberts RM (1997) The Antiproliferative and Antiviral Activities of Interferon-tau Variants in Human Cells. *J. Interferon Cytokine Res.* 17, 769-779.

Roberts RM, Liu L, and **Alexenko A** (1997) New and Atypical Families of Type I Interferons in Mammals: Comparative Functions, Structures, and Evolutionary Relationships. *Prog. Nucl. Acids Res. Mol. Biol.* 56, 287-325.

Li J, **Alexenko AP**, and Roberts RM (1995) A Bifunctional Vector Suitable for both Site-directed Mutagenesis and Recombinant Expression of Interferon- τ in *Escherichia coli*. *Prot. Express. Purif.* 6, 401-407.

Alexenko AP, Izotova LS, Kostrov SV, and Strongin AY (1991) Mapping of an Epitope of Human Leukocyte Alpha Interferon A Which is Recognized by the Murine Monoclonal Antibody NK2. *Biomed. Science* 2, 403-409.

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Nesmeyanov VA, Valyakina TI, **Alexenko AP**, Lavrova NV, Lakhtina OE, Chikirdina EE, and Kulshin VA (1984) The Biochemical Study of Rat T-Cell Growth Factor (Interleukin 2). *Immunol. Lett.* 7, 273-277.

Abstracts and Supplementals Published

Alexenko AP, Davis A.M., Schlanker S., Rosenfeld C.S., Ellersieck M., Roberts R.M. 2007. Contrasting effects of ad libitum and restricted feeding of a diet high in saturated fat on the sex ratio pups born to mature NIH Swiss mice. SSR, July 21-25 2007, San Antonio TX. Biol. Reprod., 161-161 Sp. Iss. SI 2007

J. Mao, **Alexenko, A.P.**, Fountain, E.D., Whyte, J.J., Grimm, K.M., Roberts, R.M., and Rosenfeld, C.S. 2007. Examination of Metabolic Hormones and Blood Glucose Concentrations in Female Mice on Diets That Favor Pronounced Changes in Sex Ratios of Pups Born. SSR, July 21-25 2007, San Antonio TX. Biol. Reprod., 132-133 Sp. Iss. SI 2007

Roberts RM, **Alexenko, A.P.**, Whyte JJ, and Rosenfeld CS (2007) Maternal diet and reproductive outcome. Keystone Symposium on Molecular and Cellular Biology, Feb. 20-25, 2007 Santa Fe NM

Alexenko, A.P., Franklin, C.L., Zaghouni H., and Roberts, R.M. (2004) Effect of IFN-tau Variants on Experimental Allergic Encephalomyelitis in Mice has no Direct Interaction with its Antiviral Activity. Cytokines in Cancer and Immunity. 2004 Joint Meeting of International Cytokine Society (ICS) and International Society for Interferon and Cytokine Research (ISICR), San Juan, Puerto Rico, October 21-25, 2004. *Abstracts. p.114 Abstract 366*

Bell, J.J., Ellis, J.S., Gregg, R.K., Divekar, R., Jain, R., Lee, H.H., Yu, P., **Alexenko, A.**, Zaghouni, H. (2004) Asymmetric Restoration of T Cell Tolerance Revealed by an "in trans" EAE Model. Experimental Biology 2004, Washington, DC, April 17-21, 2004. *FASEB J.*, 18, Suppl. S, A841

Alexenko, A.P., Franklin, C.L., Ealy, A.D., and Roberts, R.M. (2001) Effect of the Three Distinct IFN-tau Variants on Progression and Severity of Experimental Allergic Encephalomyelitis (EAE) in Mice. 2001 Annual Meeting of the International Society for Interferon and Cytokine Research, Cleveland, Ohio, October 7-11, 2001. *J. Interferon Cytokine Res.*, 21, suppl. 1, S111

Villeneuve, C., Parent, J., **Alexenko, A.**, Ealy, A., and Fortier, M.A. (2001) Influence of Different Isoforms of Recombinant Trophoblastic Interferons (rIFN- τ) on Prostaglandin

Production in Cultured Endometrial Cells. 34th Annual Meeting of the Society for the Study of Reproduction, July 28-August 1, 2001, University of Ottawa, Ontario, Canada. *Biol. Reprod.*, 64, suppl. 1, 177

Alexenko, A.P., Ealy, A.D., and Roberts, R.M. (2000) Antiviral Activities of Various Interferon-tau Forms in Ovine and Bovine Cell Lines. 33rd Annual Meeting of the Society for the Study of Reproduction, July 15-July 18, 2000, Madison, Wisconsin. *Biol. Reprod.*, 62, suppl. 1, 249

Ealy, A.D., Larson, S.F., Liu, L., **Alexenko, A.P.**, Bixby, J.A., and Roberts, R.M. (2000) The Identification and Expression of Bovine Interferon-tau Genes During Early Placental Development. 33rd Annual Meeting of the Society for the Study of Reproduction, July 15-July 18, 2000, Madison, Wisconsin. *Biol. Reprod.*, 62, suppl. 1, 256

Arnold, D.R., Binelli, M., Vonk, J., **Alexenko, A.P.**, and Thatcher, W.W. (1999) Regulation of Prostaglandin F₂ α (PGF₂ α) Secretion from Endometrium of Cattle Infused with Recombinant Interferon Tau (rbIFN- τ). 32nd Annual Meeting of the Society for Study of Reproduction. Washington State University/University of Idaho July 31- August 3, 1999. Pullman, Washington. *Biol. Reprod.*, 60, suppl. 1, 263

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Alexenko, A.P., Li, J., Mathialagan, N., Izotova L., Mariano T.M., Pestka S., and Roberts R.M. (1995) Interaction of Bovine Interferon- τ with the Type I Interferon Receptor on Daudi Cells. 1995 Annual Meeting of the International Society for Interferon and Cytokine Research, Baltimore, Maryland, November 6-11, 1995. *J. Interferon Cytokine Res.*, 15, suppl. 1, S97.

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