

LINDSEY MARIE VANSANDT

Theriogenologist

Center for Conservation and Research of Endangered Wildlife

Cincinnati Zoo & Botanical Garden

3400 Vine Street; Cincinnati, OH 45220

Education/Training

Institution and Location	Degree	Year	Field of Study
University of Missouri-Columbia	DVM	2008	Veterinary medicine
University of Maryland, College Park	PhD	2014	Stem cell biology

Positions and Employment

Theriogenologist Cincinnati Zoo and Botanical Garden, Center for Conservation and Research of Endangered Wildlife (CREW)	2017- current
Post-Doctoral Scientist CREW	2014 - 2017
Doctoral Research Institute University of Maryland and Smithsonian Conservation Biology Institute	2009 - 2014
Instructor of Record University of Maryland	2010 - 2014
Relief Veterinarian Veterinary Specialty Services, Emergency and Critical Care Department, Manchester, Missouri	2008 - 2009
Research Intern St Louis Zoo	2008 - 2009
Genetics Laboratory Technician Research Animal Diagnostic Laboratory (RADIL), University of Missouri	2002 - 2004

Honors and Awards

Emerging Scientist Travel Scholarship Felid Taxon Advisory Group	2017
Dr. Richard F. Davis Memorial Scholarship University of Maryland, College of Agriculture and Natural Resources	2014
PhD Student of the Year University of Maryland, Department of Animal and Avian Sciences	2013
Michael J. Pelczar Award for Excellence in Graduate Study Endowed Fellowship, University of Maryland, Graduate School	2013
Distinguished Teaching Assistant University of Maryland, Center for Teaching Excellence	2013
All-S.T.A.R. Fellowship University of Maryland, Graduate School	2013
First place, Science of the Cell, oral presentation Graduate Research Interaction Day, University of Maryland	2013
Outstanding Graduate Student – Ph.D. candidate University of Maryland, College of Agriculture and Natural Resources Alumni Chapter	2013
Distinguished Teaching Assistant University of Maryland, Center for Teaching Excellence	2012
Outstanding Teaching Assistant Award University of Maryland, College of Agriculture and Natural Resources Student Council	2012
Anesthesiology Award University of Missouri, College of Veterinary Medicine	2008

Peer-Reviewed Publications

Fischer A, VAW Benka, J Briggs, MA Driancourt, J Maki, DSO Mora, K Morris, KA Myers, L Rhodes, **LM Vansandt**, GR Weedon, J Wolf, and JK Levy. Effectiveness of GonaCon as an immunocontraceptive in colony-housed cats. *Journal of Feline Medicine and Surgery*, 2018; 20(8): 786-792.

Vansandt LM, MA Kutzler, AE Fischer, KN Morris and WF Swanson. Safety and effectiveness of a single and repeat intramuscular injection of a GnRH vaccine (GonaCon™) in adult female domestic cats. *Reproduction in Domestic Animals*, 2017; 52(S2): 348-353.

Swanson WF, HL Bateman and **LM Vansandt**. Urethral catheterization and sperm vitrification for simplified semen banking in felids. *Reproduction in Domestic Animals*, 2017; 52(S2): 255-260

Bateman HL, **LM Vansandt**, J Newsom and WF Swanson. Temporal changes in serum luteinizing hormone following ovariectomy and gonadotropin releasing hormone vaccination in domestic cats. *Reproduction in Domestic Animals*, 2017; 52(S2): 332-335

- Vansandt LM**, Livesay JL, Dickson MJ, Li L, Pukazhenthil BS, Keefer CL. Conservation of spermatogonial stem cell marker expression in undifferentiated felid spermatogonia. *Theriogenology*, 2016; 86(4): 1022-1035.
- Bermejo-Álvarez P, Ramos-Ibeas P, Park K, Powell AP, **Vansandt L**, Bickart D, Ramirez M, Gutiérrez-Adán A, Telugu BP. Tet-mediated imprinting erasure in H19 locus following reprogramming of spermatogonial stem cells to induced pluripotent stem cells. *Scientific reports*, 2015; 5: 13691.
- Franklin AD, Crosier AE, **Vansandt LM**, Mattson E, Xiao Z. Induction of Cytokine Production In Cheetah (*Acinonyx Jubatus*) Peripheral Blood Mononuclear Cells and Validation of Feline-Specific Cytokine Assays For Analysis Of Cheetah Serum. *Journal of Zoo and Wildlife Medicine*, 2015; 46(2): 306-313.
- Vansandt LM**, Pukazhenthil B, Keefer CL. Molecular Markers of Spermatogonial Stem Cells in the Domestic Cat. *Reproduction in Domestic Animals Suppl*, 2012; 47: 256-260.
- Christensen BW, Asa CS, Wang C, **Vansandt L**, Bauman K, Callahan M, Jens J , and Ellinwood NM. Effect of Semen Collection Method on Sperm Motility of Gray Wolves (*Canis lupus*) and Domestic Dogs (*C. l. familiaris*). *Theriogenology*. 2011; 76(5):975-80.

