

CURRICULUM VITAE

John Patrick Kastelic

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University of Calgary, Faculty of Veterinary Medicine
Department of Production Animal Health

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Canadian Citizen

EDUCATION (EARNED AND HONORARY)

- 2007 Professor of Honorary Cause, Faculty of Veterinary Science, Szent István University, Budapest, Hungary
- 1985-90 MS, PhD
Department of Veterinary Science, University of Wisconsin-Madison, Madison, WI, USA
Major Professor: Oliver J. Ginther, VMD, PhD
Major: Veterinary Science (Reproductive Physiology)
- 1984-85 Theriogenology Resident
Department of Herd Medicine and Theriogenology, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, SK, Canada
- 1978-82 DVM (with Distinction)
Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, SK, Canada
- 1976-78 Pre-Veterinary Program
Faculty of Agriculture and Forestry, University of Alberta, Edmonton, AB, Canada

PROFESSIONAL SPECIALIZATIONS (THERIOGENOLOGY)

Diplomate, American College of Theriogenologists
Certificate of Specialization, Canadian Veterinary Medical Association

EMPLOYMENT

- 2013-22 Head, Department of Production Animal Health, Faculty of Veterinary Medicine, University of Calgary, Calgary, AB
- 2012- Professor of Cattle Health - Theriogenology, University of Calgary, Faculty of Veterinary Medicine, University of Calgary, Calgary, AB

- 1990-12 Research Scientist (Reproductive Physiology), Agriculture and Agri-Food Canada Research Centre, Lethbridge, AB (Initial appointment RES 2; RES 3 (1999); RES 4 (2004))
- 1985-90 Research Assistant, Reproductive Physiology, Department of Veterinary Science, University of Wisconsin-Madison, Madison, Wisconsin
- 1984-85 Clinical Research Fellow, Department of Herd Medicine and Theriogenology, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Saskatchewan
- 1983-84 Self-Employed Veterinarian, Mayerthorpe Veterinary Service, Mayerthorpe, Alberta
- 1982-83 Large Animal Veterinarian, G.W. Ollis and Associates, Leduc, Alberta
- 1981 Summer Assistant, Camrose Veterinary Group, Camrose, Alberta
- 1980 Necropsy Room Technician, Animal Health Division, Department of Agriculture, Government of Alberta, Edmonton, Alberta

PROFESSIONAL AFFILIATIONS

Adjunct Professor, Large Animal Clinical Sciences, WCVN, University of Saskatchewan
 Member of the Faculty, College of Graduate Studies and Research, University of Saskatchewan
 Adjunct Professor, Department of Biological Sciences, University of Lethbridge

EDITORIAL AND PEER-REVIEW ACTIVITIES

Co-Editor-in-Chief, Canadian Veterinary Journal (2020-)
 Co-Editor-in-Chief, Theriogenology (2003-2013)
 Editorial Board, Animal Reproduction Science (2004-2006)
 Associate Editor, Canadian Journal of Animal Science (2000-2003)
 Assistant Editor, Canadian Journal of Veterinary Research (2000-2003)
 Editorial Board, International Veterinary Information Service (www.ivis.org; 2000-2003)
 Editorial Board, Theriogenology (1994-1999)

I also do *ad hoc* reviews for several journals and have reviewed grant proposals for: Alberta Cattle Commission; Dairy Farmers of Canada; NSERC; USDA; The Danish Research Council for Production and Technology Sciences; and Granting Agency of the Czech Republic. In addition, I have done peer reviews of theriogenologists being considered for promotion at Auburn University, University of Minnesota, Oklahoma State University, and University of Pretoria.

PROFESSIONAL MEMBERSHIPS

Alberta Veterinary Medical Association
American College of Theriogenologists (Exam Committee, 2001-2008; President 2017/18)
Association for Applied Animal Andrology (President 2004-2010)
Canadian Veterinary Medical Association
Society for Theriogenology

SERVICE ON GRADUATE STUDENT COMMITTEES

Student	University	Degree	Year*	Role
C. Lulai	Saskatchewan	MS	1993	Co-supervisor
G. Bo	Saskatchewan	PhD	1994	Committee member
C. Palmer	Saskatchewan	MS	1995	External examiner
R. Chandolia	Saskatchewan	PhD	1996	External examiner
B. Reed	Texas Tech	PhD	1997	Committee member
M. Martinez	Saskatchewan	MS	1998	Committee member
L. Brito	Botucatu, Brazil	MS	2000	Co-supervisor
M. Colazo	Saskatchewan	MS	2001	Committee member
M. Martinez	Saskatchewan	PhD	2002	Committee member
J. Thundathil	Saskatchewan	PhD	2002	Committee member
C. Barros	Botucatu, Brazil	PhD	2002	Co-supervisor
L. Brito	Saskatchewan	MVetSci	2002	Co-supervisor
A. Estrada	Guelph	DVSc	2003	External examiner
A. Brockway	Melbourne	PhD	2004	External examiner
M. Colazo	Saskatchewan	PhD	2005	Committee member
Z. Zhang	P. Edward Island	MS	2005	Committee member
L. Brito	Saskatchewan	PhD	2006	Co-supervisor
T. Ree	Edmonton	MS	2008	Committee member
F. Caminha	Saskatchewan	MS	2008	Co-supervisor
L. Newton	Calgary	MS	2008	Committee member
N. Kromrie	Lethbridge	MS	2009	External examiner
T. Sullivan	Queensland	PhD	2010	Assessor
K. Oliveira	Pará, Brazil	MS	2010	External examiner
E. Costa	Lethbridge	MS	2011	Committee member
H. Shojaei	Calgary	MS	2011	Committee member
A. Wasko	Calgary	MS	2012	Committee member
N. Pilgrim	Lethbridge	MS	2012	Committee member
A. Behrouzi	Alberta	MS	2013	External examiner
G. Rajamanickam	Calgary	PhD	2015	Committee member
A. Dance	Calgary	PhD	2016	Co-supervisor
E. Homerosky	Calgary	MS	2016	Co-supervisor
C. Corbett	Calgary	PhD	2017	Committee member
I. Hewage	Calgary	MS	2015	Committee member

L. Condas	Calgary	MS	2016	Committee member
A. Macedo	Calgary	MS	2017	Committee member
B. Silper	UBC	PhD	2017	External examiner
D. Dikman	Queensland	MS	2017	External examiner
C. Byrne	U. Coll. Dublin	PhD	2017	External examiner
C. Johnson	Calgary	PhD	2019	Committee member
C. Jacobs	Calgary	PhD	2019	Committee member
Y.L. Tan	Calgary	MS	2019	Co-supervisor
G. Rizzoto	Calgary	PhD	2020	Supervisor
V. Unnikrishnan	Calgary	MS	2020	Committee member
Z. Madiseh	Dalhousie	MS	2021	External examiner
M. Zakariah	Pretoria	PhD	2021	External examiner
A. Shahat	Calgary	PhD	2023	Supervisor
S. Shaw	Bharathiar U.	PhD	2023	External examiner
K. McCubbin	Calgary	PhD	2023	Committee member
L. Dorrestein	Calgary	PhD	2023	Committee member
E. de Jong	Calgary	PhD	2023	Committee member
S. Narayana	Calgary	PhD	2023	Committee member
K. Strong	Calgary	PhD	2023	Committee member
M. Biesheuvel	Calgary	PhD	2024	Committee member
S. Tiwari	Calgary	PhD	2025	Committee member
W. Shaukat	Calgary	PhD	2026	Committee member

*Refers to the year that the degree was completed (or the expected year of completion).

SCHOLARSHIPS AND AWARDS

2017	Veterinarian of the Year, Alberta Veterinary Medical Association
2013	Merck Veterinary Award (Canadian Veterinary Medical Association)
2009	Theriogenologist of the Year (American College of Theriogenologists)
2003	Agriculture and Agri-Food Canada Gold Harvest Award
2001	Canadian Society of Animal Science Award for Excellence in Genetics and Physiology
1987-90	Medical Research Council of Canada Fellowship
1984-85	Province of Alberta Scholarship
1982	John Carl Tucker Award
1981	University Undergraduate Scholarship
1981	Burroughs-Wellcome Scholarship
1980	William Sidey Scholarship
1978	Douglas Farquhar Johnston Bursary in Agriculture
1977	Board of Governors Prize in Agriculture and Forestry
1977	Percy Clubine Memorial Bursary
1977	Province of Alberta Scholarship
1976	Percy Clubine Memorial Bursary
1976	Province of Alberta Scholarship

PEER-REVIEWED PUBLICATIONS

1. Lin Y, Han J, Barkema H, Wang Y, Gao J, Kastelic J, Han B, Qin S, Deng Z. Comparative genomic analyses of *Lactococcus garvieae* isolated from bovine mastitis in China. *Microbiology Spectrum* (Accepted).
2. de Jong E, McCubbin KD, Kelton DF, Sanchez J, Dufour S, McDougall S, Ruegg PL, Lago A, Krömker V, Godden SM, Lam TJGM, Rajala-Schultz PJ, Middleton JR, Orsel K, Kastelic JP, Barkema HW. Invited review: Selective treatment of clinical mastitis in dairy cattle. *Journal of Dairy Science* (In press).
3. Strong KM, Marasco K, Invik J, Ganshorn H, Reid-Smith RJ, Waldner CL, Otto SJG, Kastelic JP, Checkley SL (2023) Factors associated with antimicrobial resistant enterococci in Canadian beef cattle: A scoping review. *Front. Vet. Sci.* 10:1155772, 2023.
4. Karimi R, Towhidi A, Ganjkanlou M, Ghasemzadeh-Nava H, Khoei S, Kastelic J. Rumen-protected glucose significantly hastens uterine involution and increases numbers of ovarian follicles in early postpartum dairy cows. *Reproduction in Domestic Animals* (Accepted)
5. Shahat AM, Thundathil JC, Kastelic JP. Melatonin improves post-thaw sperm quality after mild testicular heat stress in rams. *Reproduction in Domestic Animals* 2023;58:423-430.
6. G Liu, Y Wu, L Wang, Y Liu, W Huang, Y Li, M Gao, J Kastelic, Barkema HW, Xia Z, Jin Y. Re-emergence of canine *Leishmania infantum* infection in mountain areas of Beijing. *One Health Advances* 2023;1:1-15,
7. de Jong E, Creyten L, Speksnijder D, McCubbin KD, Dufour S, Middleton JR, Ruegg PL, Lam TJGM, Kelton DF, McDougall S, Godden SM, Lago A, Rajala-Schultz PJ, Orsel K, De Vliegher S, Krömker V, Kastelic JP, Barkema HW. Selective treatment of non-severe clinical mastitis does not adversely affect cure, somatic cell count, milk yield, recurrence or culling: A systematic review and meta-analysis. *Journal of Dairy Science* 2023;106:1267-1286.
8. Castilhos D, Polesso AM, da Silva ACF et al. Varroa destructor infestation levels in Africanized honey bee colonies in Brazil from 1977 when first detected to 2020. *Apidologie* 2023;54:5.
9. Shahat A, Castillo J, Thundathil J, Kastelic J. Angus bulls voluntarily access shade during hot weather, reducing scrotal subcutaneous temperatures and improving sperm quality. *Canadian Journal of Veterinary Research* 87:17-22, 2023.
10. Ida JM, Wilson WM, Nydam DV, Gerlach SC, Kastelic JP, Russell ER, McCubbin KD, Adams CL, Barkema, HW. Contextualized understandings of dairy farmers' perspectives on antimicrobial use and regulation in Alberta, Canada. *J Dairy Science* 2023;106:547-64.
11. Carvalho JC, Souza FS, Kastelic JP, Ferreira JCP. Reproduction in South American wild canids - A review. *Frontiers in Veterinary Science*. Published 24 October 2022 <https://doi.org/10.3389/fvets.2022.986030>
12. McCubbin KD, de Jong E, Lam TJGM, Kelton DF, Middleton JR, McDougall S, De Vliegher S, Godden S, Rajala-Schultz PJ, Rowe S, Speksnijder DC, Kastelic JP, Barkema HW. Invited Review: Selective use of antimicrobials in dairy cattle at drying-off. *J Dairy Science* 2022;105:7161-7189.
13. Shahat AM, Thundathil JC, Kastelic JP. Melatonin or L-arginine in semen extender mitigate reductions in quality of frozen-thawed sperm from heat-stressed rams. *Animal Reproduction Science* 2022;238:106934.
14. Tiwari S, Rajamanickam G, Unnikrishnan V, Ojaghi M, Kastelic JP, Thundathil JC. Testis-specific isoform of Na⁺-K⁺ ATPase and regulation of sperm function. *International Journal of Molecular Sciences* 2022;23:7936.

15. Xu M, Liu Y, Mayinuer T, Lin Y, Wang Y, Gao J, Wang D, Kastelic JP, Han B. *Mycoplasma bovis* inhibits autophagy in bovine mammary epithelial cells via a PTEN/PI3K-Akt-mTOR-dependent pathway. *Frontiers in Microbiology* 2022;13:935547.
16. Reyhan VD, Sadeghi M, Miraei-Ashtiani SR, Ghafouri F, Kastelic JP, Barkema HW. Integrated transcriptome and regulatory network analyses identify candidate genes and pathways modulating ewe fertility. *Gene Reports* 2022;28:101659.
17. Chen P, Yang J, Wu N, Han B, Kastelic JP, Gao J. *Streptococcus lutetiensis* induces autophagy via oxidative stress in bovine mammary epithelial cells. *Oxidative Medicine and Cellular Longevity* 2022;2022:2549772.
18. Zhao W, Xu M, Barkema HW, Xie X, Lin Y, Khan S, Kastelic JP, Wang D, Deng Z, Han B. *Prototheca bovis* induces autophagy in bovine mammary epithelial cells via the HIF-1 α and AMPK α /ULK1 pathway. *Frontiers in Immunology* 2022;13:934819.
19. Johnson C, Kiefer H, Chaulot-Talmon A, Dance A, Sellem E, Jouneau L, Jammes H, Kastelic J, Thundathil J. Prepubertal nutritional modulation in the bull and its impact on sperm DNA methylation. *Cell and Tissue Research* 2022;389:587-601.
20. Liang B, Zhao W, Han B, Barkema HW, Niu YD, Liu Y, Kastelic JP, Gao J. Biological and genomic characteristics of two bacteriophages isolated from sewage, using one multidrug-resistant and one non-multidrug-resistant strain of *Klebsiella pneumoniae*. *Frontiers in Microbiology* 2022;13:943279.
21. Nadri T, Towhidi A, Zeinoaldini S, Riazi G, Sharaf M, Zhandi M, Kastelic J. Supplementation of freezing medium with encapsulated or free glutathione during cryopreservation of bull sperm. *Reproduction in Domestic Animals* 2022;57:515-523.
22. Ojaghi M, Varghese J, Kastelic JP, Thundathil JC. Characterization of the testis-specific Angiotensin Converting Enzyme (tACE)-interactome during bovine sperm capacitation. *Current Issues in Molecular Biology* 2022;44:449-69.
23. Shahat AM, Thundathil J, Kastelic JP. Melatonin improves testicular hemodynamics and sperm quality in rams subjected to mild testicular heat stress. *Theriogenology* 2022;188:163-9.
24. Zhao W, Deng Z, Barkema HW, Xu M, Gao J, Liu G, Shahid M, Kastelic JP, Han B. Nrf2 and NF- κ B/NLRP3 inflammasome pathways are involved in *Prototheca bovis* infections of mouse mammary gland tissue and mammary epithelial cells. *Free Radical Biology and Medicine* 2022;184:148-57.
25. Hasankhani A, Bahrami A, Sheybani N, Aria B, Hemati B, Fatehi F, Farahani HGM, Javanmard G, Rezaee M, Kastelic JP, Barkema HW. Differential co-expression network analysis reveals key hub-high traffic genes as potential therapeutic targets for COVID-19 pandemic. *Frontiers in Immunology* 2021;12:789317.
26. Foroutan A, Devos J, Wishart DS, Li C, Colazo M, Kastelic J, Thundathil J, Fitzsimmons C. Impact of prenatal maternal nutrition and parental residual feed intake (RFI) on mRNA abundance of metabolic drivers of growth and development in young Angus bulls. *Livestock Science* 2021;243:104365.
27. El-Shalofy A, Hedia M, Kastelic J. Melatonin improves testicular hemodynamics, echotexture and testosterone production in Ossimi rams during the breeding season. *Reproduction in Domestic Animals* 2021;56:1456-63.
28. Zoche-Golob V, Donat K, Barkema HW, De Buck J, Kastelic J, Wolf R. Predicting sensitivity of repeated environmental sampling for *Mycobacterium avium subsp. paratuberculosis* in dairy herds using a Bayesian latent class model. *The Veterinary Journal* 2021;275:105728.

29. Kastelic, JP. The American College of Theriogenologists, from its pedigree to the neonatal period. *Clinical Theriogenology* 2021;13:121-6.
30. Zhao W, He F, Barkema HW, Xu S, Gao J, Liu G, Deng Z, Shahid M, Shi Y, Kastelic JP, Han B. *Prototheca* spp. induce an inflammatory response via mtROS-mediated activation of NF- κ B and NLRP3 inflammasome pathways in bovine mammary epithelial cell cultures. *Veterinary Research* 2021;52:144-57.
31. Unnikrishnan V, Kastelic J, Thundathil J. Ouabain-induced activation of phospholipase C zeta and its contributions to bovine sperm capacitation. *Cell and Tissue Research* 2021;385:785-801.
32. McCubbin KD, Anholt RM, de Jong E, Ida JA, Nóbrega DB, Kastelic JP, Conly JM, Götte M, McAllister TA, Orsel K, Lewis I, Jackson L, Plastow G, Wieden HJ, McCoy K, Leslie M, Robinson JL, Hardcastle L, Hollis A, Ashbolt NJ, Checkley S, Tyrrell GJ, Buret AG, Rennert-May E, Goddard E, Otto SJG, Barkema HW. Knowledge gaps in the understanding of antimicrobial resistance in Canada. *Frontiers in Public Health* 2021;9:726484.
33. Chohan MR, Singh J, Cowan VE, Munro BJ, Blakley B, McKinnon J, Kastelic JP, Anzar M. Sustained low-dose ergot alkaloids minimally affect post-thaw sperm characteristics in mature and yearling Angus bulls. *Theriogenology* 2021;176:163-73.
34. Zoche-Golob V, Donat K, Barkema HW, De Buck J, Kastelic J, Wolf R. Predicting sensitivity of repeated environmental sampling for *Mycobacterium avium subsp. paratuberculosis* in dairy herds using a Bayesian latent class model. *The Veterinary Journal* 2021;275:105728.
35. Zhuang C, Gao J, Liu G, Zhou M, Yang J, Wang D, Kastelic JP, Han B. Selenomethionine activates selenoprotein S, suppresses Fas/FasL and the mitochondrial pathway and reduces *Escherichia coli*-induced apoptosis of bovine mammary epithelial cells. *Journal of Dairy Science* 2021;104:10171-82.
36. Castilhos D, Bergamo GC, Kastelic JP. Honey bee colony losses in Brazil in 2018-2019. *Brazilian Journal of Animal and Environment Research* 2021;4:5017-41.
37. Xu S, Liu Y, Gao J, Zhou M, Yang J, He F, Kastelic JP, Deng Z, Han H. Comparative genomic analysis of *Streptococcus dysgalactiae* subspecies *dysgalactiae* isolated from bovine mastitis in China. *Frontiers in Microbiology* 2021;12:751863.
38. Liu Y, Deng Z, Xu S, Liu G, Lin Y, Khan S, Gao J, Qu W, Kastelic JP, Han B. *Mycoplasma bovis* subverts autophagy to promote intracellular replication in bovine mammary epithelial cells cultured in vitro. *Veterinary Research* 2021;52:130.
39. Shahat AM, Thundathil JC, Kastelic JP. Scrotal subcutaneous temperature is increased by scrotal insulation or whole-body heating, but not by scrotal neck insulation; however, all three heat-stress models decrease sperm quality in bulls and rams. *Journal of Thermal Biology* 2021;100:103064.
40. Cheng J, Zhang J, Yang J, Yi B, Liu G, Zhou M, Kastelic J, Han B, Gao J. *Klebsiella pneumoniae* infection causes mitochondrial damage and dysfunction in bovine mammary epithelial cells. *Veterinary Research* 2021;52:17.
41. Yamada PH, Codognato VM, de Ruediger FR, da Silva KM, Aristizábal VV, Kastelic JP, Rizzoto G, de Souza FF, de Soutello RVG, Chacur MGM, Oba E. A comparison of immunological, chemical and surgical castration of Nelore bulls. *Theriogenology* 2021;169:9-13.
42. Chohan MR, Munro BJ, Cowan VE, Anzar M, Blakley B, McKinnon J, Kastelic JP, Rivera-Acuña F, Singh J. Feeding yearling Angus bulls low-level ergot daily for 9 weeks decreased serum prolactin concentrations and had subtle effects on sperm end points. *Theriogenology* 2021;161:187-99.
43. Zhao W, Shi Y, Liu G, Yang J, Yi B, Liu Y, Kastelic JP, Han B, Gao J. Bacteriophage has

- beneficial effects in a murine model of *Klebsiella pneumoniae* mastitis. Journal of Dairy Science 2021;104:3474-84.
44. Cheng J, Zhou M, Nobrega DB, Barkema HW, Xu S, Li M, Kastelic JP, Shi Y, Han B, Gao J. Genetic diversity and molecular epidemiology of outbreaks of *Klebsiella pneumoniae* mastitis on two large Chinese dairy farms. Journal of Dairy Science 2021;104:762-75.
 45. Shi Y, Zha W, Liu G, Ali T, Chen P, Liu Y, Kastelic JP, Han B; Gao J. Bacteriophages isolated from dairy farm mitigated *Klebsiella pneumoniae*-induced inflammation in bovine mammary epithelial cells cultured in vitro. BMC Veterinary Research 2021;17:37.
 46. Chen P, Qiu Y, Liu G, Li X, Cheng J, Liu K, Qu W, Zhu C, Kastelic JP, Han B, Gao J. Characterization of *Streptococcus lutetiensis* isolated from clinical mastitis of dairy cows. Journal of Dairy Science 2021;104:702-14.
 47. Unnikrishnan V, Kastelic J, Thundathil J. Intracytoplasmic sperm injection in cattle. Genes 2021;12:1-18.
 48. Johnson C, Fitzsimmons C, Kovalchuk I, Kastelic J, Thundathil J. Testis-specific changes in gene expression of post-pubertal beef bulls divergent for residual feed intake and exposure to different pre-natal diets. Animal Production Science 2020;60:1491-502.
 49. Shahat AM, Thundathil JC, Kastelic JP. Data loggers in scrotal subcutaneous tissues reliably assess intrascrotal temperatures in rams. Small Ruminant Research 2020;193:106247.
 50. Nobrega DB, Tang KL, Caffrey NP, De Buck J, Cork SC, Ronksley PE, Polachek AJ, Ganshorn H, Sharma N, Kastelic JP, Kellner JD, Ghali WA, Barkema HW. Prevalence of antimicrobial resistance genes and its association with restricted antimicrobial use in food-producing animals: a systematic review and meta-analysis. Journal of Antimicrobial Chemotherapy 2020;75:561-75.
 51. Rizzoto G, Boe-Hansen G, Klein C, Thundathil JC, Kastelic JP. Acute mild heat stress alters gene expression in testes and reduces sperm quality in mice. Theriogenology 2020;158:375-81.
 52. Johnson J, Kasimanickam VR, Kastelic JP, Kasimanickam R. Reduced gastrointestinal worm burden following long term parasite control improves body condition and fertility in beef cows. Veterinary Parasitology 2020;287:109259.
 53. Trevisol E, Mogollón García HD, Ackermann CL, Lacerda W, Pires RML, Laufer-Amorin R, Carvalho RF, Franchi FF, Castilho ACS, Rizzoto G, Kastelic JP, Ferreira JCP. Partial luteolysis during early diestrus in cattle downregulates VEGFA expression and reduces large luteal cell and corpus luteum sizes and plasma progesterone concentration. Theriogenology 2020;158:188-95.
 54. Nobrega DB, Naqvi SA, Dufour S, Deardon R, Kastelic JP, De Buck J, Barkema HW. Critically important antimicrobials are generally not needed to treat nonsevere clinical mastitis in lactating dairy cows: Results from a network meta-analysis. Journal of Dairy Science 2020;103:10585-603.
 55. Liu Y, Zhou M, Xu S, Khan MA, Shi Y, Qu W, Gao J, Liu G, Kastelic JP, Han B. *Mycoplasma bovis*-generated reactive oxygen species and induced apoptosis in bovine mammary epithelial cell cultures. Journal of Dairy Science 2020;103:10429-45.
 56. Zhuang C, Huo W, Liu G, Shahid M, Gao K, Barkema HW, Rahman S, Kastelic JP, Han B. *In vitro* immune responses of bovine mammary epithelial cells induced by *Escherichia coli*, with multidrug resistant extended-spectrum β -lactamase, isolated from mastitic milk. Microbial Pathogenesis 2020;149:104494.
 57. Shahat AM, Rizzoto G, Kastelic JP. Amelioration of heat stress-induced damage to testes and sperm quality. Theriogenology 2020;158:84-96.
 58. Scheeren VFC, Sancler-Silva Y, El-Sheikh Ali H, Kastelic JP, Alvarenga MA, Papa FO. Update on seminal vesiculitis in stallions. Journal of Equine Veterinary Science 2020;94:103234.

