

# Louisa A. Rispoli

Post-Doctoral Scientist

Center for Conservation and Research of Endangered Wildlife  
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## Education/Training

Institution and Location	Degree	Year	Field of Study
University of California Davis, CA	B.S.	1995	Animal Science
Colorado State University, Fort Collins, CO	Ph.D.	2005	Reproductive Physiology

## Positions and Honors

Post-doctoral Scientist, Center for Conservation and Research of Endangered Wildlife, Cincinnati Zoo and Botanical Garden, Cincinnati, OH Nov 2019 - present

Research Assistant Professor, Department of Animal Science, University of Tennessee Institute of Agriculture, Knoxville, TN July 2012 - Sept 2020

Post-doctoral Research Assistant, Department of Animal Science, University of Tennessee Institute of Agriculture, Knoxville, TN Jan 2005 - Jun 2012

Research Associate, Animal Reproduction and Biotechnology Laboratory, Colorado State University, Fort Collins, CO Aug 1997 - Aug 1999

Research Assistant & Lab Manager, Department of Molecular and Cellular Biology, University of California, Davis, CA Sept 2005 - July 1997

## Selected Peer-Reviewed Publications

- Rispoli LA**, Edwards JL, Pohler KG, Russell S, Jordan R, Somiari R, Payton RR, and Schrick FN. 2019. Heat-induced hyperthermia impacts the follicular fluid proteome of the periovulatory follicle in lactating dairy cows. *PLoS ONE*. 14(12): e0227095.
- Abbott CR, Saxton AM, **Rispoli LA**, Payton RR, Pohler KG, Schrick FN, and Edwards JL. 2018. An in vivo model to assess the thermoregulatory response of lactating Holsteins to an acute heat stress event occurring after a pharmacologically-induced LH surge. *Journal of Thermal Biology*. 78:247-256.
- Campen KA, Abbott CR, **Rispoli LA**, Payton RR, Saxton AM, and Edwards JL. 2018. Heat stress impairs gap junction communication and cumulus function of bovine oocytes. *Journal of Reproduction and Development*. 64(5): 385-392.
- Payton RR, **Rispoli LA**, Nagel KA, Gondro C, Saxton AM, Voy B, and Edwards JL. 2018. Mitochondrial-related consequences of heat stress exposure during bovine oocyte maturation persist in early embryo development. *Journal of Reproduction and Development*. 64(3):243-251.
- Goodwin MR, **Rispoli LA**, Payton RR, Saxton AM, and Edwards JL. 2016. Developmental consequences of supplementing with matrix metalloproteinase-9 during in vitro maturation of heat stressed bovine oocytes. *Journal of Reproduction and Development*. 62(6):553-560.
- Hooper LM, Payton RR, **Rispoli LA**, Saxton AM, and Edwards JL. 2015. Impact of heat stress on germinal vesicle breakdown and lipolytic changes during in vitro maturation of bovine oocytes. *Journal of Reproduction and Development*. 61(5):459-464.
- Rispoli LA**, Payton RR, Gondro C, Saxton AM, Nagle KA, Jenkins BM, Schrick FN, and Edwards JL. 2013. Heat stress effects on the cumulus cells surrounding the bovine oocyte during maturation: altered matrix metalloproteinase 9 and progesterone production. *Reproduction* 146(2):193-207.
- Rispoli LA**, Lawrence JL, Payton RR, Saxton AM, Schrock GE, Schrick FN, Middlebrooks BM, Dunlap JR, Parrish JJ, and Edwards JL. 2011. Disparate consequences of heat stress exposure during

