



Xiaoqiu Wang



Assistant Professor of Nutrition,
and Reproductive Physiology

Title:

Research emphasis:

Reproductive physiology, endocrinology, and nutritional biochemistry with particular focus on uterine biology, early pregnancy and amino acid metabolism, using genetically engineered mouse models as well as domestic animals (pigs, sheep and other ruminants).

Dr. Wang's research program is focused on understanding the molecular mechanisms regulating normal physiology (e.g., implantation, and placentation) as well as disease development in the uterus (e.g., endometriosis, uterine fibroids, and endometrial cancer).

Application:

- Early pregnancy loss
- Functional amino acids during pregnancy
- Nutrition for healthy pregnancy outcomes

Collaboration potential:

- Uterine biology
- Gut health
- Swine reproduction
- Fetal origins of adult disease

Selected publications: (limit 4)

Wang X*, Vasquez YM*, Wetendorf M, Franco HL, Mo Q, Wang T, Lanz RB, Young SL, Lessey BA, Lydon JP, DeMayo FJ. FOXO1 regulates uterine epithelial integrity and progesterone receptor expression critical for embryo implantation. *PLOS Genetics* (accepted) *Equal contribution

Wang X, Li X, Wang T, Wu S, Jeong J, Kim TH, Young SL, Lessey BA, Lanz RB, Lydon JP, DeMayo FJ. SOX17 regulates uterine epithelial-stromal crosstalk acting via a distal enhancer upstream of *Ihh*. *Nature Communications* 2018; 24;9(1):4421. [PMID: 30356064](#)

Wang X, Zhu Y, Feng C, Lin G, Wu G, Li D, Wang J. Innate differences and colostrum-induced alterations of jejunal mucosal proteins in piglets with intrauterine growth restriction. *British Journal of Nutrition* 2018; 119(7):734-747. [PMID: 29569542](#)

Wang X, Li D, Wu G, Bazer FW. Functional roles of fructose: Crosstalk between *O*-Linked glycosylation and phosphorylation of Akt-TSC2-MTOR cell signaling cascade. *Biology of Reproduction* 2016; 95(5):102. **Front Cover** [PMID: 27655785](#)

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