Select Abstracts and Presentations

- Vansandt LM**, CH Adania, PR Yanai, Paulino JdS, RCR da Paz, HL Bateman, WF Swanson. Synchronization, Ovulation Induction, and Successful Artificial Insemination in the Jaguar (*Panthera Onca*). 51st Annual Conference of the American Association of Zoo Veterinarians, St. Louis, Missouri. Poster presentation. 2019.
- Vansandt LM**, A Moresco, R González, A Miller, J Newsom, ME Iwaniuk, JR Herrick, WF Swanson. Sperm cryopreservation with a soy lecithin-based medium in black-footed cats (*Felis nigripes*) and sand cats (*Felis margarita*): it's no yolk! 45th International Embryo Technology Society. New Orleans, Louisiana, Poster presentation. 2019.
- Vansandt LM**, D Markovic, ML Biller, J Newsom, H Bateman, WF Swanson, BA Hay. AAV-Vectored Generation of GnRH-Binding Immunoglobulins for Non-Surgical Sterilization of Domestic Cats. 6th International Symposium on Non-Surgical Contraceptive Methods of Pet Population Control, Boston, Massachusetts. Oral presentation. 2018.
- Vansandt LM**, A Fischer, L Rhodes, A Rowan. Contraceptive research: a laboratory and clinical perspective. 6th International Symposium on Non-Surgical Contraceptive Methods of Pet Population Control Boston, Massachusetts. Panel discussion. 2018.
- Vansandt LM**, CH Adania, PR Yanai, RCR da Paz, HL Bateman, WF Swanson. Semen Cryopreservation and Artificial Insemination for Conservation of the Brazilian Jaguar (*Panthera onca*). Felid TAG Annual Conference, Erie, Pennsylvania. Oral presentation. 2017.
- Vansandt LM**, CH Adania, PR Yanai, PE Kunze, ME Iwaniuk, WF Swanson. Improving and Simplifying Semen Banking in the Brazilian Jaguar (*Panthera onca*). 50th Annual Meeting of the Society for the Study of Reproduction. Washington DC. Flash talk and poster presentation. 2017.
- Vansandt LM**, Bateman HL, Newsom J, and Swanson WF. Getting the yolk out: the use of a soy lecithin-based cryomedium for semen banking in the Pallas' cat and fishing cat. 43rd International Embryo Transfer Society. Annual Conference, Austin, Texas. Poster presentation. 2017.
- Vansandt LM**, Dickson M, Zhou R, Li L, Pukazhenthil BS, Keefer CL. Long-Term Propagation And Cryopreservation Of Cat Spermatogonial Stem Cells. 42nd International Embryo Transfer Society. Annual Conference, Louisville, Kentucky. Podium presentation. 2016.
- Swanson WF, Bateman HL, Herrick JH, Lyons LA, **Vansandt LM**. Fixed-Time Laparoscopic Oviductal Artificial Insemination (LO-AI) with Frozen-Thawed Semen in Pallas' Cats (*Otocolobus Manul*). 42nd International Embryo Transfer Society Annual Conference, Louisville, Kentucky. Poster presentation. 2016.
- Swanson WF, HL Bateman, **LM Vansandt**, KR Kaemmerer, J Kinzer, S Konwiser, A Lutz-Nelson, B Palmer, JR Herrick. Advances in assisted reproduction for population management and conservation of small-sized felids. 47th Annual Conference of the American Association of Zoo Veterinarians. Portland, Oregon. Poster presentation. 2015.
- Vansandt LM**. Update on semen banking for population management in small felids. Felid TAG Conference. Pittsburgh, Pennsylvania. Oral presentation. 2015.