59. Liu Y, Xu S, Li M, Zhou M, Huo W, Gao J, Liu G, Kastelic JP, Han B. Molecular characteristics and antibiotic susceptibility profiles of *Mycoplasma bovis* associated with mastitis on dairy farms in China. *Preventive Veterinary Medicine* 2020;182:105106.
60. Kasimanickam R, Jorgensen-Muga K, Kapi A, Ratzburg K, Kasimanickam V, Kastelic J. Estrous response and pregnancy percentages following use of a progesterone-based, split-time estrous synchronization treatment regimens in beef heifers. *Animal Reproduction Science* 2020;221:106544.
61. Schlögl KS, Hiesel JA, Wolf R, Kopacka I, Wagner P, Kastelic J, Deutz A. Spatiotemporal cluster and incidence analysis of cattle mortality caused by bovine babesiosis in Styria, Austria, between 1998 and 2016. *Parasitology Research* 2020;119:1117-23.
62. Khoshniat MT, Towhidi A, Yazdi KR, Rostami F, Davachi ND, Khalooee F, Kastelic J. Dietary omega-3 fatty acids from linseed oil improve quality of post-thaw but not fresh sperm in Holstein bulls. *Cryobiology* 2020;93:102-8.
63. Liu G, Ali T, Gao J, Ur Rahman S, Yu D, Barkema HW, Huo W, Xu S, Shi Y, Kastelic JP, Han B. Co-occurrence of plasmid-mediated Colistin resistance (*mcr-1*) and Extended-Spectrum β -Lactamase encoding genes in *Escherichia coli* from bovine mastitic milk in China. *Microbial Drug Resistance* 2020;26:685-96.
64. Johnson C, Kastelic J, Thundathil J. Role of Akt and mammalian target of rapamycin signalling in insulin-like growth factor 1-mediated cell proliferation in porcine Sertoli cells. *Reproduction, Fertility and Development* 2020;32:929-40.
65. Ratzburg K, Jorgenson-Muga K, Murugeasn J, Kastelic J, Kasimanickam V, Kasimanickam R. Presynchronization with CIDR, with or without GnRH, prior to CO-Synch in beef heifers. *Theriogenology* 2020;146:80-7.
66. Zhuang C, Liu G, Barkema HW, Zhou M, Xu S, ur Rahman S, Liu Y, Kastelic JP, Gao J, Han B. Selenomethionine suppressed TLR4/NF- κ B pathway by activating Selenoprotein S to alleviate ESBL *Escherichia coli*-induced inflammation in bovine mammary epithelial cells and macrophages. *Frontiers in Microbiology* 2020;11:1461.
67. Cheng J, Zhang J, Han B, Barkema HW, Cobo ER, Kastelic JP, Zhou M, Shi Y, Wang J, Yang R, Gao J. *Klebsiella pneumoniae* isolated from bovine mastitis is cytopathogenic for bovine mammary epithelial cells. *Journal of Dairy Science* 2020;103:3493-504.
68. Rizzoto G, Ferreira JCP, Codognoto VM, Oliveira KC, Mogollón García HD, Pupulim AGR, Teixeira-Neto FJ, Castilho A, Nunes SG, Thundathil JC, Kastelic JP. Testicular hyperthermia reduces testosterone concentrations and alters gene expression in testes of Nelore bulls. *Theriogenology* 2020;152:64-8.
69. Kasimanickam R, Kasimanickam V, Kastelic J, Nagle S, Kapi A. Effects of twice daily compared with split-time estrous detection on pregnancy percentage in recipient beef cows. *Animal Reproduction Science* 2020;219:106526.
70. Carvalho JC, Silva FED, Rizzoto G, Dadalto CR, Rolim LS, Mamprim MJ, Souza FF, Teixeira CR, Kastelic JP, Ferreira JCP. Semen collection, sperm characteristics and ultrasonographic features of reproductive tissues in crab-eating fox (*Cerdocyon thous*). *Theriogenology* 2020;155:60-9.
71. Kasimanickam R, Kasimanickam V, Kastelic JP, Ramsey K. Metabolic biomarkers, body condition, uterine inflammation and response to superovulation in lactating Holstein cows. *Theriogenology* 2020;146:71-9.
72. Rizzoto G, Ferreira JCP, Mogollón Garcia HD, Teixeira-Neto FJ, Bardella LC, Martins CL, Silva JRB, Thundathil JC, Kastelic JP. Short-term testicular warming under anaesthesia causes similar

increases in testicular blood flow in *Bos taurus* versus *Bos indicus* bulls, but no apparent hypoxia. *Theriogenology* 2020;145:94-9.

73. Johnson C, Dance A, Kovalchuk I, Kastelic J, Thundathil J. Enhanced pre-pubertal nutrition upregulates mitochondrial function in testes and sperm of post-pubertal Holstein bulls. *Scientific Reports* 2020;10:2235.
74. Nascimento Júnior AD, Marques JCC, Cezar ARR, Batista AM, Kastelic JP, Câmara DR. Inhibition of Na⁺, K⁺ -ATPase with ouabain is detrimental to equine blastocysts. *Animal Reproduction* 2020;17:0079.
75. Shahid M, Cobo ER, Chen L, Cavalcante PA, Barkema HW, Gao J, Xu S, Liu Y, Knight CG, Kastelic JP, Han B. *Prototheca zopfii* genotype II induces mitochondrial apoptosis in models of bovine mastitis. *Scientific Reports* 2020;10:698.
76. Rizzoto G, Kastelic JP. A new paradigm regarding testicular thermoregulation in ruminants? *Theriogenology* 2020;147:166-75.
77. Gungor S, Inanc ME, Ozturk C, Korkmaz F, Bastan I, Cil B, Kastelic JP. Gallic and carnosic acids improve quality of frozen-thawed ram spermatozoa. *Andrologia* 2019;51:e13393.
78. Kasimanickam R, Kasimanickam V, Gold J, Moore D, Kastelic JP, Pyrdok D, Ratzburg K. Injectable or transdermal flunixin meglumine improves pregnancy rates in embryo transfer recipient beef cows without altering returns to estrus. *Theriogenology* 2019;140:8-17.
79. Gungor S, Ata A, Inanc ME, Kastelic JP. Effect of various antioxidants and their combinations on bull semen cryopreservation. *Turkish Journal of Veterinary & Animal Sciences* 2019;43:590-5
80. Rizzoto G, Sekhar D, Thundathil JC, Chelikani PK, Kastelic JP. Calorie restriction modulates reproductive development and energy balance in pre-pubertal male rats. *Nutrients* 2019;11:1993.
81. Rajamanickam GD, Kastelic JP, Thundathil JC. Testis-specific isoform of Na/K-ATPase (ATP1A4) interactome in raft and non-raft membrane fractions from capacitated bovine sperm. *International Journal of Molecular Sciences* 2019;20:3159.
82. Johnson C, Fitzsimmons C, Colazo M, Li CX, Kastelic J, Thundathil J. Impacts of residual feed intake and pre-natal diet on reproductive potential of bulls. *Animal Production Science* 2019;59:1827-36.
83. Kastelic JP, Wilde RE, Bielli A, Genovese P, Rizzoto G, Thundathil J. Hyperthermia is more important than hypoxia as a cause of disrupted spermatogenesis and abnormal sperm. *Theriogenology* 2019;131:177-81.
84. Johnson CT, Dance I, Kovalchuk I, Kastelic J, Thundathil JC. Enhanced early-life nutrition upregulates cholesterol biosynthetic gene expression and Sertoli cell maturation in testes of pre-pubertal Holstein bulls. *Scientific Reports* 2019;9:6448.
85. Naushad S, Naqvi SA, Nobrega D, Luby C, Kastelic JP, Barkema HW, De Buck J. Comprehensive virulence gene profiling of bovine non-*aureus* staphylococci based on whole-genome sequencing data. *mSystems*. 2019;4. pii:e00098-18.
86. Liu G, Yin J, Han B, Barkema HW, Shahid M, De Buck J, Cobo ER, Kastelic JP, Gao J. Adherent/invasive capacities of bovine-associated *Aerococcus viridans* contribute to pathogenesis of acute mastitis in a murine model. *Veterinary Microbiology* 2019;230:202-11.
87. Cheng J, Qu W, Barkema HW, Nobrega DB, Gao J, Liu G, De Buck J, Kastelic JP, Sun H, Han B. Antimicrobial resistance profiles of 5 common bovine mastitis pathogens in large Chinese dairy herds. *Journal of Dairy Science* 2019;102:2416-26.
88. Rizzoto G, Hall C, Tyberg JV, Thundathil JC, Caulkett NA, Kastelic JP. Testicular hyperthermia increases blood flow that maintains aerobic metabolism in rams. *Reproduction, Fertility and*

Development 2019;31:683-8.

89. Kasimanickam RK, Kasimanickam VR, Arangasamy A, Kastelic JP. Sperm and seminal plasma proteomics of high- versus low-fertility Holstein bulls. *Theriogenology* 2019;126:41-8.
90. Barkema HW, Orsel K, Nielsen SS, Koets AP, Rutten VPMG, Bannantine JP, Keefe GP, Kelton DF, Wells SJ, Whittington RJ, Mackintosh CG, Manning EJ, Weber MF, Heuer C, Forde TL, Ritter C, Roche S, Corbett CS, Wolf R, Griebel PJ, Kastelic JP, De Buck J. Knowledge gaps that hamper prevention and control of *Mycobacterium avium* subspecies *paratuberculosis* infection. *Transboundary and Emerging Diseases* 2018;65:125-48.
91. Herzog K, Debertolis L, Kastelic JP, Schmicke M, Ulbrich SE, Bollwein H. Effects of intravenous infusion of *E. coli* lipopolysaccharide in early pregnant cows. *Reproduction* 2018;157:65-76.
92. Kasimanickam RK, Hall JB, Estill CT, Kastelic JP, Joseph C, Abdel Aziz RL, Nak D. Flunixin meglumine improves pregnancy rate in embryo recipient beef cows with an excitable temperament. *Theriogenology* 2018;107:70-7.
93. Ojaghi M, Johnson C, Rizzoto G, Kastelic J, Thundathil JC. Content and activity of the testis-specific isoform of angiotensin-converting enzyme are reduced in frozen/thawed bull spermatozoa. *Reproduction, Fertility and Development* 2018;30:1575-83.
94. Ojaghi M, Kastelic J, Thundathil JC. Testis-specific isoform of angiotensin-converting enzyme (tACE) as a candidate marker for bull fertility. *Reproduction, Fertility and Development* 2018;30:1584-93.
95. Ahirwar MK, Kataktalware MA, Pushpadass HA, Jeyakumar S, Jash S, Nazar S, Devi G L, Kastelic JP, Ramesha KP. Scrotal infrared digital thermography predicts effects of thermal stress on buffalo (*Bubalus bubalis*) semen. *Journal of Thermal Biology* 2018;78:51-7.
96. Kasimanickam VR, Staker C, Williams HM, Kastelic JP, Kasimanickam RK. Aggressive attempted escape behavior during head-lock restraint reduced reproductive performances in Holstein heifers. *Theriogenology* 2018;121:147-52.
97. Corbett CS, Naqvi SA, De Buck J, Kanevets U, Kastelic JP, Barkema HW. Environmental sample characteristics and herd size associated with decreased herd-level prevalence of *Mycobacterium avium* ssp. *paratuberculosis*. *Journal of Dairy Science* 2018;101:8092-9.
98. Rizzoto G, Hall C, Tyberg JV, Thundathil JC, Caulkett NA, Kastelic JP. Increased testicular blood flow maintains oxygen delivery and avoids testicular hypoxia in response to reduced oxygen content in inspired air. *Scientific Reports* 2018;19;8:10905.
99. Kastelic JP, Rizzoto G, Thundathil J. Review: Testicular vascular cone development and its association with scrotal thermoregulation, semen quality and sperm production in bulls. *Animal* 2018;12;133-41s.
100. Barros Adwell CMQ, Brito LFC, Oba E, Wilde RE, Rizzoto G, Thundathil JC, Kastelic JP. Arterial blood flow is the main source of testicular heat in bulls and higher ambient temperatures significantly increase testicular blood flow. *Theriogenology* 2018;116:12-6.
101. Macmillan K, Kastelic JP, Colazo MG. Update on multiple ovulations in dairy cattle. *Animals (Basel)*. 2018;8, pii:E62.
102. Nobrega DB, Naushad S, Naqvi SA, Condas LAZ, Saini V, Kastelic JP, Luby C, De Buck J, Barkema HW. Prevalence and genetic basis of antimicrobial resistance in non-*aureus* staphylococci isolated from Canadian dairy herds. *Frontiers in Microbiology* 2018;16;9:256.
103. Zhang L, Gao J, Barkema HW, Ali T, Liu G, Deng Y, Naushad S, Kastelic JP, Han B. Virulence gene profiles: alpha-hemolysin and clonal diversity in *Staphylococcus aureus* isolates from bovine clinical mastitis in China. *BMC Veterinary Research* 2018;14:63.

104. Thundathil JC, Rajamanickam GD, Kastelic JP. Na/K-ATPase and regulation of sperm function. *Animal Reproduction* 2018;15 (Supplement 1):711-20.
105. Rajamanickam GD, Kastelic JP, Thundathil JC. Na/K-ATPase regulates bovine sperm capacitation through raft- and non-raft-mediated signaling mechanisms. *Molecular Reproduction and Development* 2017;84:1168-82.
106. Kastelic JP, Wilde RE, Rizzoto G, Thundathil JC. Hyperthermia and not hypoxia may reduce sperm motility and morphology following testicular hyperthermia. *Veterinari Medicina* 2017;62:437-42.
107. Chen, W, Liu Y, Barkema HW, Gao J, De Buck J, Kastelic J, Liu G, Ali T, Shahid M, Han B. Short communication: Molecular characteristics, antimicrobial susceptibility and pathogenicity of clinical *Nocardia cyriacigeorgica* isolates from an outbreak of bovine mastitis. *Journal of Dairy Science* 2017;100:8414-21.
108. Condas LAZ, De Buck J, Nobrega DB, Carson DA, Naushad S, De Vliegher S, Zadoks RN, Middleton JR, Dufour S, Kastelic JP, Barkema HW. Prevalence of non-*aureus Staphylococcus* species causing intramammary infections in Canadian dairy herds. *Journal of Dairy Science* 2017;100:5592-612.
109. Gao J, Barkema HW, Zhang L, Liu G, Deng Z, Cai L, Shan R, Zhang S, Zou J, Kastelic JP, Han B. Incidence of clinical mastitis and distribution of pathogens on large Chinese dairy farms. *Journal of Dairy Science* 2017;100:4797-806.
110. Wolf R, Hiesel J, Kuchling S, Deutz A, Kastelic J, Barkema HW, Wagner P. Spatial-temporal cluster analysis of fatal *Clostridium chauvoei* cases among cattle in Styria, Austria between 1986 and 2013. *Preventive Veterinary Medicine* 2017;138:134-8.
111. Ojaghi M, Kastelic JP, Thundathil JC. Testis-specific isoform of angiotensin-converting enzyme (tACE) is involved in the regulation of bovine sperm capacitation. *Molecular Reproduction and Development* 2017;84:376-88.
112. Wolf R, Donat K, Khol JL, Barkema HW, Kastelic J, Wagner P. Detection of *Mycobacterium avium* subspecies *paratuberculosis* infected cattle herds using environmental samples: A review. *Berliner und Munchener Tierarztliche Wochenschrift* 2017;130:4-12.
113. Rajamanickam GD, Kroetsch T, Kastelic JP, Thundathil JC. Testis-specific isoform of Na/K-ATPase (ATP1A4) regulates sperm function and fertility in dairy bulls through potential mechanisms involving reactive oxygen species, calcium and actin polymerization. *Andrology* 2017;5:814-23.
114. Rajamanickam GD, Kastelic JP, Thundathil JC. The ubiquitous isoform of Na/K-ATPase (ATP1A1) regulates junctional proteins, connexin 43 and claudin 11 via Src-EGFR-ERK1/2-CREB pathway in rat Sertoli cells. *Biology of Reproduction* 2017;96:456-68.
115. Liu G, Yin J, Barkema HW, Chen L, Shahid M, Szenci O, De Buck J, Kastelic JP, Han B. Development of a single-dose recombinant CAMP factor entrapping poly(lactide-co-glycolide) microspheres-based vaccine against *Streptococcus agalactiae*. *Vaccine* 2017;35:1246-53.
116. Homerosky ER, Caulkett NA, Timsit E, Pajor EA, Kastelic JP, Windeyer MC. Clinical indicators of blood gas disturbances, elevated L-lactate concentration and other abnormal blood parameters in newborn beef calves. *Veterinary Journal* 2017;219:49-57.
117. Homerosky ER, Timsit E, Pajor EA, Kastelic JP, Windeyer MC. Predictors and impacts of colostrum consumption by 4 h after birth in newborn beef calves. *Vet J* 2017;228:1-6.
118. Kasimanickam RK, Kasimanickam VR, Arangasamy A, Kastelic JP. Associations of hypoosmotic swelling test, relative sperm volume shift, aquaporin7 mRNA abundance and bull fertility estimates. *Theriogenology* 2017;89:162-8.

