Leslie C. Sharkey

Veterinary Clinical Sciences Department Cummings School of Veterinary Medicine Tufts University 200 Westboro Rd. North Grafton, MA 01536

Education

The Ohio State University		
Columbus, Ohio	Ph.D.	1994-1998
The Ohio State University	Residency in Veterinary Clinical Pathology	1993-1996
The Ohio State University	D.V.M.	1988-1993
University of Michigan		
Ann Arbor, Michigan	B.S. with Honors	1983-1987

Faculty Appointments

1998 - 2003	Assistant Professor, Department of Biomedical Sciences, Tufts University School of Veterinary Medicine, North Grafton, MA
2003 - 2007	Associate Professor, Department of Veterinary Clinical and Population Sciences, University of Minnesota College of Veterinary Medicine, St. Paul, MN
2007 - 2014	Associate Professor, Department of Clinical Sciences, University of Minnesota College of Veterinary Medicine, St. Paul, MN
	2004-present Residency Training Coordinator Clinical Pathology
	2006-present Laboratory Director, Clinical Pathology Laboratory
2013-2016	Vice Chair, Veterinary Clinical Sciences Department University of Minnesota College of Veterinary Medicine
2014-2017	Professor, Department of Veterinary Clinical Sciences, University of Minnesota College of Veterinary Medicine, St. Paul, MN
2017-present	Professor and Chair, Department of Veterinary Clinical Sciences, Cummings School of Veterinary Medicine, Tufts University, North Grafton, MA

Specialty Certification

1999 Diplomate American College of Veterinary Pathologists (Clinical Pathology)

Licensure

Minnesota

Awards and Honors

1995 Phi Kappa Phi Honor Society

1996	Phi Zeta, the Honor Society of Veterinary Medicine, President Phi Zeta Tufts Chapter 2002-2005
2001	Basic Science Professor of the Year, Tufts Veterinary School (Teaching award)
2002	Basic Science Professor of the Year, Tufts Veterinary School (Teaching award)
2003	Basic Science Professor of the Year, Tufts Veterinary School (Teaching award)
2003	Nominated by the Tufts Veterinary School Class of 2004 for SAVMA Teaching Excellence Award in Clinical Sciences
2004	Recognized for Excellence in Women's Health Research: Pregnancy and progesterone exacerbate hypertension in spontaneous hypertension/heart failure rats. Women's Health Research Conference, Minneapolis, MN
2006	Carl Norden-Pfizer Distinguished Teacher Award
2008	Veterinary Clinical Sciences Excellence in Teaching Award, University of Minnesota
2008	Excellence in Course Coordination Award, University of Minnesota College of Veterinary Medicine for Veterinary Clinical Pathology course
2010	Veterinary Clinical Sciences Excellence in Teaching Award, University of Minnesota
2010	Inductee Academic Health Center Academy for Excellence in the Scholarship of Teaching and Learning
2011	Carl Norden-Pfizer Distinguished Teacher Award
2012	Veterinary Clinical Sciences Excellence in Teaching Award, University of Minnesota

Memberships in Professional and Scientific Societies

1993 - present	American Veterinary Medical Association
1993 - present	American Society for Veterinary Clinical Pathology
1996 - 1998	Greater Burlington Veterinary Medical Association
1999 - present	American College of Veterinary Pathologists
1999 - 2003	Omicron Chapter Alpha Psi Veterinary Fraternity Faculty Advisor Omicron Chapter of Alpha Psi Veterinary Fraternity 1999- 2003
2000	American Society of Hypertension
2002 - 2003	Massachusetts Veterinary Medical Association
2011-present	European Society for Veterinary Clinical Pathology

Editorial Positions

American Journal of Veterinary Research: 2006 Veterinary Clinical Pathology: 2006 – 2010