- meiotic maturation: Embryo development after chemical activation versus fertilization of bovine oocytes. *Reproduction*. 142(6):831-843.
- Payton RR, **Rispoli LA**, Saxton AM, and Edwards JL. 2011. Impact of heat stress exposure during meiotic maturation on oocyte, surrounding cumulus cell and embryo RNA populations. *Journal of Reproduction and Development*. 57(4):481-491.
- Slough TL, **Rispoli LA**, Carnevale EM, Niswender GD, and Bruemmer JE. 2011 Temporal gene expression in equine corpora lutea based on serial biopsies in vivo. *Journal of Animal Science* 89(2):389-386.
- Payton RR, **Rispoli LA**, and Edwards JL. 2010. General features of certain RNA populations from gametes and cumulus cells. *Journal of Reproduction and Development* 56(6):583-592.
- Weems YS, Nett TM, **Rispoli LA**, Davis TL, Johnson DL, Uchima T, Raney A, Lennon E, Harbert T, Bowers G, Randel RD, and Weems CW. 2010. Effects of prostaglandin E and F receptor agonists in vivo on luteal function in ewes. *Prostaglandins & Other Lipid Mediators* 92(1-4):67-72.
- Weems YS, Nett TM, **Rispoli LA**, Davis TL, Johnson DL, Uchima T, Raney A, Lennon E, Pang J, Harbert T, Bowers G, Goto K, Ong A, Tsutahara N, Randel RD, and Weems CW. 2010. Prostaglandin E1 (PGE1), but not prostaglandin E2 (PGE2), alters luteal and endometrial luteinizing hormone (LH) occupied and unoccupied LH receptors and mRNA for LH receptors in ovine luteal tissue to prevent luteolysis. *Prostaglandins & Other Lipid Mediators*. 91(1-2):42-50.
- Edwards JL, Bogart AN, **Rispoli LA**, Saxton AM, and Schrick FN. 2009. Developmental competence of bovine embryos from heat-stressed ova. *Journal of Dairy Science* 92(2):563-570.
- Breen KM, Davis TL, Doro LC, Nett TM, Oakley AE, Padmanabhan V, **Rispoli LA**, Wagenmaker ER, and Karsch FJ. 2008. Insight into the neuroendocrine site and cellular mechanism by which cortisol suppresses pituitary responsiveness to gonadotropin-releasing hormone. *Endocrinology* 149(2):767-773.
- Rispoli LA** and Nett TM. 2005. Pituitary gonadotropin-releasing hormone (GnRH) receptor: Structure, distribution and regulation of expression. Special issue entitled: GnRH in Domestic Animal Reproduction. *Animal Reproduction Science* 88:57-74.
- Nett TM, Turzillo AM, Baratta M, and **Rispoli LA**. 2002. Pituitary effects of steroid hormones on secretion of follicle stimulating hormone and luteinizing hormone. *Domestic Animal Endocrinology* 23(1-2):33-42.

## Selected Abstracts

- Klabnik-Bradford JL, Payton RR, **Rispoli LA**, Pohler KG, Abbott CR, Bloomer C, Christenson LK, Huff M, Staton ME, Saxton AM, Campen KA, Schrick FN, and Edwards JL. 2018. Heat-induced hyperthermia impacts the transcriptome of cumulus and mural granulosa cells in the periovulatory follicle in lactating dairy cows. Fifty-first Annual Meeting of the Society for the Study of Reproduction. New Orleans, LA, USA. abstr. 87.
- Rispoli LA**, Schweighart A, Dye Z, Knightly F, Peterson E, Flora P, Neatour C, Whitebread B, Edwards JL, and Terrell K. 2017. Antisperm antibodies & elephant infertility: Is there a Link? Thirty-eighth Annual Elephant Managers Conference. Columbus, OH USA.
- Rispoli LA**, Dye Z, Schweighart A, Knightly F, Peterson E, Flora P, Neatour C, Whitebread B, Edwards JL, and Terrell K. 2017. Preliminary evidence for the production of anti-sperm antibodies and a link to infertility in captive African elephants (*Loxodonta africana*). Fiftieth Annual Meeting of the Society for the Study of Reproduction. Washington DC, USA. abstr. 114.
- Harris JP, Edwards JL, **Rispoli LA**, Rohrbach NR, Prado TM, Saxton AM and Schrick FN. 2013. Motility characteristics of spermatozoa from bulls grazing tall fescue pastures. *Reproduction, Fertility and Development*. 26(1):abstr. 13.
- Harris JP, Edwards JL, **Rispoli LA**, Payton RR, Rohrbach NR, Prado TM, Waller JC, Saxton AM and Schrick FN. 2011. Fertilization characteristics of spermatozoa from bulls grazing tall fescue pastures. *Reproduction, Fertility and Development*. 24(1): abstr. 181.