119. Tostes R, Goji N, Amoako K, Chui L, Kastelic J, DeVinney R, Stanford K, Reuter T. Subtyping *Escherichia coli* virulence genes isolated from feces of beef cattle and clinical cases in Alberta. *Foodborne Pathogens and Diseases* 2017;14:35-42.
120. Câmara DR, Kastelic JP, Thundathil JC. Role of the Na⁺/K⁺-ATPase ion pump in male reproduction and embryo development. *Reproduction, Fertility and Development* 2017;29:1457-67.
121. Rajamanickam GD, Kastelic JP, Thundathil JC. Content of testis-specific isoform of Na/K-ATPase (ATP1A4) is increased during bovine sperm capacitation through translation in mitochondrial ribosomes. *Cellular and Tissue Research* 2017;368:187-200.
122. Dance A, Kastelic J, Thundathil J. A combination of insulin-like growth factor I (IGF-I) and FSH promotes proliferation of prepubertal bovine Sertoli cells isolated and cultured in vitro. *Reproduction Fertility and Development* 2017;29:1635-41.
123. Ritter C, Jansen J, Roth K, Kastelic JP, Adams CL, Barkema HW. Dairy farmers' perceptions toward the implementation of on-farm Johne's disease prevention and control strategies. *Journal of Dairy Science* 2016;99:9114-25.
124. Kasimanickam V, Kastelic J. MicroRNA in sperm from Duroc, Landrace and Yorkshire boars. *Scientific Reports* 2016;6:32954.
125. López Helguera I, Behrouzi A, Kastelic JP, Colazo MG. Risk factors associated with dystocia in a tie stall dairy herd. *Canadian Journal of Animal Science* 2016;96:135-42.
126. Câmara DR, Pinto LC, Pinto MMCM, Kastelic JP, Nunes JF, Barbosa JMP, Guerra MMP. Influence of catalase and pre-freezing equilibration on post-thaw semen quality and conception rate in ewes laparoscopically inseminated. *Animal Reproduction* 2016;13:21-7.
127. Gábor G, Kastelic JP, Abonyi-Tóth Z, Gábor P, Endrődi T, Balogh OG. Pregnancy loss in dairy cattle: Relationship of ultrasound, blood Pregnancy-Specific Protein B, progesterone and production variables. *Reproduction in Domestic Animals* 2016;51:467-73.
128. Kasimanickam RK, Whittier WD, Hall JB, Kastelic JP. Estrous synchronization strategies to optimize beef heifer reproductive performance after reproductive tract scoring. *Theriogenology* 2016;86:831-8.
129. Gürler H, Malama E, Heppelmann M, Calisici O, Leiding C, Kastelic JP, Bollwein H. Effects of cryopreservation on sperm viability, synthesis of reactive oxygen species, and DNA damage of bovine sperm. *Theriogenology* 2016;86:562-71.
130. Ritter C, Jansen J, Roth K, Kastelic JP, Adams CL, Barkema HW. Dairy farmers' perceptions toward the implementation of on-farm Johne's disease prevention and control strategies. *Journal of Dairy Science* 2016;99:9114-25.
131. Kasimanickam V, Kastelic J. Circulating cell-free mature microRNAs and their target gene prediction in bovine metritis. *Scientific Reports* 2016;6:29509.
132. Gábor G, Kastelic JP, Abonyi-Tóth Z, Gábor P, Endrődi T, Balogh OG. Pregnancy loss in dairy cattle: Relationship of ultrasound, blood Pregnancy-Specific Protein B, progesterone and production variables. *Reproduction in Domestic Animals* 2016;51:467-73.
133. Thundathil JC, Dance AL, Kastelic JP. Fertility management of bulls to improve beef cattle productivity. *Theriogenology* 2016;86:397-405.
134. Dance A, Thundathil J, Blondin P, Kastelic J. Enhanced early-life nutrition of Holstein bulls increases sperm production potential without decreasing postpubertal semen quality. *Theriogenology* 2016;86:687-94.
135. Kasimanickam RK, Whittier WD, Hall JB, Kastelic JP. Estrous synchronization strategies to optimize beef heifer reproductive performance after reproductive tract scoring. *Theriogenology*

2016;86:831-8.

136. Michi AN, Favetto PH, Kastelic J, Cobo ER. A review of sexually transmitted bovine trichomoniasis and campylobacteriosis affecting cattle reproductive health. *Theriogenology* 2016;85:781-91.
137. Goldhawk C, Janzen E, González LA, Crowe T, Kastelic J, Kehler C, Siemens M, Ominski K, Pajor E, Schwartzkopf-Genswein KS. Trailer temperature and humidity during winter transport of cattle in Canada and evaluation of indicators used to assess the welfare of cull beef cows before and after transport. *Journal of Animal Science* 2015;93:3639-53.
138. Barkema HW, von Keyserlingk MA, Kastelic JP, Lam TJ, Luby C, Roy JP, LeBlanc SJ, Keefe GP, Kelton DF. Invited review: Changes in the dairy industry affecting dairy cattle health and welfare. *Journal of Dairy Science* 2015;98:7426-45.
139. Dance A, Thundathil J, Wilde R, Blondin P, Kastelic J. Enhanced early-life nutrition promotes hormone production and reproductive development in Holstein bulls. *J Dairy Sci* 2015;98:987-98.
140. Goldhawk C, Crowe T, Janzen E, González LA, Kastelic J, Pajor E, Schwartzkopf-Genswein KS. Trailer microclimate during commercial transportation of feeder cattle and relationship to indicators of cattle welfare. *Journal of Animal Science* 2014;92:5155-65.
141. Pereira GR, Lorenzo PL, Carneiro GF, Bilodeau-Goeseels S, Kastelic J, Liu IK. A specific adenylyl cyclase inhibitor (DDA) and a cyclic AMP-dependent protein kinase inhibitor (H-89) block the action of equine growth hormone on in vitro maturation of equine oocytes. *Zygote* 2015;23:795-801.
142. Pereira GR, Lorenzo PL, Carneiro GF, Ball BA, Bilodeau-Goeseels S, Kastelic J, Pegoraro LMC, Pimentel CA, Esteller-Vico A, Illera JC, Granado GS, Casey P, Liu I. Selection of developmentally competent immature equine oocytes with brilliant cresyl blue stain prior to in vitro maturation with equine growth hormone. *Zygote* 2014;22:500-4.
143. Kasimanickam, R. Asay, M. Schroeder, S, Kasimanickam, V, Gay, J.M, Kastelic, J.P, Hall, J.B. Whittier. W.D. Calm temperament improves reproductive performance of beef cows. *Reproduction in Domestic Animals* 2014;49:1063-7.
144. Detilleux J, Kastelic J, Barkema HW. Mediation analysis to estimate direct and indirect milk losses due to clinical mastitis in dairy cattle. *Preventive Veterinary Medicine* 2015;118:449-56.
145. Ambrose, DJ, Gobikrushanth, M, Zuidhof, S, Kastelic JP. Low-dose natural prostaglandin F2 α (dinoprost) at timed insemination improves conception rate in dairy cattle. *Theriogenology* 2015;83:529-34
146. Goldhawk C, Crowe T, Janzen E, González LA, Kastelic J, Pajor E, Schwartzkopf-Genswein KS. Trailer microclimate during commercial transportation of feeder cattle and relationship to indicators of cattle welfare. *Journal of Animal Science* 2014;92:5155-65.
147. Kere M, Siriboon C, Liao JW, Lo NW, Chiang HI, Fan YK, Kastelic J, Ju JC. Vascular endothelial growth factor A improves quality of matured porcine oocytes and developing parthenotes. *Domestic Animal Endocrinology* 2014;49:60-9.
148. Goldhawk C, Janzen E, González LA, Crowe T, Kastelic J, Pajor E, Schwartzkopf-Genswein KS. Trailer microclimate and calf welfare during fall-run transportation of beef calves in Alberta. *Journal of Animal Science* 2014;92:5142-54.
149. Goldhawk C, Crowe T, González LA, Janzen E, Kastelic J, Pajor E, Schwartzkopf-Genswein K. Comparison of eight logger layouts for monitoring animal-level temperature and humidity during commercial feeder cattle transport. *Journal of Animal Science* 2014;92:4161-71.
150. Balogh O, Túry E, Abonyi-Tóth Z, Kastelic J, Gábor G. Macroscopic and histological characteristics of fluid-filled ovarian structures in dairy cows. *Acta Veterinaria Hungarica* 2014;62:215-32.
151. Kasimanickam R, Kasimanickam V, Kastelic JP. Mucin1 and cytokines mRNA in endometrium of

- dairy cows with postpartum uterine disease or repeat breeding. *Theriogenology* 2014;81:952-8.
152. Gutierrez K, Kasimanickam R, Tibary A, Gay JM, Kastelic JP, Hall JB, Whittier WD. Effect of reproductive tract scoring on reproductive efficiency in beef heifers bred by timed insemination and natural service versus only natural service. *Theriogenology* 2014;81:918-24.
 153. Kastelic JP. Understanding and evaluating bovine testes. *Theriogenology* 2014;81:18-23.
 154. Balogh OG, Túry E, Abonyi-Tóth Z, Kastelic J, Gábor G. Histological characteristics of luteal structures in dairy cows. *Acta Veterinaria Hungarica* 2014;62:215-32.
 155. Kasimanickam RK, Ranjan A, Asokan GV, Kasimanickam VR, Kastelic JP. Prevention and treatment of biofilms by hybrid- and nano-technologies. *International Journal of Nanomedicine* 2013;8:2809-19.
 156. Kastelic JP. Male involvement in fertility and factors affecting semen quality in bulls. *Animal Frontiers* 2013;3:20-5.
 157. Kasimanickam R, Tibary A, Kastelic J. Fundamentals of bull selection. *Clinical Theriogenology* 2013;5:97-107.
 158. Oliveira EC, Fagundes AK, Melo CC, Nery LT, Rêvoredó RG, Andrade TF, Oliveira-Esquerre K, Kastelic JP, Silva VA Jr. Intratesticular injection of a zinc-based solution for contraception of domestic cats: A randomized clinical trial of efficacy and safety. *Veterinary Journal* 2013;197:307-10.
 159. Kasimanickam RK, Kasimanickam VR, Olsen JR, Jeffress EJ, Moore DA, Kastelic JP. Associations among serum pro- and anti-inflammatory cytokines, metabolic mediators, body condition, and uterine disease in postpartum dairy cows. *Reproductive Biology and Endocrinology* 2013;11:103.
 160. Condas LAZ, Ribeiro MG, Yazawa K, Vargas APC, Salerno T, Giuffrida R, Langoni H, Melville PA, Biesdorf S, Matsuzama T, Gonoï T, Kastelic JP, Barkema HG. Molecular identification and antimicrobial susceptibility of *Nocardia* spp. isolated from bovine mastitis in Brazil. *Veterinary Microbiology* 2013;167:708-12.
 161. Pereira GR, Lorenzo PL, Carneiro GF, Ball BA, Bilodeau-Goeseels S, Kastelic J, Pegoraro LM, Pimentel CA, Esteller-Vico A, Illera JC, Granado GS, Casey P, Liu IK. The involvement of growth hormone in equine oocyte maturation, receptor localization and steroid production by cumulus-oocyte complexes in vitro. *Research in Veterinary Science* 2013;95:667-74.
 162. Hatvani C, Balogh OG, Endrődi T, Abonyi-Tóth Z, Holló I, Kastelic JP, Gábor G. Estrus response and fertility after a single cloprostenol treatment in dairy cows with various ovarian structures. *Canadian Journal of Veterinary Research* 2013;77:218-20.
 163. Shojaei Saadi HA, van Riemsdijk E, Dance AL, Rajamanickam GD, Kastelic JP, Thundathil JC. Proteins associated with critical sperm functions and sperm head shape are differentially expressed in morphologically abnormal bovine sperm induced by scrotal insulation. *Journal of Proteomics* 2013;82:64-80.
 164. Gilroyed BH, Reuter T, Kastelic JP, McAllister TA. Emergency euthanasia of cattle challenged with *Escherichia coli* O157:H7- A case study for a response to an infectious disease outbreak. *The Journal of Veterinary Science* 2013;14:103-6.
 165. Dias FCF, Costa E, Adams GP, Mapletoft RJ, Kastelic JP, Dochi O, Singh J. Effect of duration of the growing phase of ovulatory follicles on oocyte competence in superstimulated cattle. *Reproduction, Fertility and Development* 2013;25:523-30.
 166. Kasimanickam VR, Kasimanickam RK, Kastelic JP, Stevenson JS. Associations of adiponectin and fertility estimates in Holstein bulls. *Theriogenology* 2013;79:766-77.
 167. He ML, Sultana H, Oba M, Kastelic JP, Dugan ME, McKinnon JJ, McAllister TA. Triticale dried

distillers' grain increases alpha-1 linolenic acid in subcutaneous fat of beef cattle fed oilseeds. *Lipids* 2012;47:1209-20.

168. Kasimanickam V, Kasimanickam R, Arangasamy A, Saberivand A, Stevenson J.S, Kastelic JP. Association between mRNA abundance of functional sperm function proteins and fertility of Holstein bulls. *Theriogenology* 2012;78:2007-19.
169. Brito LF, Barth AD, Wilde RE, Kastelic JP. Testicular vascular cone development and its association with scrotal temperature, semen quality and sperm production in beef bulls. *Anim Reprod Sci* 2012;134:135-40.
170. Herzog K, Strueve K, Kastelic JP, Piechotta M, Ulbrich SE, Pfarrer C, Shirasuna K, Shimizu T, Miyamoto A, Bollwein H. *E. coli* lipopolysaccharide administration transiently suppresses luteal function and structure in dioestrous cows. *Reproduction* 2012;144:467-76.
171. Kastelic JP, Brito LFC, Thundathil JC. Bull development (in utero to one year of age). *Clinical Theriogenology* 2012;4:270-6.
172. Kastelic JP, Thundathil JC, Brito LFC. Bull BSE and semen analysis for predicting bull fertility. *Clinical Theriogenology* 2012;4:277-87.
173. Kastelic JP, Brito LFC, Barth AD. Effects of nutrition on reproductive development (puberty) in male ruminants. *Taurus* 2012;53:10-23.
174. Thundathil JC, Rajamanickam GD, Newton LD, Kastelic JP. The effects of increased testicular temperature on testis-specific isoform of Na⁺/K⁺-ATPase in sperm and its role in spermatogenesis and sperm function. *Reproduction in Domestic Animals* 2012;47(Suppl. 4):170-7.
175. Oliveira ECS, Muller PM, Silva FLM, Nery LTB, de Sá MJC, Guerra MMP, Oliveira-Esquerre KP, Kastelic JP, Douglas RH. Oral administration of an anti-inflammatory does not compromise the efficacy of intratesticular injection of zinc gluconate as a contraceptive for dogs. *Animal Reproduction Science* 2012;132:207-12.
176. Shojaei H, Kroetsch T, Wilde R, Blondin P, Kastelic JP, Thundathil JC. Moribund sperm in frozen-thawed semen, and sperm motion end points post-thaw and post-swim up, are related to fertility in Holstein AI bulls. *Theriogenology* 2012;77:940-51.
177. Oliveira EC, Moura MR, de Sá MJ, Silva VA Jr, Kastelic JP, Douglas RH, Marques AP Jr. Permanent contraception of dogs induced with intratesticular injections of a zinc gluconate-based solution? *Theriogenology* 2012;77:1056-63.
178. Kasimanickam RK, Kasimanickam VR, Kastelic JP. Intrauterine fetal growth restriction, adaptation and programming – A review. *Clinical Theriogenology* 2012;4:133-48.
179. Kastelic JP, Brito LFC. Ultrasonography for monitoring reproductive function in the bull. *Reproduction in Domestic Animals* 2012;47(Suppl. 3):45-51.
180. Brito LFC, Barth AD, Wilde RE, Kastelic JP. Effect of growth rate from 6 to 16 months of age on sexual development and reproductive function in beef bulls. *Theriogenology* 2012;77:1398-405.
181. Piechotta M, Sander AK, Kastelic JP, Rudolphi B, Schuberth HJ, Bollwein H, Kaske M. Short Communication: Prepartum plasma insulin-like growth factor-I concentrations based on day of insemination are lower in cows developing postpartum diseases. *Journal of Dairy Science* 2012;95:1367-70.
182. Brito LFC, Barth AD, Wilde RE, Kastelic JP. Testicular ultrasonogram pixel intensity during sexual development and its relationship with semen quality, sperm production, and quantitative testicular histology in beef bulls. *Theriogenology* 2012;78:69-76.
183. He ML, McAllister TA, Kastelic JP, Mir PS, Aalhus JL, Dugan MER, Aldai N, McKinnon JJ. Feeding flaxseed in grass hay and barley silage diets to beef cows increases alphalinolenic acid and

- its biohydrogenation intermediates in subcutaneous fat. *Journal of Animal Science* 2012;90:592-604.
184. Dias FCF, Mapletoft RJ, Kastelic JP, Adams GP, Colazo MG, Stover BC, Dochi O, Singh J. Effect of length of progesterone exposure during ovulatory wave development on pregnancy rate. *Theriogenology* 2012;77:437-44.
 185. Pereira GR, Lorenzo PL, Carneiro GF, Ball BA, Gonçalves PB, Pegoraro LM, Bilodeau-Goeseels S, Kastelic JP, Casey PJ, Liu IK. The effect of growth hormone (GH) and insulin-like growth factor-I (IGF-I) on in vitro maturation of equine oocytes. *Zygote* 2012;20:353-60.
 186. Herzog K, Vossa C, Kastelic JP, Beindorff N, Paul V, Niemann H, Bollwein H. Luteal blood flow increases during the first three weeks of pregnancy in lactating dairy cows. *Theriogenology* 2011;75:549-54.
 187. Costa E, Uwiera R, Kastelic JP, Selinger LP, Inglis GD. Non-therapeutic administration of a model antimicrobial growth promoter modulates intestinal immune responses. *Gut Pathogens* 2011;3:14.
 188. Menon AG, Thundathil JC, Wilde R, Kastelic JP, Barkema HW. Associations between sperm abnormalities, breed, age, and scrotal circumference in beef bulls. *Canadian Journal of Veterinary Research* 2011;75:241-7.
 189. Menon AG, Thundathil JC, Wilde R, Kastelic JP, Barkema HW. Validating the assessment of bull sperm morphology by veterinary practitioners. *Canadian Veterinary Journal* 2011;52:407-8.
 190. Lüttgenau J, Beindorff N, Ulbrich SE, Kastelic JP, Bollwein H. Low plasma progesterone concentrations are accompanied by reduced luteal blood flow and increased size of the dominant follicle in dairy cows. *Theriogenology* 2011;76:12-22.
 191. Domingues SFS, Almeida DVC, Sealerio SRR, Kastelic JP, Santos RR. Unilateral ovarian absence in two capuchin monkeys. *Journal of Medical Primatology* 2011;40:37-40.
 192. Inglis GD, Kastelic JP, Uwiera RRE. Catheterization of intestinal loops in ruminants does not adversely affect loop function. *Comparative Medicine* 2010;60:1-10.
 193. Bilodeau-Goeseels SG, Panich PL, Kastelic JP. Activation of AMP-activated protein kinase may not be involved in AICAR- and metformin-mediated meiotic arrest in bovine denuded and cumulus-enclosed oocytes in vitro. *Zygote* 2010;23:1-10.
 194. Dias FCF, Colazo MG, Kastelic JP, Mapletoft RJ, Adams GP, Singh J. Progesterone concentration, estradiol pretreatment, and dose of gonadotropin-releasing hormone affect gonadotropin-releasing hormone-mediated luteinizing hormone release in beef heifers. *Domestic Animal Endocrinology* 2010;39:155-62.
 195. Small JA, Colazo MG, Kastelic JP, Erickson NE, Mapletoft RJ. Effects of presynchronization and eCG on pregnancy rates to GnRH-based, fixed-time artificial insemination in beef heifers. *Canadian Journal of Animal Science* 2010;90:23-34.
 196. Newton LD, Jaiswal R, Wong B, Kastelic JP, van der Hoorn F, Thundathil J. Na⁺/K⁺ATPase regulates sperm capacitation through a mechanism involving kinases and redistribution of its testis-specific isoform. *Molecular Reproduction and Development* 2010;77:136-48.
 197. Lysyk TJ, Veira DM, Kastelic JP, Majak W. Inducing active and passive immunity in sheep to paralysis caused by *Dermacentor andersoni*. *Journal of Medical Entomology* 2009;46:1436-41.
 198. Pfeifer LFM, Mapletoft RJ, Kastelic JP, Small JA, Adams GP, Dionello NJ, Singh J. Effects of low versus physiological plasma progesterone concentrations on ovarian follicular development and fertility in beef cattle. *Theriogenology* 2009;72:1237-50.
 199. Pfeifer LM, Siqueira LGB, Mapletoft RJ, Kastelic JP, Adams GP, Colazo MG, Singh J. Effects of exogenous progesterone and cloprostenol on ovarian follicular development and first ovulation in prepubertal heifers. *Theriogenology* 2009;72:1054-64.

200. Uwiera RE, Kastelic JP, Inglis G.D. Catheterization of intestinal loops in ruminants. *Journal of Visualized Experiments*. (<http://www.jove.com/index/details.stp?ID=1301>). Published June 11, 2009.
201. Ree TO, Colazo MG, Lamont AGA, Kastelic JP, Dyck MJ, Mapletof, RJ, Ametaj BN, Ambrose DJ. The effect of porcine luteinizing hormone in the synchronization of ovulation and corpus luteum development in lactating cows. *Theriogenology* 2009;72:120-8.
202. Newton LD, Kastelic JP, Wong B, van der Hoorn F, Thundathil J. Elevated testicular temperature modulates expression patterns of sperm proteins in Holstein bulls. *Molecular Reproduction & Development* 2009;76:109-18.
203. Small JA, Colazo MG, Kastelic JP, Mapletoft RJ. Effects of progesterone presynchronization and eCG on pregnancy rates to GnRH-based, timed-AI in beef cattle. *Theriogenology* 2009;71:698-706.
204. Small JA, Ambrose DJ, Rajamahendran R, Kastelic JP. Mixed-breed twin production by contralateral direct-transfer of male embryos to beef cow recipients bred to GnRH-based, fixed-time AI. *Livestock Science* 2008;118:272-81.
205. Kastelic JP. Evidence-based veterinary medicine. *Magyar Állatorvosok Lapja (Hungarian Veterinary Journal)* 2008;130(Supplement I):55-8.
206. Ambrose DJ, Emmanuel DGV, Colazo MG, Kastelic JP. Pregnancy rates to timed artificial insemination in Holstein heifers given prostaglandin F₂alpha twenty-four hours before or concurrent with removal of an intravaginal progesterone-releasing insert. *Journal of Dairy Science* 2008;91:2678-83.
207. Kastelic JP, Mapletoft RJ, Colazo MG, Martinez MF. Ovarian follicular development and synchronization of estrus and ovulation in cattle. *Magyar Állatorvosok Lapja (Hungarian Veterinary Journal)* 2008;130(Supplement I):58-62.
208. Barth AD, Brito LFC, Kastelic JP. The effect of nutrition on sexual development of bulls. *Theriogenology* 2008;70:485-95.
209. Colazo MG, Ambrose DJ, Kastelic JP, Small JA. Comparison of 2 enzymeimmunoassays and a radioimmunoassay for measurement of progesterone concentrations in bovine plasma, skim milk and whole milk. *The Canadian Journal of Veterinary Research* 2008;72:32-6.
210. Kastelic JP, Thundathil J. Breeding soundness evaluation and semen analysis for predicting bull fertility. *Reproduction in Domestic Animals* 2008;43(Supplement 2):368-73.
211. Colazo MG, Kastelic JP, Davis H, Rutledge MD, Martínez MF, Small JA, Mapletoft RJ Effects of plasma progesterone concentrations on LH release and ovulation in beef cattle given GnRH. *Domestic Animal Endocrinology* 2008;34:109-17.
212. Romano MA, Barnabe VH, Kastelic JP, de Oliveira CA, Romano RM. Follicular dynamics in heifers during pre-pubertal and pubertal period kept under two levels of dietary energy intake. *Reproduction in Domestic Animals* 2007;42:616-22.
213. Brito LFC, Barth AD, Rawlings NC, Wilde RE, Crews Jr DH, Boisclair YR, Ehrhardt RA, Kastelic JP. Effect of feed restriction during calfhod on serum concentrations of metabolic hormones, gonadotropins, testosterone, and on sexual development in bulls. *Reproduction* 134:171-81, 2007.
214. Brito LFC, Barth AD, Rawlings NC, Wilde R.E, Crews Jr DH, Mir S, Kastelic JP. Effect of improved nutrition during calfhod on serum metabolic hormones, gonadotropins, and testosterone concentrations, and on testicular development in bulls. *Domestic Animal Endocrinology* 2007;33:460-9.
215. Brito LFC, Barth AD, Rawlings NC, Wilde RE, Crews Jr DH, Mir PS, Kastelic JP. Circulating metabolic hormones during the peripubertal period and their association with testicular development

in bulls. *Reproduction in Domestic Animals* 2007;42:502-8.

216. Martínez MF, Kastelic JP, Colazo MG, Mapletoft RJ. Effects of estradiol on gonadotrophin release, estrus and ovulation in CIDR-treated beef cattle. *Domestic Animal Endocrinology* 2007;33:77-90.
217. Brito LFC, Barth AD, Rawlings NC, Wilde RE, Crews Jr DH, Mir PS, Kastelic JP. Effect of nutrition during calfhoo and peripubertal period on serum metabolic hormones, gonadotropins and testosterone concentrations, and on sexual development in bulls. *Domestic Animal Endocrinology* 2007;33:1-18.
218. Colazo MG, Kastelic JP, Small JA, Wilde RE, Ward DR, Mapletoft RJ. Resynchronization of estrus in beef cattle: Ovarian function, estrus and fertility following progestin treatment and treatments to synchronize ovarian follicular development and estrus. *Canadian Veterinary Journal* 2007;48:49-56.
219. Kastelic JP. Critical evaluation of scientific articles and other sources of information; an introduction to evidence-based veterinary medicine. *Theriogenology* 2006;66:534-42.
220. Ambrose DJ, Kastelic JP, Corbett R, Pitney PA, Petit HV, Small JA, Zalkovic P. Lower pregnancy losses in lactating dairy cows fed a diet enriched in alpha-linolenic acid. *Journal of Dairy Science* 2006;89:3066-74.
221. Colazo MG, Kastelic JP, Gavaga QA, Whittaker PR, Small JA, Martinez MF, Wilde RE, Veira DM, Mapletoft RJ. Resynchronization of previously timed-inseminated beef heifers with progestins. *Theriogenology* 2006;65:557-72.
222. Acharya SN, Kastelic JP, Beauchemin KA, Messenger DF. A review of research progress on cicer milkvetch (*Astragalus cicer* L.). *Canadian Journal of Plant Science* 2005;86:49-62. (Invited review)
223. Ambrose JD, Kastelic JP, Rajamahendran R, Aali A, Dinn, N. Progesterone (CIDR)-based timed AI protocols using GnRH, porcine LH or estradiol cypionate for dairy heifers: Ovarian and endocrine responses and pregnancy rates. *Theriogenology* 2005;64:1457-74.
224. Inglis GD, Kalischuk LD, Busz HW, Kastelic JP. Colonization of cattle intestines by *Campylobacter jejuni* and *Campylobacter lanienae*. *Applied and Environmental Microbiology* 2005;71:5145-53.
225. Colazo MG, Martínez MF, Small J, Kastelic JP, Burnley CA, Ward D, Mapletoft RJ. Effect of estradiol valerate on ovarian follicle dynamics and superovulatory response in progestin-treated cattle. *Theriogenology* 2005;63:1454-68.
226. Martínez MF, Kastelic JP, Bó GA, Caccia M, Mapletoft RJ. Effects of oestradiol and some of its esters on gonadotrophin release and ovarian follicular dynamics in CIDR-treated beef cattle. *Animal Reproduction Science* 2005;86:37-52.
227. Brito LFC, Silva AEDF, Unanian MM, Dode MAN, Barbosa RT, Kastelic JP. Sexual development in early- and late-maturing *Bos indicus* and *Bos indicus* x *Bos taurus* crossbred bulls in Brazil. *Theriogenology* 2004;62:1198-217.
228. Hittinger MA, Ambrose JD, Kastelic JP. Luteolysis, onset of estrus and ovulation in Holstein heifers given prostaglandin F2 α concurrent with, or 24 hours prior to, removal of an intravaginal, progesterone-releasing device. *Canadian Journal of Veterinary Research* 2004;68:283-7.
229. Martínez MF, Kastelic JP, Mapletoft RJ. The use of estradiol and/or GnRH in a two-dose PGF protocol for breeding management of beef heifers. *Theriogenology* 2004;62:363-72.
230. Colazo MG, Kastelic JP, Whittaker PR, Gavaga QA, Wilde R, Mapletoft RJ. Fertility in beef cattle given a new or previously used CIDR insert and estradiol, with or without progesterone. *Animal Reproduction Science* 2004;81:25-34.
231. Colazo MG, Kastelic JP, Martínez MF, Whittaker PR, Wilde R, Ambrose JD, Corbett R, Mapletoft RJ. Fertility following fixed-time AI in CIDR-treated beef heifers given GnRH or estradiol cypionate and fed diets supplemented with flax seed or sunflower seed. *Theriogenology* 2004;61:115-24.

232. Brito LFC, Silva AEDF, Barbosa RT, Kastelic JP. Testicular thermoregulation in *Bos indicus*, crossbred and *Bos taurus* bulls: relationship with scrotal, testicular vascular cone and testicular morphology and effects on semen quality and sperm production. *Theriogenology* 2004;61:511-28.
233. Bilodeau-Goeseels S, Kastelic JP. Factors affecting embryo survival and strategies to reduce embryonic mortality in cattle. *Canadian Journal of Animal Science* 2003;83:659-71.
234. Brito LFC, Barth AD, Bilodeau-Goeseels S, Panich PL, Kastelic JP. Comparison of methods to evaluate the plasmalemma of bovine sperm and their relationship with in vitro fertilization rate. *Theriogenology* 2003;60:1539-51.
235. Brito LFC, Silva AEF, Barbosa RT, Unanian MM, Kastelic JP. Effects of scrotal insulation on sperm production, semen quality, and testicular echotexture in *Bos indicus* and *Bos indicus* x *Bos taurus* bulls. *Animal Reproduction Science* 2003;79:1-15.
236. Colazo MG, Kastelic JP, Mapletoft RJ. Effects of estradiol cypionate (ECP) on ovarian follicular dynamics, synchrony of ovulation, and fertility in CIDR-based, fixed-time AI programs in beef heifers. *Theriogenology* 2003;60:855-65.
237. Mapletoft RJ, Martinez MF, Colazo MG, Kastelic JP. The use of Controlled Internal Drug Release Devices for the regulation of bovine reproduction. *Journal of Animal Science* 2003;81(E. Suppl. 2):E28-36.
238. Martinez MF, Carruthers T, Kastelic JP, Mapletoft RJ. The effects of three different gonadorelin products on luteinizing hormone release, ovulation, and follicular wave emergence in cattle. *Canadian Veterinary Journal* 2003;44:125-31.
239. Martinez MF, Kastelic JP, Adams GP, Mapletoft, R.J. The use of a progesterone-releasing device (CIDR-B) or melengestrol acetate with GnRH, LH, or estradiol benzoate for fixed-time AI in beef heifers. *Journal of Animal Science* 2002;80:1746-51.
240. Rawlings NC, Kastelic JP, Evans ACO, Bartlewski PM, Beard AP, Chandiola RK, Cook SJ. Plasma concentrations of cortisol and progesterone during the period of reproductive development in beef and dairy heifers. *Animal Science* 2002;75:281-8.
241. Colazo MG, Martinez MF, Kastelic JP, Mapletoft RJ. Effects of dose and route of administration of cloprostenol on estrus synchronization and ovulation time in beef heifers. *Animal Reproduction Science* 2002;72:47-62.
242. Brito LFC, Silva AEDF, Rodrigues LH, Vieira F, Deragon LAG, Kastelic JP. Effect of age and genetic group on characteristics of the scrotum, testes and testicular vascular cones, and sperm production and semen quality in AI bulls in Brazil. *Theriogenology* 2002;58:1175-86.
243. Brito LFC, Silva AEDF, Rodrigues LH, Vieira FV, Deragon LAG, Kastelic JP. Effects of environmental factors, age, and genotype on sperm production and semen quality in *Bos indicus* and *Bos taurus* AI bulls in Brazil. *Animal Reproduction Science* 2002;70:181-90.
244. Brito LFC, Satrapa R, Marson EP, Kastelic JP. Efficacy of PGF2alpha to synchronize estrus in water buffalo cows (*Bubalus bubalis*) is dependent upon plasma progesterone concentration, corpus luteum size and ovarian follicular status before treatment. *Animal Reproduction Science* 2002;73:23-35.
245. Colazo MG, Carruthers TD, Martinez MF, Kastelic JP, Mapletoft RJ. The ischiorectal fossa: an alternative route for the administration of prostaglandin in cattle. *Canadian Veterinary Journal* 2002;43:535-41.
246. Martinez MF, Kastelic JP, Adams GP, Cook RB, Olson WO, Mapletoft RJ. The use of progestins in regimens for fixed-time artificial insemination in beef cattle. *Theriogenology* 2002;57:1049-59.
247. Gábor G, Kastelic JP, Pintér S, Szász F, Szigeti E, Solymosi N. Improving reproductive performance in lactating dairy cows by synchronizing ovulation or inducing estrus. *Acta Veterinaria Hungarica*

2002;50:231-24.

248. Martinez MF, Kastelic JP, Adams GP, Mapletoft RJ. The use of GnRH or estradiol to facilitate fixed-time insemination in an MGA-based synchronization regimen in beef cattle. *Animal Reproduction Science* 2001;67:221-9.
249. Kastelic JP, Cook RB, Pierson RA, Coulter, G.H. Relationships among scrotal and testicular characteristics, sperm production and seminal quality in 129 beef bulls. *Canadian Journal of Veterinary Research* 2001;65:111-5.
250. Gábor G, Kastelic JP, Cook RB, Sasser RG, Brito LFC, Völgyi-Csík J, Coulter GH, Györkös I. Effects of GnRH treatment on scrotal surface temperature in bulls. *Canadian Journal of Veterinary Research* 2001;65:60-3.
251. Cook RB, Popp JD, McAllister TA, Kastelic JP, Harland R. Effects of immunization against GnRH, melengestrol acetate and a trenbelone acetate/estradiol implant on growth and carcass characteristics of beef heifers. *Theriogenology* 2001;55:973-81.
252. Martinez M, Adams GP, Kastelic JP, Bergfelt D, Mapletoft RJ. Induction of follicular wave emergence for estrus synchronization and artificial insemination in heifers. *Theriogenology* 2000;54:757-69.
253. Cook RB, Popp JD, Kastelic JP, Robbins S, Harland R. The effects of active immunization against GnRH on testicular development, feedlot performance, and carcass characteristics of beef bulls. *Journal of Animal Science* 2000;78:2778-83.
254. Martinez M, Kastelic JP, Adams GP, Janzen E, McCartney DH, Mapletoft RJ. Estrus synchronization and pregnancy rates in beef cattle given CIDR-B, prostaglandin and estradiol, or GnRH. *Canadian Veterinary Journal* 2000;41:786-90.
255. Mwansa PB, Kemp RA, Crews Jr DH, Kastelic JP, Bailey DRC, Coulter GH. Selection for cow lifetime pregnancy rate using bull and heifer growth and reproductive traits in composite cattle. *Canadian Journal of Animal Science* 2000;80:507-10.
256. Mwansa PB, Kemp RA, Crews Jr DH, Kastelic JP, Bailey DRC, Coulter GH. Comparison of models for genetic evaluation of scrotal circumference in crossbred bulls. *Journal of Animal Science* 2000;78:275-82.
257. Martinez M, Adams GP, Bergfelt D, Kastelic JP, Mapletoft RJ. Effect of LH or GnRH on the dominant follicle of the first follicular wave in beef heifers. *Animal Reproduction Science* 1999;57:23-33.
258. Kastelic JP, Cook RB, Coulter GH. Effects of ambient temperature and scrotal fleece cover on scrotal and testicular temperatures in rams. *Canadian Journal of Veterinary Research* 1999;63:157-60.
259. Thundathil J, Kastelic JP, Olson WO, Cook RB, Mapletoft RJ. Melengestrol acetate (MGA), estradiol-17 β and GnRH for synchronization of estrus in beef cows. *Canadian Journal of Animal Science* 1999;79:39-43.
260. Kastelic JP, Olson WO, Martinez M, Cook RB, Mapletoft, R.J. Synchronization of estrus in beef cattle with norgestomet and estradiol valerate. *Canadian Veterinary Journal* 1999;40:173-8.
261. Thundathil J, Kastelic JP, Mapletoft RJ. The effect of estradiol cypionate (ECP) on ovarian follicular development and ovulation in dairy cattle. *Canadian Journal of Veterinary Research* 1998;61:314-6.
262. Gábor G, Sasser RG, Kastelic JP, Coulter GH, Falkay G, Mézes M, Bozó S, Völgyi-Csík, J, Bárány I, Szász F. Morphologic, endocrine and thermographic measurement of testicles in comparison with semen characteristics in mature Holstein-Friesian breeding bulls. *Animal Reproduction Science* 1998;51:215-24.

263. Gabo, G, Sasser RG, Kastelic JP, Mézes M, Falkay G, Bozó S, Völgyi Csík J, Bárány I, Hidas A, Szász F, Boros, G. Computer analysis of video and ultrasonographic images for evaluation of bull testes. *Theriogenology* 1998;50:223-8.
264. Gabor G, Sasser RG, Kastelic JP, Coulter GH, Everso, DO, Falkay Gy, Mézes M, Bozó S, Cook RB, Völgyi Csík J, Bárány I, Szász F. Endocrine and thermal responses to GnRH treatment and prediction of sperm output and viability in Holstein-Friesian breeding bulls. *Theriogenology* 1998;50:177-83.
265. Popp JD, McAllister TA, Kastelic JP, Majak W, Ayroud M, VanderKop MA, Karren D, Yost G, Cheng K-J. Effect of melengestrol acetate on development of 3-methylindole-induced pulmonary edema and emphysema in sheep. *Canadian Journal of Veterinary Research* 1998;62:268-74.
266. Kastelic JP, Mapletoft RJ. Ovarian follicular responses in dairy cattle treated with GnRH and cloprostenol. *Canadian Veterinary Journal* 1998;39:107-9.
267. Kastelic JP, McCartney DH, Olson WO, Barth AD, Mapletoft RJ. Melengestrol acetate (MGA) and estradiol-17 β for synchronizing estrus and improving reproductive performance in beef cattle. *Canadian Journal of Animal Science* 1997;77:683-8.
268. Reed BK, Hunt CW, Sasser RG, Momont PA, Rode LM, Kastelic JP. Effect of forage:concentrate ratio on digestion and reproduction in primiparous beef heifers. *Journal of Animal Science* 1997;75:1708-14.
269. Kastelic JP, Cook RB, Coulter GH. Contribution of the scrotum, testes, and testicular artery to scrotal/testicular thermoregulation in bulls at two ambient temperatures. *Animal Reproduction Science* 1997;45:255-61.
270. Coulter GH, Cook RB, Kastelic JP. Effects of dietary energy on scrotal surface temperature, seminal quality, and sperm production in young beef bulls. *Journal of Animal Science* 1997;75:1048-52.
271. Popp JD, McAllister TA, Burgevitz WJ, Kemp RA, Kastelic JP, Cheng, K.-J. Effect of trenbolone acetate/estradiol implants and estrus suppression on growth performance and carcass characteristics of beef heifers. *Canadian Journal of Animal Science* 1997;77:325-8.
272. Kastelic JP, Cook RB, Coulter, G.H. Contribution of the scrotum and testes to scrotal/testicular thermoregulation in bulls and rams. *Journal of Reproduction and Fertility* 1996;108:81-5.
273. Kastelic JP, McCartney DH, Garcia A, Olson W, Mapletoft RJ. Estrus synchronization in cattle using estradiol, melengestrol acetate and PGF. *Theriogenology* 1996;46:1295-304.
274. Kastelic JP, Cook RB, Coulter GH, Saacke RG. Ejaculation increases scrotal surface temperature in bulls with intact epididymides. *Theriogenology* 1996;46:889-92.
275. Kastelic JP, Cook RB, Coulter GH, Wallins GL, Entz, T. Environmental factors affecting measurement of bovine scrotal surface temperature with infrared thermography. *Animal Reproduction Science* 1996;41:153-9.
276. Kastelic JP, Cook RB, Coulter GH, Saacke RG. Insulating the scrotal neck affects semen quality and scrotal/testicular temperatures in the bull. *Theriogenology* 1996;45:935-42.
277. Kastelic JP, Cook RB, McMahon LR, McAllister TA, McClelland L.A, Cheng, K-J. Induction of parturition in ewes with dexamethasone or dexamethasone and cloprostenol. *Canadian Veterinary Journal* 1995;37:101-2.
278. Kastelic JP, Coulter GH, Cook RB. Scrotal surface, subcutaneous, intratesticular, and intraepididymal temperatures in bulls. *Theriogenology* 1995;44:147-52.
279. Rode LM, Coulter GH, Kastelic JP, Bailey DRC. Seminal quality and sperm production in beef bulls with chronic dietary Vitamin A deficiency and subsequent re-alimentation. *Theriogenology* 1995;43:1269-77.

280. Lulai CL, Dobrinski I, Kastelic JP, Mapletoft, R.J. Induction of luteal regression, ovulation and development of new luteal tissue during early pregnancy in heifers. *Animal Reproduction Science* 1994;35:163-72.
281. Kastelic JP. Embryonic loss in cattle. *Veterinary Medicine* 1994;89:584-9.
282. Kastelic JP. Ovarian follicular development in cattle. *Veterinary Medicine* 1994;89:64-71.
283. Lulai C, Kastelic JP, Carruthers TD, Mapletoft RJ. Role of luteal regression in embryonic death in cattle. *Theriogenology* 1994;41:1081-9.
284. Cook RB, Coulter GH, Kastelic JP. The testicular vascular cone, scrotal thermoregulation, and their relationships to sperm production and seminal quality in beef bulls. *Theriogenology* 1994;41:653-71.
285. Adams GP, Matteri RL, Kastelic JP, Ko JCH, Ginther OJ. Associations between surges of follicle stimulating hormone and the emergence of follicular waves in heifers. *Journal of Reproduction and Fertility* 1992;94:177-88.
286. Kastelic JP, Ginther OJ. Factors affecting the origin of the ovulatory follicle in heifers with induced luteolysis. *Animal Reproduction Science* 1991;26:13-24.
287. Kastelic JP, Bergfelt DR, Ginther OJ. Ultrasonic detection of the conceptus and characterization of intrauterine fluid on days 10 to 22 in heifers. *Theriogenology* 1991;35:569-581.
288. Ko JCH, Kastelic JP, Del Campo MR, Ginther OJ. Effects of a dominant follicle on ovarian follicular dynamics during the oestrous cycle in heifers. *Journal of Reproduction and Fertility* 1991;91:511-9.
289. Bergfelt DR, Kastelic JP, Ginther OJ. Continued periodic emergence of follicular waves in nonbred progesterone-treated heifers. *Animal Reproduction Science* 1991;24:193-204.
290. Kastelic JP, Northey DL, Ginther OJ. Spontaneous embryonic death on Days 20 to 40 in heifers. *Theriogenology* 1991;35:351-363.
291. Kastelic JP, Knopf L, Ginther O.J. Effect of day of prostaglandin F_{2α} treatment on selection and development of the ovulatory follicle in heifers. *Animal Reproduction Science* 1990;23:169-80.
292. Kastelic JP, Ko JCH, Ginther OJ. Suppression of dominant and subordinate ovarian follicles by a proteinaceous fraction of follicular fluid in heifers. *Theriogenology* 1990;34:499-509.
293. Kastelic JP, Pierson RA, Ginther OJ. Ultrasonic morphology of corpora lutea and central luteal cavities during the estrous cycle and early pregnancy in heifers. *Theriogenology* 1990;34:487-98.
294. Kastelic JP, Bergfelt DR, Ginther OJ. Relationship between ultrasonic assessment of the corpus luteum and plasma progesterone concentration. *Theriogenology* 1990;33:1269-78.
295. Kastelic JP, Curran S, Ginther OJ. Accuracy of ultrasonography for pregnancy diagnosis on Days 10 to 22 in heifers. *Theriogenology* 1989;31:813-20.
296. Kastelic JP, Ginther OJ. Fate of conceptus and corpus luteum after induced embryonic loss in heifers. *Journal of the American Veterinary Medical Association* 1989;194:922-8.
297. Ginther OJ, Kastelic JP, Knopf L. Intraovarian relationships among dominant and subordinate follicles and the corpus luteum in heifers. *Theriogenology* 1989;32:787-95.
298. Ginther OJ, Knopf L, Kastelic JP. Ovarian follicular dynamics in heifers during early pregnancy. *Biology of Reproduction* 1989;41:255-261.
299. Ginther OJ, Knopf L, Kastelic JP. Temporal associations among ovarian events during bovine oestrous cycles with two and three follicular waves. *Journal of Reproduction and Fertility* 87:223-30, 1989.
300. Ginther OJ, Kastelic JP, Knopf L. Composition and characteristics of follicular waves during the bovine estrous cycle. *Animal Reproduction Science* 1989;20:187-200.
301. Curran S, Kastelic JP, Ginther OJ. Determining sex of the bovine fetus by ultrasonic assessment of

- the relative location of the genital tubercle. *Animal Reproduction Science* 1989;19:217-27.
302. Knopf L, Kastelic JP, Schallenberger E, Ginther OJ. Ovarian follicular populations in heifers: Test of two wave hypothesis by ultrasonically monitoring individual follicles. *Domestic Animal Endocrinology* 1989;6:111-9.
303. Kastelic JP, Curran S, Pierson RA, Ginther OJ. Ultrasonic evaluation of the bovine conceptus. *Theriogenology* 1988;29:39-54.
304. Pierson RA, Kastelic JP, Ginther OJ. Basic principles and techniques for transrectal ultrasonography in cattle and horses. *Theriogenology* 1988;29:3-20.
305. Kastelic JP, Adams GP, Ginther OJ. Role of progesterone in mobility, fixation, orientation and survival of the equine embryonic vesicle. *Theriogenology* 1987;27:655-63.
306. Adams GP, Kastelic JP, Bergfelt DR, Ginther OJ. Effect of uterine inflammation and ultrasonically-detected uterine pathology on fertility in the mare. *Journal of Reproduction and Fertility* 1987;Supp. 35:445-54.

BOOK CHAPTERS

Barth A, Kastelic JP. Testicular degeneration. *Bovine Reproduction*, p. 144-50, 2021.

Kastelic JP, Rizzoto G. Thermoregulation of the testes. *Bovine Reproduction*, p. 40-46, 2021.

Kastelic JP, Rizzoto G. Termorregulación testicular. In: *Reproducción en los animales domésticos*. Editorial Asís, Zaragoza, Spain, p. 71-74, 2020.

Holani R, Marin MS, Kastelic JP, Cobo ER. Host defense peptides as innate immunomodulators in the pathogenesis of colitis. *Antimicrobial Peptides in Gastrointestinal Diseases*, 2018:133-164.

Colazo MG, Kastelic JP. Reproductive management in cattle and sheep. *UNESCO – Encyclopedia of Life Support System, Reproduction in Livestock-Chapter 08, Subchapter 5.15.20.5*.

Kastelic, JP. Thermoregulation of the testes. *Bovine Reproduction*, Hopper, RM Editor, Wiley Blackwell, pp. 26-29, 2015.

Chenoweth PJ, Kastelic JP. Clinical reproductive physiology and endocrinology of bulls. In: *Current Therapy in Large Animal Theriogenology*, Second Edition. R.S. Youngquist, ed. W.B. Saunders, Philadelphia 2007, pp. 221-228.

ABSTRACTS, PROCEEDINGS AND NONREVIEWED PUBLICATIONS

Kastelic JP, Thundathil J. Testicular function and fertility in bulls. *Reproduction in Domestic Ruminants* 2014;VIII, 229-38.

Thundathil J, Rajamanickam GD, Kastelic JP. Regulation of male fertility. *Proceedings of the International Symposium on Current Challenges and Translational Research to Augment Animal Reproduction*, Chennai, India, December, 2014.

Thundathil JC, Rajamanickam GD, Kastelic JP. Bovine sperm abnormalities: Prevalence, etiology and mechanisms leading to infertility. Proceedings, Annual Meeting of the Society for Theriogenology, Society for Theriogenology, Portland, OR, USA, 2014.

Thundathil JC, Rajamanickam GD, Kastelic JP. The association between sperm function and field fertility. Proceedings, Annual Meeting of the Society for Theriogenology, Society for Theriogenology, Portland, OR, USA, 2014.

Lo A, Paradis F, Dance A, Kastelic JP, Thundathil JC. Developmental competence of embryos resulting from the fertilization of oocytes by sperm from low- versus high-fertility dairy bulls, Proc 46th Ann Meet Society for the Study of Reprod, Montreal, QC, July, 2013.

Rajamanickam GD, Kastelic J, Thundathil J. Na/K-ATPase is involved in raft and nonraft-mediated signaling during bovine sperm capacitation, Proc 46th Ann Meet Soc Stud Reprod, Montreal, QC, July, 2013 July.

G.D. Rajamanickam, J.P. Kastelic, J.C. Thundathil. Content of testis-specific isoform of Na/K-ATPase is increased and raft- and non-raft pools of this protein activate specific signaling pathways during bovine sperm capacitation. Proceedings, 39th Annual Conference of the American Society of Andrology, April 2014.

A. Dance, J. Thundathil, R. Wilde, P. Blondin, and J. Kastelic. High nutrition during early life improves reproductive potential of Holstein bulls. Proceedings of the 41st Annual Conference of International Embryo Transfer Society, January, 2015.

G.D. Rajamanickam, J.P. Kastelic, J.C. Thundathil. Content of testis-specific isoform of Na/K-ATPase increases during bovine sperm capacitation, UCV Research Day, University of Calgary, March, 2014.

Mysegades, W, Bollwein, H, Gil-Araujo, M, Kastelic, J, Hoedemaker, M. Piechotta, M. Plasma IGF-I concentrations ante partum are not indicative for delayed ovulation post partum in dairy cows. Proceedings, Annual Conference of Physiology and Pathology of Reproduction, Berlin, Germany, 2012.

Lang, L, Bollwein, H, Jung, M, Kastelic, J, Piechotta, M. Low endogenous progesterone concentrations 5 days after insemination reduce pregnancy rates in Holstein Friesian cows, irrespective of subsequent progesterone supplementation. Proceedings, Annual Conference of Physiology and Pathology of Reproduction, Berlin, Germany, 2012.

Yücesoy, N, Piechotta, M Ekhlas-Hundrieser, M Ulbrich, SE Kastelic, JP, Górriz L, Hettel, C Brehm R, Frese D, Rath, D Bollwein H. In vitro spontaneous contractile activity of the oviduct in heifers versus cows. Proceedings, Annual Conference of Physiology and Pathology of Reproduction, Berlin, Germany, 2012.

Kastelic, J.P. Principles of ultrasonography and ultrasonographic imaging of the reproductive tract in farm animals. Proceedings, I Simposio Latinoamericano de Reproducción Animal, November 7-8, 2011, Viña del Mar, Chile.

Kastelic, J.P, The effects of nutrition on reproductive development (puberty) in male ruminants. Proceedings, I Simposio Latinoamericano de Reproducción Animal, November 7-8, 2011, Viña del Mar, Chile.

Shojaei, H, Kroetsch, T, Blondin, P, Wilde, R, Kastelic, J.P, Thundathil, J.C. Physical and functional markers of fertility in Holstein bulls. 44th Annual Meeting of the Society for the Study of Reproduction. Portland, Oregon, USA, July 31-August 4, 2011 (poster presentation).

Costa, E, Uwiera, R.R.E, Kastelic, J.P, Selinger, L.B, Inglis, G.D. Non-therapeutic administration of chlortetracycline modulates immune responses to *Citrobacter rodentium* in mice. Poster presentation at the Canada/UK Gut and Health Workshop, St. Hyacinthe, Quebec, February, 2011.

Goldhawk, C. E. Janzen, L. Gonzalez, T. Crowe, J. Kastelic, E. Pajor and K.S.G. Schwartzkopf-Genswein. 2011. Predicting internal trailer THI based on space allowance and ambient THI during transport of fall-weaned beef calves. 2011 CSAS Annual Meeting (May 4-5, 2011, Halifax, Nova Scotia).

Goldhawk, C, Janzen, E, Gonzalez, L. Crowe, T, Kastelic, J, Pajor, E. and Schwartzkopf-Genswein, K. 2011. Location of sensors for sensing microclimate during cattle transport and the ability to estimate animal-level conditions. Animal Transport Association Conference.

Kastelic, J.P. Effects of pre-weaning nutrition in beef bulls is far-reaching. Prairie Post 2011 Bull Breeders. Pages A3, A10.

Shojaei, H, Kroetsch, T, Blondin, P, Wilde, R, Kastelic, J.P, Thundathil, J.C. Fertility markers in dairy bulls: Implications for improving cattle productivity. UCVN Research Day, Calgary, AB, March 15, 2011.

Gandolfi, F, Kastelic, J.P. Biology and therapeutic use of domestic animal stem cells – Foreword. Theriogenology 75:1371, 2011.

Costa, E, Uwiera, R.E, Kastelic, J.P, Selinger, L.B, Inglis, G.D. Non-therapeutic administration of chlortetracycline modulates immune responses to *Citrobacter rodentium* in mice. Canada/UK Gut and Health Workshop, St. Hyacinthe, QC, February 24, 2010 (poster).

Kastelic, J.P, Thundathil, J.C. All things testicular: normal and abnormal function and its assessment. Proceedings, 23rd Technical Conference, National Association of Animal Breeders, September 16-17, 2010, pp 51-56.

Kastelic, J.P. Are we conserving or condemning genetic diversity? Proceedings, International Strategic Programs for the Conservation of Animal Genetic Resources for Food and Agriculture (sponsored by OECD Co-operative Research Programme), p. 6-10, 2010.

Colazo, M.G, Ambrose, D.J, Kastelic, J.P. Practical uses for transrectal ultrasonography in reproductive management of cattle. Proceedings, World Buiatrics Congress, 2010, p. 146-156.

C. Goldhawk, E. Janzen, L. Gonzalez, T. Crowe, J. Kastelic, E. Pajor and K. Schwartzkopf-Genswein.

2010. Temperature during summer transport of Canadian feeder cattle at high and low loading densities. J. Anim. Sci. Vol. 88, E-Suppl. 2. p 318.

He, M.L, McAllister, T. A, Kastelic, J. P, Chung, Y.-H, Beauchemin, K.A, Mir, P.S, Aalhus, J. L, Dugan, M.E.R. and Aldai, N, 2010, Feeding flaxseed to beef cows increases concentrations of omega-3 fatty acids and linolenic acid biohydrogenation intermediates in subcutaneous fat. Joint Annual Meeting, American Dairy Science Association, Poultry Science Association, American Milk Producers Association, Canadian Society of Animal Science, and American Society of Animal Science, Denver, CO. July 11-15. Journal of Animal Science 88 (E. Suppl. 2): 67-68. Abstract M158.

Menon, A.G, Barkema, H.W, Wilde, R, Kastelic, J.P, Thundathil, J.C. An update on sperm defects in beef bulls in Alberta. Western Canadian Association of Bovine Practitioners Newsletter.

Gandolfi, F, Kastelic, J. Embryonic stem cells in domestic animals: Foreword. Theriogenology 74:491, 2010.

Ambrose, D.J, Colazo, M.G, Kastelic, J.P. The applications of timed artificial insemination and timed embryo transfer in reproductive management of dairy cattle. Revista Brasileira de Zootecnia 39: -292 (Special Supplement), 2010.

Gandolfi, F, Kastelic, J.P. A new initiative: Special review articles. Theriogenology 73:165, 2010.

Shojaei, H, Kroetsch, T, Blondin, P, Kastelic, J, Thundathil, J. Fertility markers in dairy bulls: Implications for improving cattle productivity. Bovine Genomic meeting, Calgary AB, May, 2010.

Shojaei, H, Kastelic, J.P, Thundathil, J. Could submicroscopic sperm characteristics be used to predict fertility in dairy bulls? Proceedings of the 3rd UCVN Research Day, March 8, 2010, p.18.

Menon, A.G, Wilde, R, Kastelic, J.P, Thundathil, J, Barkema, H.W. Effects of breed, age, and scrotal circumference on the prevalence of sperm abnormalities in Alberta beef bulls. Proceedings of the 3rd UCVN Research Day, March 8, 2010. p.13.

Colazo, M.G, Mapletoft, R.J, Martinez, M.F, Kastelic, J.P. Selección de los tratamientos hormonales disponibles en el mercado para la sincronización de celos en vaquillonas de carne [Selection of commercial hormone products for synchronization of estrus in beef heifers]. VIII Simosio Internacional de Reproduccion Animal, Cordoba, Argentina, 2009, 14 pp.

Kastelic, J.P, Gandolfi, F. On-line publication of supplementary material. Theriogenology 72:1, 2009.

Thundathil, J, Kastelic, J.P. Cell biological and molecular approaches for fertility predictions in bulls. Proceedings of the XXV Annual Convention of the Indian Society for Study of Animal Reproduction. December 9-12, 2009; Nammakkal, Tamilnadu, India, p.186-189.

Gandolfi, F, Kastelic, J.P. Supporting efforts to fund research using domestic animals for agricultural and biomedical research. Theriogenology 70:1409, 2008.

Ambrose, D.J, Estill, C.T, Rajamahendran, R, Colazo, M.G, Kastelic, J.P, Gordon, M, Corbett, R, Dinn, N.E, and Veira, D.M. Pregnancy establishment and loss in dairy cows fed a flaxseed-based ration: observations from two field trials. *Canadian Journal of Animal Science*, 88:151, 2008.

J. Thundathil, L. Newton, J.P. Kastelic, B. Wong, F. van der Hoorn. Na⁺/K⁺ATPase regulates tyrosine phosphorylation and capacitation in bovine sperm through multiple signal transduction pathways. *Reproduction in Domestic Animals* 43 (Supplement 3):66, 2008.

Kastelic, J.P. Evidence-based veterinary medicine. Proceedings, XXV Jubilee World Buiatrics Congress. Magyar Állatorvosok Lapja (Hungarian Veterinary Journal) 130 (Suppl. 1):55-58, 2008.

Kastelic, J.P, Mapletoft, R.J, Colazo, M.G, Martinez, M.F. Ovarian follicular development and synchronization of estrus and ovulation in cattle. Proceedings, XXV Jubilee World Buiatrics Congress. Magyar Állatorvosok Lapja (Hungarian Veterinary Journal) 130 (Suppl. 1):58-62, 2008.

L. Newton, B. Wong, J.P. Kastelic, F. van der Hoorn, J. Thundathil. Elevated testicular temperature modulates expression patterns of sperm proteins in Holstein bulls. Proceedings, 6th Biannual Meeting, Association for Applied Animal Andrology, 2008.

J.P. Kastelic, R. Wilde, A. Bielli, P. Genovese, S. Bilodeau-Goeseels, J Thundathil. Hyperthermia is more important than hypoxia as a cause of disrupted spermatogenesis. *Reproduction in Domestic Animals* 43 (Supplement 3):166, 2008.

Colazo MG, Mapletoft RJ, Martinez MF, Kastelic, JP. El uso de tratamientos hormonales para sincronizar el celo y la ovulación en vaquillas. Proceedings of II Xornada de Reproducción Bovina, Lalin, Spain, March 2008, p. 37-45.

Small, J, Dias, F, Pfeifer, L, Lightfoot, K, Colazo, M, Kastelic, J, Mapletoft, R. 2008. FSH at CIDR removal does not affect pregnancy rate to a CIDR-based, CoSynch protocol in lactating beef cows. *Reproduction, Fertility and Development* 20:90.

Pfeifer, L, Mapletoft, R, Adams, G, Kastelic, J, Small, J, Dias, F, Singh, J. 2008. The effect of progesterone on follicular development and pregnancy rate in beef cattle. *Reproduction, Fertility and Development* 20:90.

Pfeifer, L, Lightfoot, K, Colazo, M, Kastelic, J, Mapletoft, R. Administration of FSH at CIDR removal does not affect pregnancy rate to a CIDR-based, CoSynch protocol in lactating beef cows. *Reproduction, Fertility and Development* 20:90, 2008.

L.D Newton, B. Wong, J.P. Kastelic, F. van der Hoorn, J. Thundathil. Na/K-ATPase as a signalling molecule during mammalian sperm capacitation. Faculty of Veterinary Medicine Research Day, University of Calgary, August 7, 2007; (poster presentation).

Mapletoft, R.J, Adams, G.P, Kastelic, J.P. Timed artificial insemination (AI) in cattle: Improving use and

pregnancy rates. Final Report to the Agricultural Development Fund, February 28, 2007, 32 pp.

Kastelic, J.P. Progress in cloning: A retrospective from the pages of Theriogenology. Proceedings, 2007 Tsukuba Meeting for Animal Biotechnology: Progress in somatic cell nuclear transfer. Tsukuba, Japan, January 12-13, 2007, pp.11-13

Colazo, M.G, Dias, F.C, Lightfoot, K, Dochi, O, Kastelic, J.P. and Mapletoft, R.J. Pregnancy rate following timed AI in beef heifers treated with Cue-Mate and pLH or GnRH. Reproduction, Fertility and Development 19:122, 2007.

Mapletoft RJ, Colazo MG, Martínez MF, Kastelic JP. Synchronisation oestale et insémination ciblée dans les élevages de boucherie. Le médecin vétérinaire du Québec 2007; 36 :112-115.

Small, J.A, Colazo, M.G, Kastelic, J.P, Ward, D.R, Dochi, O. and Mapletoft, R.J. The effects of CIDR and eCG treatments in a GnRH-based protocol for timed AI or embryo transfer on pregnancy rates in lactating beef cows. Reproduction, Fertility and Development 19:127-128, 2007.

Reuter, T, Alexander, T. W, Inglis, G. D, Kastelic, J. P, Uwiera, R.R.E. and McAllister, T. A, 2007, In situ detection of fluorescent-labelled oligonucleotides crossing the intestinal barrier (Abstract; Poster). Canadian Regulatory System for Biotechnology (CRSB) Forum - Critical Path Forward "Looking Back and the Way Forward". Ottawa, ON. Jan. 22-23.

Inglis, D, Kastelic, J, Uwiera, R. Cattle, Campylobacter, and Campylobacteriosis: A Concern to the Canadian Beef Industry? Report to the Beef Cattle Research Council, November, 2006, 7 pp.

Kastelic, J.P. Wolfe, D.F. Evaluación de la aptitud reproductiva potencial del toro [Breeding Soundness Evaluation of the Bull]. XXXV Jornadas Uruguayas de Buiatria, pp. 10-15, 2007.

Kastelic, J.P, Brito, L.F.C, Barth, A.D. Efectos de la nutrición en la pubertad y fertilidad de los toros. [Effects of nutrition on puberty and fertility of bulls]. XXXV Jornadas Uruguayas de Buiatria, pp. 207-215, 2007.

Pereira, G.R, Lorenzo, P.L, Carneiro, G.F, Bilodeau-Goesseels, S, Kastelic, J.P, Pegorara, L, Pimentel, C.A, Esteller-Vico, A, Illera, J.C, Silvan, G, Casey, P, Liu, I.K.M. Effect of equine growth hormone (eGH) on in vitro maturation of equine oocytes and on steroidogenesis by their cumulus-oocyte complexes Animal Reproduction Science 94:364-365, 2006.

Concannon, P.W, England, G.C.W, Farstad, W, Linde-Forsberg, C, Lopes, M.D, Verstegen III, J.P, and Kastelic, J.P. "Foreword.", Theriogenology 66:1407-1409, 2006.

Ambrose, D.J, Estill, C.T, Colazo, M.G, Kastelic, J.P, Corbett, R. 2006. Conception rates and pregnancy losses in dairy cows fed a diet supplemented with rolled flaxseed. Proc. 7th International Ruminant Reproduction Symposium, 13-17 August, Wellington, New Zealand. Abst #50.

Kastelic, JP, Brito, LFC, Barth AD. Effects of environmental factors and nutrition on puberty in male

ruminants. Proceedings, 8th Budapest Workshop on Clinical Endocrinology; Endocrine Aspects in Management of Reproduction in Ruminants, 2006 (13 pp).

Kastelic, J.P. Principles of scientific writing. Proceedings, 8th Budapest Workshop on Clinical Endocrinology; Endocrine Aspects in Management of Reproduction in Ruminants, 2006 (10 pp).

Kastelic, JP, Brito, LFC, Barth AD. Effects of environmental factors and nutrition on puberty in male ruminants. Proceedings, 5th Biannual Meeting, Association for Applied Animal Andrology, 2006 (14 pp)

Barth AD, Brito LFC, Kastelic JP. The effect of nutrition on sexual development of bulls. Jornadas de discusión en biotecnologías de la reproducción en bovinos. Cordoba Animal Reproduction Institute, Cordoba, Argentina. June 30, 2006.

Davis, H, Colazo, M, Rutledge, M, Small, J, Kastelic, J, Mapletoft, R. Effects of plasma progesterone concentrations on LH release and ovulation in beef cattle given GnRH. Proceedings of the Annual Conference of the International Embryo Transfer Society, Orlando, FL, USA, 7-11 January, 2006. Reproduction, Fertility and Development 18:115, 2006.

Colazo, M, Small, J, Kastelic, J, Davis, H, Ward, D, Wilde, R, Mapletoft, R. Effects of a CIDR-based presynchronization and eCG on fertility for a GnRH-based timed-AI protocol in cattle. Proceedings of the Annual Conference of the International Embryo Transfer Society, Orlando, FL, USA, 7-11 January, 2006. Reproduction, Fertility and Development 18:114, 2006.

Kastelic, J. and Gandolfi, F. Experimental design, statistical analysis and quality papers. Theriogenology 63:697, 2005.

Pereira, G.R, Lorenzo, P.L, Carneiro, G.F, Bilodeau-Goesseels, S, Kastelic, J.P. and Liu, I.K.M. In vitro maturation of equine oocytes with growth hormone. Journal of Physiology and Biochemistry, 61:177, 2005.

Lorenzo, P.L, Pereira, G.R, Bilodeau-Goesseels, S, Carneiro, G.F, Kastelic, J.P. and Liu, I.K.M. Effect of growth hormone and inhibitors on the in vitro maturation of equine oocytes. Reproduction in Domestic Animals 40:378, 2005.

Mapletoft, R.J, Colazo, M, Martinez, M, and Kastelic, J.P. Application of fixed-time AI in beef management programs in Canada. Proceedings, VI Symposium Internacional de Reproduccion Animal, Cordoba, Argentina, 2005, 81-96.

Mapletoft, R.J. and Kastelic, J.P. Timed artificial insemination (AI) in cattle: improving use and pregnancy rates. Report to Saskatchewan Agricultural Development Fund, February, 2005, 9 pp.

Ambrose, J.D, Kastelic, J.P, Day, P.A, Wilde, R. and Small, J.A. Electronic or visual detection of estrus versus timed-AI. Advances in Dairy Technology 17:363, 2005.

Ambrose, J.D, Day, P.A. and Kastelic, J.P. Progesterone (CIDR) device-based timed AI protocols for dairy

heifers. *Advances in Dairy Technology* 17:362, 2005.

Ambrose, J.D. and Kastelic, J.P. Conception rates in dairy cows given prostaglandin at insemination. *Advances in Dairy Technology* 17:365, 2005.

Kastelic, J.P. and Ambrose, J.D. Effects of modifying a timed-insemination protocol (Ovsynch) on pregnancy rates in dairy cows. *ACTION FAX*, Jan 14, 2005

Colazo, M, Rutledge, M, Small, J, Kastelic, J, Siqueira, L, Ward, D. And Mapletoft, R. Effects of presynchronization with a used CIDR, and treatment with eCG on fertility in lactating cows subjected to a cosynch protocol. *Reproduction, Fertility and Development* 17:156-157. *Proceedings of the Annual Conference of the International Embryo Transfer Society, Copenhagen, Denmark, 8-12 January, 2005.*

Mapletoft, R, Colazo, M, Siqueira, L, Small, J, Rutledge, M, Ward, D. and Kastelic, J. Strategies to improve fertility with cosynch-CIDR protocols in beef cattle. *Reproduction, Fertility and Development* 17:159. *Proceedings of the Annual Conference of the International Embryo Transfer Society, Copenhagen, Denmark, 8-12 January, 2005.*

Martinez, M, Caccia, M, Colazo, M, Bó, G, Kastelic, J. and Mapletoft, R. Effects of dose on estradiol benzoate and progesterone in prostaglandin-treated beef heifers. *Reproduction, Fertility and Development* 17:160. *Proceedings of the Annual Conference of the International Embryo Transfer Society, Copenhagen, Denmark, 8-12 January, 2005.*

Kastelic, J.P. Folliculogenesis in cattle. *Proceedings, 1^o Simpósio Internacional de Reprodução Animal Aplicada (First International Symposium on Applied Animal Reproduction)*, pp. 17-26, 2004.

Kastelic, J.P. Importance of scrotal circumference to bull fertility. *Simmental Country*, June/July 2004, p. 16.

Small, J.A, Colazo, M.G, Kastelic, J.P. and Mapletoft, R.J. Effects of PGF presynchronization and CIDR on pregnancy rates in suckled beef cattle subjected to fixed-time insemination following estradiol and progesterone treatment to synchronize follicular growth, and PGF and estradiol cypionate to synchronize ovulation. *Journal of Animal Science* 82 (Supplement 1):367, 2004.

Kastelic, J.P. Scientific Writing. *Proceedings, 7th Budapest Workshop on Clinical Endocrinology*, June 28-July 2, 2004, Budapest, Hungary, 11 pp.

Kastelic, J.P. The effects of active immunization against GnRH on growth and reproductive function in cattle. *Workshop on anti-GnRH vaccination in animals. Proceedings, 15th International Congress on Animal Reproduction, Workshop Communications*, pp. 37-38, 2004.

Brito, L.F.C, Barth, A.D, Wilde, R.E, Mir, P.S. and Kastelic, J.P. Serum IGF-I, LH, and testosterone and their role on sexual development in beef bulls receiving different diets. *Proceedings, 15th International Congress on Animal Reproduction (Abstracts)* 1:170, 2004.

Mapletoft, R.J., Colazo, M.G., Erickson, N.E., Wilde, R. and Kastelic, J.P. Estrus rate and fertility in beef heifers resynchronized with CIDR, MGA, GnRH, or ECP followed timed-AI. Proceedings, 15th International Congress on Animal Reproduction (Abstracts) 2:329, 2004.

Colazo, M.G., Kastelic, J.P., Small, J.A. and Mapletoft, R.J. Follicle dynamics, estrus and ovulation in CIDR-treated cows given ECP, GnRH, or progesterone during diestrus. Proceedings, 15th International Congress on Animal Reproduction (Abstracts) 2:330, 2004.

Kastelic, J.P. and Ambrose, J.D. Effects of modified ovsynch protocols, including presynchronization, and/or post-breeding pLH or hCG, on pregnancy rates in dairy cows. Proceedings, 15th International Congress on Animal Reproduction (Abstracts) 2: 334, 2004.

Ambrose, J.D. and Kastelic, J.P. The influence of low doses of dinoprost administered concurrent with timed insemination on conception rates in dairy cows. Proceedings, 15th International Congress on Animal Reproduction (Abstracts) 2: 372, 2004.

Brito L.F.C., Barth A.D., Kastelic J.P., Rawlings N.C. and Wilde R. Effects of restricted nutrition during calthood on sexual development in beef bulls. Proceedings, Society for Theriogenology and American College of Theriogenologists Annual Conference & Symposium, 2004, p. 2.

Kastelic, J.P., Colazo, M.G., Martinez, M.F. and Mapletoft, R.J. Controlled breeding in beef cattle: approaches, management and economics. Proceedings, WCVN June Conference 2004, 15 pp.

Kastelic, J.P., Colazo, M.G., Small, J.A., Ward, D.R. and Mapletoft, R.J. Ovarian follicular dynamics in cows treated with a CIDR, estradiol and progesterone late in the estrous cycle. Reproduction, Fertility and Development 16:129-130, 2004.

Colazo, M.G., Small, J.A., Ward, D.R., Erickson, N.E., Kastelic, J.P. and Mapletoft, R.J. The effect of presynchronization on pregnancy rate to fixed-time AI in beef heifers subjected to a Cosynch protocol. Reproduction, Fertility and Development 16:128, 2004.

Small, J., Colazo, M., Ambrose, D., Mapletoft, R., Reeb, J. and Kastelic, J. Pregnancy rate following transfer of in vitro- and in vivo-produced bovine embryos to LH-treated recipients. Reproduction, Fertility and Development 16:213, 2004.

Mapletoft, R.J., Colazo, M.G., Small, J.A., Ward, D.R. and Kastelic, J.P. Effect of dose of estradiol valerate on ovarian follicular dynamics in CIDR-treated beef cows. Reproduction, Fertility and Development 16:130, 2004.

Ambrose, D.J. and Kastelic, J.P. Dietary fatty acids and dairy cow fertility. Advances in Dairy Technology 15:35-47, 2003.

Mapletoft, R.J., Colazo, M.G., Martinez, M.F. and Kastelic, K.P., 2003. Esteres de Estrógeno para la Sincronización de la Emergencia de la Onda Follicular y la Ovulación en Animales Tratados con Dispositivos con Progesterona. V Simposio Internacional de Reproducción Animal. Heuta Grande, Córdoba, Argentina, pages 55-70.

Ambrose, J.D, Kastelic, J.P, Corbett,, R, Day, P.A, Small, J.A. Petit, H. Pregnancy outcome in dairy cows fed diets supplemented with flaxseed or sunflowerseed. J. Anim. Sci 81 (Suppl. 1)/J. Dairy Sci. 86 (Suppl. 1):2, 2003.

Ambrose, J.D. and Kastelic, J.P. Effects of presynchronization and/or post-breeding treatment with pLH or hCG on pregnancy rates in dairy cows synchronized with an Ovsynch protocol. J. Anim. Sci 81 (Suppl. 1)/J. Dairy Sci. 86 (Suppl. 1):1, 2003.

Colazo, M.G, Whittaker, P.R, Kastelic, J.P. and Mapletoft, R.J. CIDR-based protocols for synchronizing bovine embryo transfer recipients without estrus detection. J. Anim. Sci 81 (Suppl. 1)/J. Dairy Sci. 86 (Suppl. 1):183, 2003.

Kastelic, J.P. Scrotal/testicular thermoregulation in bulls. Proceedings, Annual Meeting, Western Canadian Association of Bovine Practitioners 2003, 6 pp.

Kastelic, J.P. and Mapletoft, R.J. Synchronization of estrus and ovulation in cattle. Proceedings, Annual Meeting, Western Canadian Association of Bovine Practitioners 2003, 13 pp.

Ambrose, D, Kastelic, J, Aali, M, Dinn, N. and Rajamahendran, R. New protocols for fixed-time breeding in dairy heifers. Research Reports, University of British Columbia, February, 2003, 2 pp.

Kastelic, J.P, Colazo, M.G, Martínez, M.F. and Mapletoft, R.J. Effects of a CIDR or MGA, reproductive status, and estradiol, GnRH or pLH treatment on pregnancy rate to fixed-time AI in beef heifers. Theriogenology 59:223, 2003.

Gavaga, Q.A, Colazo, M.G. Martínez, M.F, Wilde, R.E. and Kastelic, J.P. Used CIDR and injectable progesterone for resynchronization of estrus in fixed-time inseminated beef heifers. Theriogenology 59:221, 2003.

Martínez MF, Colazo MG, Kastelic JP, Mapletoft RJ. Effects of estradiol and progesterone on plasma steroid and gonadotropin concentrations in CIDR-treated ovariectomized cows. Theriogenology 59:224, 2003.

Colazo, M.G, Gavaga, Q.A, Kastelic, J.P. and Mapletoft, R.J. The effects of estradiol cypionate at CIDR removal and interval to fixed-time AI on pregnancy rates in beef cattle. Theriogenology 59:215, 2003.

Ambrose, D.J, Rajamahendran, R, Kastelic, J.P, MacLean, M, Aali, M. Experimental protocols for the control of ovulation and fixed-time insemination in dairy heifers. 9th International Conference on Biotechnology of Animal Reproduction, Chennai, India, December 2-4, 2002.

Mapletoft, R.J, Colazo, M.G, Martinez, M. and Kastelic, J.P. Estrogen esters to synchronize follicular wave emergence and ovulation in CIDR-treated cattle. Proceedings, American Embryo Transfer Association, 2002, pp. 27-38.

Mapletoft, R, Martinez, M., Colazo, M. and Kastelic, J. Folliculogenesis and manipulation of

folliculogenesis for fixed-time AI in beef cattle. Proceedings of the Australian Embryo Transfer Society, 2002, pp. 6-19.

Schwartzkopf-Genswein, K.S, Kastelic, J.P, McAllister, T.A, Wilde, R. Silasi, R. and Milligan, D.A novel protocol to assess methods of reducing riding behaviour in feedlot cattle. Proceedings of the Fifth North American Regional Meeting of the International Society of Applied Ethology, July 20-21, 2002, Laval University, Quebec City, Canada, pg. 11.

Mapletoft, R.J. and Kastelic, J.P. Use of CIDR-B for regulating reproduction. J. Anim. Sci. Vol. 80, Suppl. 1/J. Dairy Sci. Vol. 85, Suppl. 1, 2002, p. 12.

Ambrose, J.D, Kastelic, J.P. and Rajamahendran, R. Pregnancy rates to a timed insemination protocol using estradiol cypionate or GnRH in Holstein heifers and cows. J. Anim. Sci. Vol. 80, Suppl. 1/J. Dairy Sci. Vol. 85, Suppl. 1, 2002, p. 267.

Kastelic, J.P. Evaluation of motility of bull spermatozoa. Bull Breeding Soundness Evaluation CDROM (Produced by University of Nebraska Great Plains Veterinary Educational Centre, 2002).

Brito, L.F.C, Barth, A.D, Bilodeau-Goeseels, S, Panich, P.L, and Kastelic, J.P. A comparison of methods to evaluate the plasmalemma of bovine sperm and their relationship with in vitro fertilization rate. Proceedings, 3rd Biannual Meeting of the Association for Applied Animal Andrology, Lake Balaton, Hungary, 2002, p. 32.

Coulter, G.H. and Kastelic, J.P. Needs and potential solutions for education in animal andrology. Proceedings, 3rd Biannual Meeting of the Association for Applied Animal Andrology, Lake Balaton, Hungary, 2002, p. 20.

Kastelic, J.P, Mapletoft, R.J. and Bó, G.A. Superovulation and CIDR protocols. Proceedings, Annual Convention, Canadian Embryo Transfer Association, 2002, pp. 2-22.

Mapletoft, R.J. and Kastelic, J.P. The use of Cystorelin or Lutropin-V and CIDR devices in estrus synchronization programs for fixed-time AI. Prepared for Merial Canada Inc. 2002, 14 pp.

Whittaker, P.R, Colazo M.G, Martínez, M.F, Kastelic, J.P. and Mapletoft, R.J. New or used CIDR-B devices and estradiol benzoate, with or without progesterone, for fixed-time AI in beef cattle. Theriogenology 57:391, 2002.

Martínez, M.F, Colaza, M.G, Kastelic, J.P. and Mapletoft, R.J. Effects of estradiol-17 β and estradiol benzoate on follicular dynamics in CIDR-B-treated beef heifers. Theriogenology 57:382, 2002.

Colazo M.G, Martínez, M.F, Whittaker, P.R, Kastelic, J.P. and Mapletoft, R.J. Estradiol cypionate (ECP) in CIDR-B-based programs for fixed-time AI in beef heifers. Theriogenology 57:371, 2002.

Ambrose, J.D, Kastelic, J.P, Rajamahendran, R, Small, J. Gonadotropin releasing hormone after timed-insemination to increase pregnancy rates in dairy cattle. Final Report: Alberta Agricultural Research

Institute Project No. 99M457. Edmonton, Alberta, Canada, 2001.

Kastelic, J.P. Effects of ambient temperature and blood flow on testicular temperature in bulls. Proceedings of the Annual Conference of the Society for Theriogenology, 2001, p.19.

Ambrose, J.D, Kastelic, J.P. and Rajamahendran, R. Ovarian and Hormonal Responses in Dairy Heifers Treated with Estradiol Cypionate, Porcine LH, GnRH, or Saline in a CIDR-based Synchronization Protocol. Proceedings of the Annual Conference of the Society for Theriogenology, 2001, p. 22.

Kastelic, J.P. and Small, J.A. New opportunities in beef heifer development. Proceedings, National Beef Sciences Seminar, 2001, pp. 249-255.

Kastelic, J.P. Computerized heat detection. Advances in Dairy Technology 13:393-402, 2001.

Ambrose, D.J, Kastelic, J.P, Rajamahendran, R. Pregnancy rates after CIDR-based timed AI using GnRH or estradiol cypionate in dairy heifers. Advances in Dairy Technology 13:444, 2001.

Mapletoft, R.J, Adams, G.P. and Kastelic, J.P. Synchronization of ovarian function for artificial insemination by appointment in beef cattle. Final Report. CABIDF Project 97AB139, 2001, 53 pp.

Martinez, M.F, Carruthers, T, Kastelic, J.P. and Mapletoft, R.J. The effects of three different gonadorelin products on luteinizing hormone release, ovulation, and follicular wave emergence in cattle. Report to Intervet Canada Ltd, 2001, 12 pp.

Ambrose, D. and Kastelic, J. Effect of PGF2 α treatment in conjunction with timed-insemination in dairy cattle. Report to Pharmacia and Upjohn Ltd, 2001, 5 pp.

D.J. Ambrose, R. Rajamahendran, J.P. Kastelic, J.A. Small. Ovulationssynchronisation und Trächtigkeitsraten in Holstein-Färsen nach intravaginaler applikation von progesteron mittels CIDR, Östradiolcypionat, LH vom schwein oder GnRH. Archiv für Tierzucht Dummerstorf (Synchronization of ovulation and conception rates in Holstein heifers given an intravaginal progesterone-releasing device (CIDR) and estradiol cypionate, porcine LH or gonadotropin releasing hormone. Archives of Animal Breeding), Vol 44 (special issue):77-79, 2001.

Kastelic, JP and Mapletoft, RJ. Causes of embryo death in an embryo transfer program. Proceedings of the SAVSEG Congress (South Africa). pp. 46-59, 2001.

Mapletoft, Reuben, Martinez, Marcelo, Adams, Gregg and Kastelic, John. Estrus synchronization, timed-AI and resynchronization of repeats. Proceedings of the SAVSEG Congress (South Africa). Pp 146-156, 2001.

Kastelic, J.P. Termoregulación del testículo del toro. Resúmenes, 4º Simposio Internacional de Reproducción Animal (Thermoregulation of bull testes. Proceedings, 4th International Symposium on Animal Reproduction), pp. 1-8, 2001.

Kastelic, J.P. Conceptos actuales en la detección de celo en bovinos. Resúmenes, 4º Simposio Internacional de Reproducción Animal. (Current Concepts in Estrus Detection in Cattle. Proceedings, 4th International Symposium on Animal Reproduction), pp. 73-81, 2001.

Mapletoft, R.J. and Kastelic, J.P. Inseminación artificial a tiempo fijo en ganado *Bos taurus*. Resúmenes, 4º Simposio Internacional de Reproducción Animal. Proceedings, 4th International Symposium on Animal Reproduction), pp. 83-93, 2001.

Martinez, M, Adams, G, Kastelic, J. and Mapletoft, R. Artificial insemination without heat detection in beef heifers. Large Animal Veterinary Rounds, Volume 1, Issue 2, April, 2001 (7 pp.).

Kastelic, J.P, Veira, D.M, Small, J.A. and Martinez, M.F. Efficacy of a CIDR-B device, LH and cloprostenol for fixed-time AI in beef heifers. Theriogenology 55:246, 2001.

Martinez, M.F, Kastelic, J.P, Adams, G.P, Cook, R.B. and Mapletoft, R.J. The use of estradiol and progesterone in PGF-based fixed-time AI and progestin-based resynchronization programs in beef heifers. Theriogenology 55:247, 2001.

Colazo, M.G, Martinez, M.F, Deyo, C, Carruthers, T.D, Kastelic, J.P. and Mapletoft, R.J. Effect of route of administration of dinoprost on pregnancy rate using different protocols for fixed time artificial insemination. Theriogenology 55:243, 2001.

Schwartzkopf-Genswein, K.S, Milligan, D, McAllister, T.A, Kastelic, J.P. and Silasi, R. Effect of brush/scratcher use on the incidence of bulling, feeding behaviour and performance of feedlot cattle. Final Report to Promold Inc, 2000, 9 pp.

Kastelic, J.P, Cook, R.B. and Coulter, G.H. Scrotal/Testicular Thermoregulation in Bulls. In: Topics in Bull Fertility, Chenoweth P.J. (Ed.). Published by: International Veterinary Information Service, 2000. (http://www.ivis.org/advances/Repro_Chenoweth/kastelic/chapter_frm.asp).

Gabaldi, S.H, Define, R.M, Uribe-Velasquez, Oba, E, Barros, C.M.Q. and Kastelic, J.P. Effect of scrotal insulation on plasma concentrations of testosterone, cortisol and thyroid hormones in Nelore bulls. Proceedings, 14th International Congress on Animal Reproduction (Abstracts, Vol. 1) 3:17 (p.121), 2000.

Martinez, M.F, Kastelic, J.P, Cook, R.B, Wilde, R.E. and Mapletoft, R.J. Estradiol benzoate for synchronization of wave emergence and ovulation in heifers given two doses of cloprostenol. Proceedings, 14th International Congress on Animal Reproduction (Abstracts, Vol. 2) 14:33 (p. 64), 2000.

Olson, W.O. and Kastelic, J.P. Effects of fresh versus frozen semen and time of AI on pregnancy rates in beef heifers synchronized with MGA and estradiol. Proceedings, Agri-Food 2000 Conference, July 15-19, 2000, p. 117.

Ambrose, J.D, Kastelic, J.P, Rajamahendran, R, Small, J. and Urton, G. Pregnancy rates in dairy cows after GnRH treatment at 7, 14, or 7 and 14 days after timed insemination. Proceedings, Agri-Food 2000 Conference, July 15-19, 2000, p.117.

Kastelic, J. and Freeze, B. Synchronization of estrus in beef cattle. Schering-Plough Animal Health, Technical Memo 2000-01-ESTRUMATE, May 1, 2000. 6 pp.

Kastelic, J. and Freeze, B. Synchronization of estrus in beef cattle. Handout distributed at Producer meetings in Swift Current and Moose Jaw, Saskatchewan, February 24, 2000. 4 pp.

Cook, R. B. and Kastelic, J.P. New approaches to suppressing reproductive function in feedlot cattle. Proceedings, National Beef Science Seminar, Lethbridge, Alberta, January 26-28, 2000 (6 pp).

Martinez, M.F, Kastelic, J.P, Adams, G.P. and Mapletoft, R.J. The use of CIDR-B devices in GnRH/LH based artificial insemination programs. *Theriogenology* 53:202, 2000.

Mapletoft, R, Martinez, M, Kastelic, J. and Adams, G. The application of new knowledge to the synchronization of estrus and ovulation in cattle. Proceedings, 2000 WCVN June Conference, 17 pp.

Kastelic, J.P. Scrotal/testicular thermoregulation in the bull. *Annual Review of Biomedical Sciences* 1:87-101, 1999.

Kastelic, J.P. Reproduction in Cattle: Performance, Possibilities, Problems. Proceedings, Clean Air Strategic Alliance Animal Health Workshop, November 29-30, 1999, pp. 56-61.

Barros, C.M.Q, Oba, E, Brito, L.F.C, Cook, R.B, Coulter, G.H, Groves, G, Olson, M. and Kastelic, J.P. Avaliação do fluxo sanguíneo e do oxigênio testicular em touros Aberdeen Angus (Testicular blood flow and oxygen evaluation in Aberdeen Angus bulls). *Revista Brasileira de Reprodução Animal* 23(3):218-220, 1999.

Brito, L.F.C, Silva A.E.D.F, Barbosa, R.T, Wilde, R. and Kastelic, J.P. Termorregulação testicular e sua relação com a produção e qualidade espermática em touros Canchim e Aberdeen Angus (Testicular thermoregulation and its relationship with sperm production and quality in Canchim and Aberdeen Angus bulls). *Revista Brasileira de Reprodução Animal* 23(3):220-222, 1999.

Gabaldi, S.H, Define, R.M, Barros, C.M.Q, Mascaro, K, Kastelic, J.P. and Rose, G.J.M. Efeitos da elevação da temperatura testicular nas características espermáticas em touros Nelores (Effect of elevated testicular temperature on spermatoc characteristics in Nelore bulls). *Revista Brasileira de Reprodução Animal* 23:222-224, 1999.

Mwansa, P.B, Kemp, R.A, Crews Jr, D.H, Kastelic, J.P, Bailey, D.R.C. and Coulter, G.H. Genetic and phenotypic relationships among bull and heifer reproductive traits in a multibreed beef cattle population. *Journal of Animal Science* 77:132, 1999.

Ambrose, J.D, Kastelic, J.P, Kappe, Y, Small, J, Rajamahendran, H.M.R. and Goonewardene, L. Ovulation responses, progesterone concentrations, and pregnancy rates in dairy cows after GnRH treatment at 7, 14, or 7 and 14 days after timed insemination. *Journal of Animal Science* 77:227, 1999.

Kastelic, J.P. and Mapletoft, R.J. Synchronizing estrus in beef cattle: past, present and future considerations. *Simmental Country*, February, 1999.

Mapletoft, R.J, Barth, A.D, Kastelic, J.P. and Coulter, G.H. Fertility and puberty in the young beef bull. *Simmental Country*, February, 1999.

Mapletoft, R. J, Martinez, M. F, Adams, G. P, Kastelic, J. P. and Burnley, C. A. The effect of estradiol preparation on follicular wave emergence and superovulatory response in norgestomet-implanted cattle. *Theriogenology* 51:411, 1999.

Martinez, M.F, Kastelic, J.P, Adams, G.P, Cook, R.B. and Mapletoft, R.J. Synchronization of ovulation for fixed-time insemination in heifers. *Theriogenology* 51:412, 1999.

Coulter, G.H. and Kastelic, J.P. Management programs for developing bulls. In: *Current Veterinary Therapy-Food Animal Practice* 4. W.B. Saunders Co, Edited by J.L. Howard and R. Smith, pp. 127-136, 1999.

Cook, R.B, Popp, J, Kastelic, J.P, Robbins, S. and Harland, R. Active immunization of bulls against GnRH: Effects on testes, feedlot performance and carcass characteristics. *Journal of Animal Science*, Vol. 76 (Supplement 1)/*Journal of Dairy Science* Volume 81(Supplement 1), p. 277, 1998.

Popp, J, Cook, R.B, Kastelic, J.P, McAllister, T.A, Robbins, S. and Harland, R. Effect of estrus suppression method and a trenbolone acetate/estradiol implant on growth performance and carcass characteristics of beef heifers. *Journal of Animal Science*, Vol. 76 (Supplement 1)/*Journal of Dairy Science* Volume 81(Supplement 1), p. 329, 1998.

Kastelic, J.P. and Mapletoft, R.J. Practical and philosophical considerations in estrus synchronization. *Proceedings, WCVM June Conference*, 3 pp, 1998.

Cook, R.B, Popp, J, Kastelic, J.P, Robbins, S. and Harland, R. The effect of active immunization of bulls against GnRH on feedlot performance, testes and carcass characteristics. *Proceedings, Canada West Society for Reproductive Biology, 20th Annual Workshop*, March 5-7, p. 16, 1998.

Martinez, M.F, Kastelic, J.P, Adams, G.P, Janzen, E, Olson, W.O. and Mapletoft, R.J. Alternative methods of synchronizing estrus and ovulation for fixed-time insemination in cattle. *Theriogenology* 49:350, 1998.

Kastelic, J.P. and Mapletoft, R.J. Synchronization of estrus in cattle. *Anais, IV Congress International da Associação Brasileira de Estudos Canadenses*, pp. 555-559, 1997.

Kastelic, J.P, Feliciano Silva, A.E.D, Unanian, M.M, Barbosa, R.T. and Freitas, A.R. O uso da ultrasonografia testicular em machos Nelore. *Anais, IV Simposio: O Nelore do Seculo XXI*, pp. 58-62, 1997.

Kastelic, J.P. and Mapletoft, R.J. Recent developments in estrus synchronization in cattle. *Curso de Post-Grado en Reproduccion Bovina. Instituto de Reproduccion Animal Cordoba, Cordoba, Argentina*, October,

1997, 12 pp.

Cook, R.B, Popp, J.D. and Kastelic, J.P. Active immunization against GnRH in combination with respiratory vaccines: effects on testes function, feedlot performance and carcass characteristics of bulls. Final Report. September 15, 1997, 17 pp.

Kastelic, J.P. Gonadal development and function in cattle. *Revista Brasileira de Reprodução Animal* 21(3):1-7, 1997.

Kastelic, J.P, Feliciano Silva A.E.D, Barbosa, R.T, Pineda, N.R, Freitas, A.R. and Cook, R.B. Relationships between pixel intensity of testicular ultrasonograms and semen morphology in Nelore and crossbred Zebu bulls. *Revista Brasileira de Reprodução Animal* 21(2):40-42, 1997.

Kastelic, J.P, Olson, W.O, Martinez, M, Mapletoft, R.J. and Machado, R. (1997) Sincronização do estro em bovinos Hereford-Angus com Crestar (Synchronization of estrus in Hereford-Angus cattle with Crestar). *Revista Brasileira de Reprodução Animal* 21(2):101-103, 1997.

Feliciano Silva, A.E.D, Kastelic, J.P, Unanian, M.M, Freitas, A.R, and Cook, R.B. Ultra-sonografia de machos Nelore na fase peri-puberal (Testicular ultrasonography of peripubertal Nelore bulls). *Revista Brasileira de Reprodução Animal* 21(2):34-36, 1997.

Kastelic, J.P, Feliciano Silva, A.E.D, Barbosa, R.T. and Machado, R. Novos métodos de avaliação da capacidade reprodutiva de touro (New technologies for breeding soundness evaluation of the bull). *Anais, III Convenção Nacional da Raça Canchim (São Carlos, Junho de 1997)*, pp. 35-45.

Kastelic, J.P. New realities and novel responses in livestock research. (Presented at EMBRAPA, CPNGC, Campo Grande, MS, Brazil), 5 pp, 1997.

Kastelic, J.P, Cook, R.B. and Coulter, G.H. Scrotal/testicular thermoregulation and the effects of increased testicular temperature in the bull. *Veterinary Clinics of North America, Food Animal Practice, Bull Infertility*. Volume 13, Number 2, July, 1997, pp. 271-282.

Kastelic, J.P. Synchronization of Estrus with Crestar. A final report for Intervet Canada Limited. January, 1997. 26 pp.

Martinez, M.F, Bergfelt, D.R, Adams, G.P, Kastelic, J.P. and Mapletoft, R.J. Synchronization of follicular wave emergence and its use in an estrus synchronization program. *Theriogenology* 47:145, 1997.

Kastelic, J.P. Synchronizing estrus in cattle. Fourth Annual Consolidated Technical Round Table, 1996, 1 pp.

Mapletoft, R.J. and Kastelic, J.P. Estrus synchronization in beef cattle. *Proceedings, Second International Symposium on Animal Reproduction, Cordoba, Argentina, 1996*, 14 pp.

Mapletoft, R.J, Barth, A.D, Kastelic, J.P, and Coulter, G.H. Management and selection of beef bulls. *Proceedings, Second International Symposium on Animal Reproduction, Cordoba, Argentina, 1996*, 19 pp.

Kastelic, J.P. Successful estrous synchronization in beef cattle. *Animal Science Research and Development: Meeting Future Challenges*, 1996, pp. 235-242.

Kastelic, J.P., Cook, R.B., Coulter, G.H., Kemp, R.A. and Bailey, D.R.C. Characteristics of Angus cattle from sires with large or average yearling scrotal circumference. *Proceedings (Abstracts), Canadian Society of Animal Science*, 46th Annual Conference, 1996, p. 61

Popp, J., Kastelic, J.P., Ayroud, M., Vanderkop, M., Yost, G., Majak, W., McAllister, T.A., Karren, D. and Cheng, K.-J. The role of melengestrol acetate in 3-methylindole-induced pulmonary lesions in nonpregnant ewes. *Proceedings (Abstracts), Canadian Society of Animal Science*, 46th Annual Conference, 1996, p. 30.

Kastelic, J.P. and Freeze, B.S. Profitable cow-calf management. *Mallinckrodt Veterinary Infovet*. January, 1996, 6 pp.

Kastelic, J.P. Induction of lambing. *The Shepherd's Journal*, January, 1996, pp. 3-4.

Kastelic, J.P., McCartney, D.H., Garcia, A., Olson, W. and Mapletoft, R.J. Estradiol and MGA for estrus synchronization in cattle. *Theriogenology* 45:322, 1996.

Kastelic, J.P. MGA for estrous synchronization and improvement of reproductive performance in beef cattle. Final Report, *Farming For the Future*, Project #940536, 1995, 31 pp.

Kastelic, J.P., Cook, R.B. and Coulter, G.H. Bulls must keep their cool. *Lethbridge Research Centre Weekly Letter No. 3171*, November 15, 1995, 1 pp.

Kastelic, J.P. Relationships among scrotal and testicular characteristics, sperm production, seminal quality and fertility in beef bulls. Final Report, *Farming For the Future*, Project #940544, 1995, 36 pp.

Kastelic, J.P., Cook, R.B. and Coulter, G.H. Scrotal/testicular thermoregulation in the bull. *Proceedings, American Society of Animal Science, Western Section*, 46:227-229, 1995.

Kastelic, J., Wilde, R., Mapletoft, R., McCartney, D., Hamilton, D. and Olson, W. Estradiol-17B and melengestrol acetate (MGA) for estrus synchronization in beef cattle. *Proceedings, American Society of Animal Science, Western Section*, 46:239-241, 1995.

Kastelic, J.P., Mears, G.J. and Wallins, G. Neonatal hypothyroidism induced with 6-propyl-2-thiouracil does not enhance gonadal development in bulls and heifers. *Proceedings, American Society of Animal Science, Western Section*, 46:223-226, 1995.

Coulter, G.H. and Kastelic, J.P. New concepts in testicular thermoregulation in the bull. *Proceedings, 3rd Hungarian Animal Reproduction Meeting, Papers Plenary and Poster Sessions 1995*, pp. 52-61.

Kastelic, J.P. and Mears, G.J. Factors controlling gonadal development in cattle. Final Report, *Farming For the Future*, Project #920153, 1995, 50 pp.

Kastelic, J.P. Vet advice: How to synchronize heat in beef cattle. Cattlemen, The Beef Magazine, May, 1995, p. 43.

Kastelic, J.P. Cattlemen's calving tips for 1995: Tips from a vet. Cattlemen, The Beef Magazine, February, 1995, pp. 18-22.

Kastelic, J.P. and Coulter, G.H. Selection and management of bulls to optimize fertility. Proceedings, Canadian Semen Production Symposium, February 16-19, 1995, pp. 47-58.

Kastelic, J.P. Recent developments in estrous synchronization in cattle. Proceedings, Western Canadian Association of Bovine Practitioners meeting, January 26, 1995, 8 pp.

Kastelic, J.P. and Coulter, G.H. Infrared thermography as a diagnostic tool. Proceedings of the International Beef Symposium, January 18-20, 1995, Great Falls, Montana: Special Report #SR58, Montana State University, Department of Animal and Range Sciences, pp. 86-90.

Tribulo, H.E, Bo, G.A, Kastelic, J.P, Pawlyshyn, V, Barth, A.D. and Mapletoft, R.J. Estrus synchronization in cattle with estradiol-17B and CIDR-B vaginal devices. Theriogenology 43:340, 1995.

Coulter, G.H. and Kastelic, J.P. Testicular thermoregulation in bulls. Proceedings of the 15th Technical Conference on Artificial Insemination and Reproduction, 1994, pp. 28-34.

Rahnefeld, G, Weiss, G, Coulter, G, Kastelic, J. and Ward, D. The importance of herd bulls in beef production. News notes. Agriculture and Agri-Food Canada, Research Branch, Research Centre, Brandon, Manitoba. Publication No. 140, September 16, 1994.

Kastelic, J.P, Coulter, G.H, Cook, R.B, Saacke, R.G. and Kozub, G.C. Importance of testicular thermoregulation on the quantity and quality of sperm production in young postpubertal and mature Holstein bulls. Final Report, Canadian Association of Animal Breeders, 1994, 41 pp.

Kastelic, J.P. New approaches to optimizing reproductive efficiency. Advances in Dairy Technology (Proceedings of the 1994 Western Canadian Dairy Seminar), 6:175-186, 1994.

Kastelic, J.P. and Coulter, G.H. Cattle researchers issue frostbite warnings. Canada/Alberta Livestock Research Trust Inc, News Release, February, 1994, 1 pp.

Kastelic, J.P. and Coulter, G.H. Elucidation of environmental and management factors influencing scrotal temperature in the bull as measured by infrared thermography. Final Report, Canadian Association of Animal Breeders, 1994, 37 pp.

Reed, B.K, Hunt, C.W, Momont, P.A, Kastelic, J.P. and Rode, L.M. Effect of forage:concentrate on digestive and reproductive function in beef cows. J. Animal Science 72 (Supplement 1):193, 1994.

Rahnefeld, G.W, Weiss, G.M, Coulter, G.H, Kastelic, J.P. and Ward, D. Relationship of reproductive traits

in young bulls to reproductive traits in heifers II. Agriculture Canada Report, 1993, 28 pp.

Kastelic, J.P. and Bailey, D.R.C. Beef cattle management. Grazing and livestock management workshop. Peigan Indian Band, Brockett, Alberta, 1993, 2 pp.

Kastelic, J.P. Effect of environmental and management factors on thermoregulation of the testicles and scrotum in bulls. Final Report, Farming For the Future, 1993, 41 pp.

Coulter, G.H. and Kastelic, J.P. Fisiologia de la espermatogenesis y la regulacion de la temperatura testicular en el toro (Physiology of spermatogenesis and temperature regulation in the bull). Proceedings, Simposio internacional de reproduccion animal. Cordoba, Argentina. October, 1993, 6 pp.

Cook, R.B, Kastelic, J.P. and Coulter, G.H. Cool bulls are more fertile. Lethbridge Research Station Weekly Letter No. 3084, September 22, 1993.

Kastelic, J.P. Embryonic development and embryonic loss in cattle. Society for Theriogenology, Proceedings for Annual Meeting, August, 1993, pp. 117-127.

Kastelic, J.P. and Coulter, G.H. Scrotal and testicular thermoregulation in the bull and ram. Society for Theriogenology, Proceedings for Annual Meeting, August, 1993, pp. 67-72.

Kastelic, J.P. and Coulter, G.H. Scrotal surface, scrotal subcutaneous, intratesticular, and intraepididymal temperatures in bulls. Proceedings, VII World Conference on Animal Production, Volume 3, pp. 360-361.

Kastelic, J.P. and Coulter, G.H, and Cook, R.B. Scrotal/testicular thermoregulation in bulls and rams. Proceedings, Canada West Society for Reproductive Biology, 15th Annual Winter Workshop, February 1993, pp. 23-25.

Coulter, G.H, Senger, P.L, Kastelic, J.P. and Mirando, M.A. Infrared thermography of the perineum for estrous detection in gilts, cows, and ewes. Journal of Animal Science, Vol. 71 (Supp. 1):214, 1994.

Lulai, C, Kastelic, J.P, Carruthers, T.C. and Mapletoft, R.J. Role of luteal regression in embryonic loss in cattle. 12th International Congress on Animal Reproduction, Congress Proceedings, Vol. 3, pp. 1255-1257, 1992.

Kastelic, J.P, Lulai, C. and Mapletoft, R.J. Role of luteal regression in early embryonic loss in cattle. Final Report, Farming For the Future, 1992, 38 pp.

Kastelic, J.P. Embryonic loss in cattle. Lethbridge Research Station Weekly Letter No. 3030, May 27, 1992, 1 pp.

Kastelic, J.P. Improving reproductive performance in beef females. Canadian National Breeder's School Handbook, 1992.

Kastelic, J.P. Ultrasound in cattle reproduction. Canadian National Breeder's School Handbook, 1992.

Lulai, C, Kastelic, J.P. and Mapletoft, R.J. Maternal recognition of pregnancy. Proceedings, WCVN June Conference, 1992: Advances in Large Animal Reproduction.

Coulter, G.H. and Kastelic, J.P. Effects of dietary energy on scrotal surface temperatures, seminal quality, and sperm production in young beef bulls. Canada West Society for Reproductive Biology, 14th Annual Winter Workshop, February, 1992.

Olson, W.O, Kastelic, J.P. and Murphy, B.D. Pituitary FSH-beta mRNA, serum FSH, and ovarian follicular development in follicular fluid-treated cows. Canada West Society for Reproductive Biology, 14th Annual Winter Workshop, February 1992.

Lulai, C, Dobrinski, I, Kastelic, J.P. and Mapletoft, R.J. Generation of new luteal tissue in pregnant heifers. Canada West Society for Reproductive Biology, 14th Annual Winter Workshop, February 1992.

Kastelic, J.P. Reproductive physiology of the bovine female. Mid-Winter Conference of the Alberta Veterinary Medical Association, 1991.

Kastelic, J.P, Knopf, L. and Ginther, O.J. Follicular dynamics and temporal associations among ovarian events in heifers. Journal of Animal Science 67 (Supplement 1):332-333, 1989.

Knopf, L, Kastelic, J.P, Ginther, O.J. and Schallenberge, E. Ultrasonographische und hormonanalytische untersuchungen zur follikelentwicklung während zyklus und frühgravidität beim rind (Ultrasonographic and endocrine investigations on the follicular development during estrous cycle and early pregnancy in cattle). Zuchthygiene 24:158, 1989.

Kastelic, J.P. and Ginther, O.J. Embryonic development and loss in cattle. Proceedings of the 72 Annual Convention of the Wisconsin Veterinary Medical Association, 1987, pp. 141-146.

Kastelic, J.P. and Ginther, O.J. Spontaneous and induced embryonic death in heifers. Proceedings, American Society of Animal Science, Midwestern Section meeting, 1987.

PRESENTATIONS

Principles of planning, conducting, analysing and communicating scientific research; Selected topics in animal reproduction. Faculty of Veterinary Medicine and Animal Science (FMVZ), Unesp, Botucatu; 6 days of presentations, March 25 to April 10, 2019.

Beef bulls should be fit and not fat! Saskatchewan Ranch Management Forum, Prince Albert, SK, February 2, 2019.

Progesterone in bovine reproduction. Annual Meeting, Western Canadian Association of Bovine Practitioners, Saskatoon, SK, January 18, 2019

Scientific Writing and Writing in English, Facultad de Ciencias Veterinarias, Universidad de Concepción, Campus Chillán, Chillán, Chile, January 8-11, 2019

Pathogenesis of postpartum disorders in dairy cattle. Hungarian Animal Reproduction Society, Szekesfehervar, Hungary, September 22, 2018.

Ovarian follicular development in cattle; Ovarian follicular dynamics and superovulation in cattle; Principles of scientific writing. 27 Annual Congress, Italian Embryo Transfer Society, Peschiera del Garda Verona, Italy, September 14-15, 2018.

Raising and selecting functional beef bulls. Animal Clinic of Strathmore client meeting, Strathmore, AB, March 27, 2018.

Breeding soundness evaluation in cattle; Evaluation of bull sperm morphology; Update on trichomoniasis and campylobacter in bulls; Physical abnormalities in breeding bulls. Annual Meeting, Saskatchewan Veterinary Medical Association, Saskatoon, SK, September 11, 2016

Use of ultrasound and infrared thermography for examining bulls; Effects of nutrition on puberty in bulls; and Bull abnormalities and their effect on sperm production and fertility. Symposium on Animal Reproduction, Guadalajara, Mexico, July 14-15, 2016.

Breeding soundness evaluation of the bull. European College of Bovine Health Management (internet-based presentation), January 17, 2013.

Ultrasonography for monitoring reproductive performance in the bull. Internacional Conference of the Asociación Española de Reproducción Animal. Córdoba, Spain, June 14, 2012.

How to write a scientific paper in English. Internacional Conference of the Asociación Española de Reproducción Animal. Córdoba, Spain, June 12-13, 2012.

Principles of scientific writing and manuscript preparation. Agriculture and Agri-Food Canada, Research Centre, Swift Current, SK, April 18, 2012.

Scientific writing workshop. Federal University of Viçosa, Viçosa, MG, Brazil, November 28-30, 2011.

Scientific writing workshop. State University of Ceará, Fortaleza, CE, Brazil, November 23-25, 2011.

Scientific writing workshop. Universidad de Chile, Santiago, Chile, November 10-11, 2011.

Principles of ultrasonography and ultrasonographic imaging of the reproductive tract in farm animals; The effects of nutrition on reproductive development (puberty) in male ruminants. I Simposio Latinoamericano de Reproducción Animal, Viña del Mar, Chile, November 8, 2011.

Scientific writing workshop. Clinic for Cattle, University of Veterinary Medicine, Hannover, Germany, September 26-30, 2011.

Scientific writing workshop. Research Institute for Animal Breeding and Nutrition, Herceghalom, Hungary, June 28 to July 1, 2011.

Principles of Scientific Writing. Lethbridge Research Centre, Lethbridge, AB, Canada, December 11, 2010.

Principles of Scientific Writing. Nova Scotia Agricultural College, Truro, NS. (RESM 4002/4010 class). Delivered by conference call, November 23, 2010.

Why are science and scientific research important? Nutrition, metabolic hormones, and sexual development in bulls. Scrotal/testicular thermoregulation in bulls. China Agricultural University, Beijing, China, October 25 to 29, 2010

Scientific writing workshop. China Agricultural University, Beijing, China, October 18 to 22, 2010

Scientific writing workshop. Clinic for Cattle, University of Veterinary Medicine, Hannover, Germany, September 27 to October 1, 2010.

Principles of Animal Care and Use: Core Module. Lethbridge Research Centre (June 30 and December 9, 2010); Animal Diseases Research Institute, Lethbridge (December 10, 2010); and Onefour Research Substation (December 14, 2010).

All things testicular: normal and abnormal function and its assessment. National Association of Animal Breeders, Biennial meeting, Milwaukee, WI, USA, September 17, 2010.

Development and thermoregulation of the bovine testis. Cornell Physiology/Endocrinology Seminar Series, Cornell University, Ithaca, NY, USA, September 15, 2010.

Principles of data handling and analysis, preparation of tables and figures; Principles of scientific writing; Writing an abstract; Scientific writing for non-native speakers of English. Cornell University, Ithaca, NY, USA, September 14-15, 2010.

Ramblings of an itinerant Theriogenologist. Presentation to dual degree (DVM-PhD) students. Cornell University, Ithaca, NY, USA, September 14, 2010.

A new paradigm in scrotal/testicular thermoregulation. 7th Biennial Meeting, Association for Applied Animal Andrology, Sydney, Australia, August 29, 2010.

Are we conserving or condemning genetic diversity? Keynote Address at the International Strategic Programs for the Conservation of Animal Genetic Resources for Food and Agriculture (sponsored by OECD Co-operative Research Programme). Vancouver, BC, Canada, July 17, 2010.

Principles of scientific writing. Federal University of Pará (UFPA), Belem, PA, Brazil, January 25, 2010.

Principles of scientific writing and writing in English. Federal University of Brasilia, Brasilia, Brazil, January 18-21, 2010.

Workshop for authors publishing scientific papers in English. Post-conference workshop, Annual Meeting, International Embryo Transfer Society, Cordoba, Argentina, January 13-14, 2010.

Scientific writing: Why is it important and how can we improve it? Lethbridge Research Centre, December 9, 2009.

Scientific writing workshop. Clinic for Cattle, University of Veterinary Medicine, Hannover, Germany, September 28-October 2, 2009.

Breeding soundness evaluation of the bull; Scrotal testicular thermoregulation in the bull; Effects of nutrition on puberty in bulls; Principles of ultrasonography and ultrasonographic imaging of the reproductive tract in farm animals; Use of anti-GnRH vaccines to suppress reproductive function in cattle. School of Veterinary Medicine, Federal University of Minas Gerais, Belo Horizonte, MG, Brazil, March 9-20, 2009.

Principles of science and scientific writing in English. School of Veterinary Medicine, Federal University of Minas Gerais, Belo Horizonte, MG, Brazil, March 2-6, 2009.

Pregnancy, placentation, and parturition. University of Calgary, Faculty of Veterinary Medicine, Guest Lecture (MDSC701), November 19, 2008.

Scientific writing workshop. Clinic for Cattle, University of Veterinary Medicine, Hannover, Germany, October 31-November 2, 2008.

Effects of nutrition on puberty in bulls. Clinic for Cattle, University of Veterinary Medicine, Hannover, Germany, October 30, 2008.

Scrotal/testicular thermoregulation in bulls. Clinic for Cattle, University of Veterinary Medicine, Hannover, Germany, October 29, 2008.

Scientific writing workshop. Faculty of Veterinary Science, Szent István University, Budapest, Hungary July 18-19, 2008.

Breeding soundness evaluation and semen analysis for predicting bull fertility. International Congress on Animal Reproduction, Budapest, Hungary, July 15, 2008.

Evidence-based veterinary medicine. XXV Jubilee World Buiatrics Congress, Budapest, Hungary, July 10, 2008.

Ovarian follicular development and synchronization of estrus and ovulation in cattle. XXV Jubilee World Buiatrics Congress, Budapest, Hungary, July 8, 2008.

Effects of nutrition on puberty in male ruminants. Lethbridge College Tour Group, Lethbridge Research Centre, Lethbridge, AB, April 17, 2008.

Scientific writing for non-native speakers of English. Pre-conference workshop, Annual Meeting, International Embryo Transfer Society, Denver, CO, USA, January 5-6, 2008.

Synchronization of estrus and ovulation in cattle. University of Veterinary and Pharmaceutical Sciences Brno, Brno, Czech, Republic, December 4, 2007.

Principles of scientific writing. University of Veterinary and Pharmaceutical Sciences Brno, Brno, Czech, Republic, December 3, 2007.

Scientific writing workshop: Pathways to an accepted manuscript. Faculty of Veterinary Science, Szent István University, Budapest, Hungary November 28-29, 2007.

Selected chapters in reproduction of farm animals (Ovarian follicular development, induction and synchronization of estrus and ovulation in cattle, horses, and small ruminants; Principles of ultrasonography and ultrasonographic imaging of the reproductive tract in farm animals; Scrotal testicular thermoregulation in the bull; Effects of nutrition on puberty in bulls). Faculty of Veterinary Science, Szent István University, Budapest, Hungary November 27-28, 2007.

Principles of science and scientific writing. Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, SK. November 19-20, 2007.

Principles of scientific writing. Federal University of Pará (UFPA), Belem, PA, Brazil, June 20-22, 2007.

Effects of nutrition on puberty in bulls. Federal University of Pará (UFPA), Belem, PA, Brazil, June 23, 2007.

Principles of scientific writing. Federal University of Minas Gerais (UFMG), Belo Horizonte, MG, Brazil on Thursday, June 15, 16, and 18, 2007.

Effects of nutrition on puberty in bulls. Federal University of Minas Gerais (UFMG), Belo Horizonte, MG, Brazil, June 19, 2007.

Principles of scientific writing. University of the Republic, Montivideo Uruguay, June 11-13, 2007.

Breeding soundness evaluation of the bull (Wet Lab). Annual Conference for Cattle Veterinarians, Paysandú, Uruguay, June 9, 2007.

Effects of nutrition on puberty in bulls. Breeding soundness evaluation of the bull. Annual Conference for Cattle Veterinarians, Paysandú, Uruguay, June 7, 2007.

Scientific writing for non-native speakers of English; Reviewing and editing manuscripts; Principles of scientific writing; Writing an abstract. Cornell University, School of Veterinary Medicine, Ithaca, NY,

USA. January 18-19, 2007.

Effects of nutrition on puberty and fertility in the bull. Cornell University, School of Veterinary Medicine, Ithaca, NY, January 18, 2007.

Workshop for authors publishing scientific papers in English. 2007 Tsukuba Meeting for Animal Biotechnology: Progress in somatic cell nuclear transfer. Tsukuba, Japan, January 12-13, 2007.

Progress in cloning: A retrospective from the pages of Theriogenology. Keynote address, 2007 Tsukuba Meeting for Animal Biotechnology: Progress in somatic cell nuclear transfer. Tsukuba, Japan, January 12, 2007.

Scientific writing for non-native speakers of English. Pre-conference workshop, Annual Meeting, International Embryo Transfer Society, Kyoto, Japan, January 6-7, 2007.

Effects of nutrition on puberty in bulls. 5th Biannual Meeting, Association for Applied Animal Andrology. St. Paul, MN, August 28, 2006.

Critical evaluation of scientific articles and other sources of information; an introduction to evidence-based veterinary medicine. Annual Meeting, Society for Theriogenology, St. Paul, MN, USA, August 26, 2006.

The art and science of scientific writing; Principles of preparing posters and powerpoint presentations. 8th Workshop on Clinical Endocrinology: Endocrine aspects in Management of Reproduction in Ruminants. Faculty of Veterinary Science, Szent István University, Budapest, Hungary, July 5-6, 2006.

Effect of environmental factors and nutrition on puberty in male ruminants. 8th Workshop on Clinical Endocrinology: Endocrine aspects in Management of Reproduction in Ruminants. Faculty of Veterinary Science, Szent István University, Budapest, Hungary, July 4, 2006.

Scientific writing for non-native speakers of English. Pre-conference workshop, Annual Meeting, International Embryo Transfer Society, Orlando, Florida, USA, January 7-8, 2006.

Principles of science and scientific writing. University of Lethbridge, Graduate Students Association Seminar, Lethbridge, AB, November 16, 2005.

Scientific writing. University of Lethbridge Pre-Vet Club, Lethbridge, AB, October 29, 2005.

Experiences in Brazil. Lethbridge Research Centre Seminar, Lethbridge, AB, October 26, 2005.

The responsibilities and rewards of editing an international scientific journal. Meeting of Scientific Editors, University of Sao Paulo, Sao Paulo, SP, Brazil, October 6, 2005.

Successful publishing in an English language journal. University of Sao Paulo, Sao Paulo, SP, Brazil, October 3-5, 2005.

Folliculogenesis in cattle. II Workshop de Reprodução Animal, Pelotas, RS, Brazil, September 29, 2005.

Scientific writing. Embrapa Clima Temperado, Pelotas, RS, Brazil, September 28, 2005.

Scientific writing for non-native speakers of English. Pre-conference workshop, Annual Meeting, International Embryo Transfer Society, Copenhagen, Denmark, January 8-9, 2005.

Scientific writing from an editor's perspective. University of Saskatchewan, Reproductive Biology Seminar Series, Saskatoon, SK, December 10, 2004.

Scientific writing. University of Lethbridge Neuroscience Seminar, Lethbridge, AB, November 19, 2004.

Principles of scientific writing. UNESP Botucatu, Botucatu, SP, Brazil, October 26, 2004.

Synchronization of ovulation in cattle. Scrotal/testicular thermoregulation in cattle. UNESP Botucatu, Botucatu, SP, Brazil, October 25, 2004.

Principles of scientific writing. Federal University of Santa Maria, Santa Maria, RS, Brazil, October 18-19, 2004.

Folliculogenesis in cattle. 1^o Simpósio Internacional de Reprodução Animal Aplicada (First International Symposium on Applied Animal Reproduction). Londrina, PR, Brazil, October 14, 2004.

Inducing abortion in feedlot heifers. Animal Health Seminar for Veterinarians. Lethbridge, AB, October 1, 2004.

The effects of active immunization against GnRH on growth and reproductive function in cattle. Workshop on anti-GnRH vaccination in animals. 15th International Congress on Animal Reproduction. Porto Seguro, BA, Brazil, August 9, 2004.

Scrotal/testicular thermoregulation in bulls. 4th Biannual meeting, Association for Applied Animal Andrology, Porto Seguro, BA, Brazil, August 7, 2004.

Principles of scientific writing. 7th Budapest Workshop on Clinical Endocrinology, University of Veterinary Science, Budapest, Hungary, July 1, 2004.

Controlled breeding in beef cattle: approaches, management and economics. June Conference 2004, University of Saskatchewan, Saskatoon, SK, June 12, 2004.

Scrotal/testicular thermoregulation in bulls. Interdisciplinary Reproductive Biology Group, University of Florida, Gainesville, Florida, January 29, 2003.

Scrotal/testicular thermoregulation in bulls. Synchronization of estrus and ovulation in cattle. Annual Meeting, Western Canadian Association of Bovine Practitioners 2003, Calgary, AB, January 16, 2003.

Bovine breeding soundness evaluation CD-ROM. 3rd Biannual Meeting of the Association for Applied Animal Andrology, Lake Balaton, Hungary, August 27, 2002.

A comparison of methods to evaluate the plasmalemma of bovine sperm and their relationship with in vitro fertilization rate. 3rd Biannual Meeting of the Association for Applied Animal Andrology, Lake Balaton, Hungary, August 27, 2002.

Superovulation and CIDR protocols. Annual Convention, Canadian Embryo Transfer Association, Quebec City, Quebec, August 24, 2002.

Evaluating motility of bovine semen. Bull Breeding Soundness Panel, Breeding Soundness Symposium and Wetlab, Annual Conference, Society for Theriogenology, Colorado Springs, Colorado, August 8, 2002.

Evaluation of a killed Neospora vaccine in beef cattle. Abstract presented at the Annual Conference, Society for Theriogenology, Colorado Springs, Colorado, August 8, 2002.

The use of Cystorelin or Lutropin-V and CIDR devices in estrus synchronization programs for fixed-time AI. Meril Veterinary Partnership Meeting for Quebec Dairy Practitioners. Alexandria Bay, New York, June 15, 2002.

Synchronizing estrus in cattle. Producer meetings, Lethbridge and Medicine Hat, Alberta and Swift Current, Saskatchewan. February 18 and 19, 2002.

Temperature regulation of the testes in bulls. Association for Applied Animal Andrology, Milwaukee, Wisconsin, September 28, 2000.

Effects of fresh versus frozen semen and time of AI on pregnancy rates in beef heifers synchronized with MGA and estradiol. Canadian Society of Animal Science Technical Session, Agri-Food 2000 Conference, Winnipeg, Manitoba, July 18, 2000.

Synchronizing estrus in beef cattle. Producer meetings, Swift Current and Moose Jaw, Saskatchewan, February 24, 2000.

Implications of new methods of estrus suppression on animal health. National Beef Sciences Seminar, Lethbridge, Alberta, January 27, 2000.

Infrared thermography as a tool for bull evaluation. Ag-Days Bull Congress, Brandon Manitoba, January 19-21, 1999.

Fat affects bull fertility. Peace Country Bull Congress, Fairview Alberta, January 16, 1999.

Synchronization of estrus in cattle. Western College of Veterinary Medicine June Conference, University of Saskatchewan, Saskatoon, Saskatchewan, June 19, 1998.

Breeding soundness evaluation and scrotal/testicular thermoregulation in beef bulls. USDA Meat Animal Research Centre, Clay Centre, Nebraska, April 22, 1998.

Estrus synchronization in dairy cattle. Producer meeting, Lethbridge, Alberta, March 12, 1998.

Estrus synchronization in beef cattle. Producer meeting, Lethbridge, Alberta, March 11, 1998.

The use of testicular ultrasonography in Nelore bulls. IV Simposio: O Nelore do Seculo XXI. Uberaba, MG, November 17, 1997.

Synchronization of estrus in cattle. IV Congress International da Associação Brasileira de Estudos Canadenses, Uberlandia, MG, November 13, 1997.

Optimizing calving rates in cattle. UNESP Jaboticabal, Jaboticabal, SP, November 3, 1997.

Principles of ultrasound imaging; Ultrasound imaging of the reproductive tract of cattle. Course on reproductive ultrasound in cattle. Federal University of Uberlandia, Uberlandia, MG, October 27 to 29, 1997.

Principles of ultrasound imaging; Ultrasound imaging of the reproductive tract of cattle. Course on ultrasound imaging of the reproductive tract of the bovine species. EMBRAPA, CGNGC, Campo Grande, MS, October 20 to 23, 1997.

Ovarian follicular dynamics and estrus synchronization in cattle; Puberty in cattle; Breeding soundness evaluation and scrotal/testicular thermoregulation in bulls; The art and science of animal research; Principles of scientific writing. Post-graduate course on animal reproduction, UNESP Botucatu, Botucatu, SP, October 13 to 15, 1997.

Principles of ultrasound imaging; Ultrasound imaging of the reproductive tract of cattle. Course on bovine embryo transfer. EMBRAPA, CPPSE, São Carlos, SP, Brazil, October 7, 1997.

Ovarian follicular dynamics and estrus synchronization in cattle; Principles of ultrasound imaging and examination of the reproductive tract in cattle; Breeding soundness evaluation and scrotal/testicular thermoregulation in bulls. Post-graduate course on animal reproduction, Institute de Reproduccion Animal Cordoba, Cordoba, Argentina, October 4 and 5, 1997.

Importance of the Bull; Anatomy and Physiology of the Male Reproductive Tract; New Technologies for Reproductive Evaluation. Course on evaluation of bull fertility using new technologies. EMBRAPA, CPPSE, São Carlos, SP, Brazil, September 16 to 18, 1997.

Gonadal development and function in cattle. XII Congresso Brasileiro de Reprodução Animal, Caxambu, MG, Brazil, August 5, 1997.

New technologies for breeding soundness evaluation of the bull. Seminar for students, EMBRAPA, CPPSE, São Carlos, SP, Brazil, July 17, 1997.

New realities and novel responses in livestock research. EMBRAPA, CGNGC, Campo Grande, MS, July 2, 1997.

New technologies for breeding soundness evaluation of the bull. III Convenção Nacional da Raça Canchim, EMBRAPA, CPPSE, São Carlos, SP, Brazil, June 13, 1997.

Improving reproductive efficiency in cattle. EMBRAPA, CPPSE, São Carlos, Brazil, March 6, 1997.

Selection and management of bulls to optimize fertility; Successful estrus synchronization. Fall Meeting, Ontario Association of Bovine Practitioners, Guelph, Ontario, September 21, 1996.

Successful estrous synchronization in beef cattle. Annual Meeting, Canadian Society of Animal Science, Lethbridge Alberta, July 10, 1996.

Characteristics of Angus cattle from sires with large or average yearling scrotal circumference. Annual Meeting, Canadian Society of Animal Science, Lethbridge Alberta, July 10, 1996.

Nutritional management of bulls; Management of replacement heifers; Managing beef females to improve reproductive performance. 1996 Western College of Veterinary Medicine June Conference, University of Saskatchewan, Saskatoon, Saskatchewan, June 20 and 21, 1996.

Livestock research at the Lethbridge Research Centre. Green Acres Kiwanis Club. Lethbridge, Alberta, May 21, 1996.

Infrared thermography. Career Fair, St. Francis Jr. High School. Lethbridge, Alberta, May 10, 1996.

Management and estrus synchronization of beef cattle. Chinook Applied Research Association, Monitor, Alberta, February 13, 1996.

Profitable cow-calf management. Mallinckrodt Veterinary Inc, National Sales Meeting. Toronto, Ontario, February 10, 1996.

Breeding soundness evaluations of bulls. Southern Alberta Large Animal Practitioner's Group. Lethbridge, Alberta, February 8, 1996.

Ultrasonographic evaluation of the female bovine reproductive tract. Department of Animal Reproduction and Veterinary Radiology, Faculty of Veterinary Medicine and Animal Science, Sao Paulo State University, Botucatu, S.P, Brazil, September 25, 1995.

Ultrasonographic evaluation of the female bovine reproductive tract. Tenth Annual Meeting, Brazilian Society for Embryo Transference, Aguas de Lindoia, S.P, Brazil, September 24, 1995.

Measurement and importance of scrotal circumference in beef bulls. Red Angus Association Tour, Blue Spruce Stock Farm, Sangudo, Alberta, August 6, 1995.

Estradiol-17B and melengestrol acetate (MGA) for estrus synchronization in beef cattle. Western Section, American Society of Animal Science, and Western Branch, Canadian Society of Animal Science, Lethbridge, Alberta, July 8, 1995.

Visit with a vet. Lethbridge Public Library, Lethbridge, Alberta, May 27, 1995.

Selection and management of bulls to optimize fertility. Canadian Semen Production Symposium, Balzac, Alberta, February 17, 1995.

Recent developments in estrous synchronization in cattle. Western Canadian Association of Bovine Practitioners meeting, Calgary, Alberta, January 26, 1995.

Infrared thermography as a diagnostic tool. International Beef Symposium, Great Falls, Montana, January 19, 1995.

New approaches to optimizing reproductive efficiency. Western Canadian Dairy Seminar, Red Deer, Alberta, February 25, 1994.

Beef cattle management. Grazing and livestock management workshop. Peigan Indian Band, Brockett, Alberta, November 30, 1993.

Embryonic development and embryonic loss in cattle; Scrotal/testicular thermoregulation in bulls and rams. Society for Theriogenology Annual Meeting, Jacksonville, Florida, August 13 and 14, 1993.

Canada West Society for Reproductive Biology, 15th Annual Winter Workshop, Saskatoon, Saskatchewan, February 27, 1993.

Improving reproductive efficiency in the beef female. Canadian Embryo Transfer Association/Canadian Association of Animal Breeders Annual Convention, Halifax, Nova Scotia, September 15, 1992.

Ultrasonic assessment of the corpus luteum in cattle; Ultrasonic assessment of the conceptus in cattle; Embryonic loss in cattle; Ultrasonic assessment of reproductive organs in bulls. 1992 Western College of Veterinary Medicine June Conference, University of Saskatchewan, Saskatoon, Saskatchewan, June 18 and 19, 1992.

Improving reproductive performance in beef females; Ultrasound in cattle reproduction. Fifth Annual Canadian National Breeder's School, University of Guelph, Guelph, Ontario, May 29, 1992.

Effects of dietary energy on scrotal surface temperatures, seminal quality, and sperm production in young beef bulls. Canada West Society for Reproductive Biology, 14th Annual Winter Workshop, Edmonton, Alberta, February 28, 1992.

Pituitary FSH-beta mRNA, serum FSH, and ovarian follicular development in follicular fluid-treated cows. Canada West Society for Reproductive Biology, 14th Annual Winter Workshop, Edmonton, Alberta,

February 28, 1992.

Factors affecting postpartum anestrus in beef cows. Annual Meeting, Pinhorn Grazing Association, Foremost, Alberta, January 13, 1992.

Improving reproductive performance and profitability in beef bulls and females. Alberta Agriculture Seminar for Cow-Calf Producers, Highwood Auction Market, High River, Alberta, December 3, 1991.

The utilization of ultrasonic imaging to study reproductive biology in cattle. Lethbridge East Rotary Club, Lethbridge, Alberta, December 2, 1991.

Improving reproductive performance and productivity in beef cows. Agriculture Canada Research Station Seminar, Lethbridge Research Station, Lethbridge, Alberta, February 14, 1991.

Reproductive physiology of the bovine female. Mid-Winter Conference of the Alberta Veterinary Medical Association, Calgary, Alberta, February 5, 1991.

Role of the corpus luteum in embryonic development and embryonic loss in ponies and heifers. PhD seminar, Department of Veterinary Science, University of Wisconsin-Madison, Madison, Wisconsin, July 25, 1990.

Follicular dynamics and temporal associations among ovarian events in heifers. American Society of Animal Science and American Dairy Science Association Combined Annual Meeting, Lexington, Kentucky, August 1, 1989.

Embryonic development and embryonic loss in cattle. Department of Herd Medicine and Theriogenology, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, January 4, 1989.

Principles of ultrasonography and ultrasonographic examination of the reproductive tract of mares and heifers. Central California Veterinary Medical Association, Fresno, California, June 4, 1988.

Ultrasonographic evaluation of embryonic development and embryonic loss in cattle. Endocrinology-Reproductive Physiology Seminar, Madison, Wisconsin, April 14, 1988.

Ultrasonic evaluation of the bovine conceptus. International Embryo Transfer Society Meeting, Fort Collins, Colorado, January 17, 1988.

Role of the corpus luteum in embryonic development and embryonic loss in heifers and ponies. Department of Veterinary Science, University of Wisconsin-Madison, Madison, Wisconsin, December 30, 1987.

Embryonic development and loss in cattle. Seventy-Second Annual Meeting of the Wisconsin Veterinary Medical Association, Green Bay, Wisconsin, October 6, 1987.

Spontaneous and induced embryonic death in heifers. American Society of Animal Science, Midwestern Section meeting, Des Moines, Iowa, March 24, 1987.

John Patrick Kastelic, DVM, PhD, Dipl. ACT

Dr. Kastelic was raised on a dairy farm near Edmonton, Alberta Canada. He received his DVM (with distinction) from the U. of Saskatchewan (1982), spent 2 years in private veterinary practice and received an MS and PhD in Reproductive Physiology in 1988 and 1990 from the U. of Wisconsin-Madison. After 22 years as a Research Scientist at the Agriculture and Agri-Food Canada Lethbridge Research Centre, in 2012, he was appointed Professor of Theriogenology at the U. of Calgary, Faculty of Veterinary Medicine. He is author/co-author of >300 peer-reviewed papers and 5 book chapters. He has edited thousands of papers, served as Co-Editor-in-Chief of *Theriogenology* (2003-2013) and Co-Editor-in-Chief of the *Canadian Veterinary Journal* (since 2021) and has given presentations and workshops on scientific writing in 18 countries.