Veterinary Pathology: 2017-present

Publications

Peer reviewed journals

- 1. Sharkey, LC, T.J. Rosol, A. Grone, H. Ward, and C. Steinmeyer. Production of granulocyte colony-stimulating factor and granulocyte macrophage colony-stimulating factor by carcinomas in a dog and a cat with paraneoplastic leukocytosis. *J. Vet. Int. Med.* 1996; 10:405.
- Sharkey, LC, B.J. Holycross, S. Park, S.A. McCune, R. Hoversland, and M.J. Radin. Effect
 of Ovariectomy in heart failure prone SHHF/Mcc-fa^{cp} rats. Am. J. Phys. 1998;
 275(Regulatory and Integrative Physiol. 44): R1968.
- 3. **Sharkey, LC**, J. Gliatto, and J. Gallagher. Cytologic diagnosis of tumoral calcinosis in the canine. *Vet. Clin. Path.* 1999; 29:147-149.
- 4. **Sharkey, LC**, B.J. Holycross, S.A. McCune, and M.J. Radin. Effect of ovariectomy and estrogen replacement on cardiovascular disease in SHHF/Mcc-fa^{cp} rats. *J. Mol. Cell. Cardiol.* 1999; 31:1527-1537.
- 5. McClure TJ, Young KM, Fiste BS, **Sharkey, LC**, Lunn DP. Immunophenotypic classification of leukemia in three horses. *J. Vet. Int. Med.* 2001;15:144-152.
- 6. **Sharkey, LC**, B.J. Holycross, S.A. McCune, and M.J. Radin. Obese female SHHF/Mcc-fa^{cp} rats resist the antihypertensive effects of renin-angiotensin system inhibition. *J of Clin Exp Hypertension*. 2001;23:227-239.
- 7. **Sharkey, LC**, McCune, S, Yuan, O., Lange, C. and Fray, J. Spontaneous pregnancy-associated hypertension and fetal growth restriction in rats. *Am. J. Hypert*. 2001;14:1058-1066.
- 8. Radin MJ, Holycross BJ, **Sharkey, LC**, Shiry L, McCune SA. Gender Modulates Neurohumoral Activation in the SHHF Rat Model of Genetic Hypertension and Heart Failure. *J Appl Physiol* 2002;92:935-940.
- 9. Simpson GIC, **Sharkey, LC**, Fray JCS. Altered abundance of messenger RNA transcripts whose products have membrane attachment sites in pregnancy induced hypertension. *Journal of Biological Systems*. 2002;10:447-461.
- 10. Christopher MM, Stokol T, **Sharkey, LC**. Guidelines for resident training in clinical pathology. I: *Clinical chemistry. Vet Clin Path.* 2003;32:202-208.
- 11. **Sharkey, LC**, McDonnell JJ, Alroy J. Cytology of a mass on the meningeal surface of the left brain in a dog. *Vet Clin Path* 2004;33:111-114.
- 12. MacGregor JM, Rozanski EA, McCarthy, **Sharkey, LC**, Winter MD, Rush JE. Cholesterol-based pericardial effusion and aortic thromboembolism in a 9-year-old mixed breed dog with hypothyroidism. *J Vet Intern Med* 2004;18:354-358.
- 13. Nolen-Walston R, Hanelt L, D'Oench S, Paradis MR, **Sharkey, LC**. Acute recumbency associated with Anaplasma phagocytophilum infection in a horse. *J Am Vet Med Assoc* 2004;224:1964-1966.
- 14. **Sharkey, LC**, Kirchain S, McCune SA, Simpson GI, Archambault EZ, Boatright NK, Hicks E, Fray JCS. Progesterone increases blood pressure in spontaneous gestational hypertension in rats. *American Journal of Hypertension* 2005;18:36-43.
- 15. **Sharkey, LC**, DeWitt S, Stockman C. Neurologic signs and hyperammonemia in a horse with enterocolitis. *Vet Clin Path* 2006; 35:254-258.

- 16. Wagner A, MacGregor JM, Berg J, **Sharkey, LC**, Rush JE. Septic pericarditis in a Yorkshire Terrier. *J Vet Emerg Crit Care*. 2006;16:136-140.
- 17. Firshman A, Sage A, Valberg S, Kaese H, Hunt L, Kenney D, **Sharkey, LC**, Murphy M. "Idiopathic Hemorrhagic Pericardial Effusion in 5 Cows" *J Vet Intern Med* 2006;20:1499-1502.
- Schultze AE, Messick JB, Sharkey, LC. Developing Formal Training Opportunities for Clinical Pathology Residents at Pharmaceutical and Biotechnology Companies and Commercial Diagnostic Laboratories. Vet Clin Path 2006;35:272-275.
- 19. **Sharkey, LC**, Wellman M, Christopher M. Guidelines for resident training in clinical pathology. II: Hematology. *Vet Clin Path* 2006;35:382-387.
- 20. Overmann J, **Sharkey, L**, Weiss D, Borjesson D. Performance of two canine Coombs' tests at a veterinary teaching hospital. *Vet Clin Path* 2007;36:179-183.
- 21. **Sharkey, LC**, Ployngam T, Tobias A, Torres S. "Effects of a single injection of methylprednisolone acetate on serum biochemical parameters in 11 cats" *Vet Clin Path* 2007;36:184-187.
- 22. **Sharkey, LC**, Overmann J, Flash P. Evolution of a course in veterinary clinical pathology: The application of case-based writing assignments to focus on skill development and facilitation of learning. *J of Vet Med Educ.* 2007;34:424-431.
- 23. Crews L, **Sharkey, L**, Feeney D, Jessen C. Evaluation of total and ionized calcium status in dogs with blastomycosis: 38 cases (1997-2006). *J Am Vet Med Assoc.* 2007;231:1545-9.
- 24. Crews L, Feeney D, Jessen C, Newman AB, **Sharkey, L**. Canine pulmonary blastomycosis: The utility of diagnostic tests and comparison of medical therapies. *J Am Vet Med Assoc* 2008;232:222-227.
- 25. Berzina I, **Sharkey, L**, Matisse I, Kramek B. Correlation between cytologic and histopathologic diagnoses of bone lesions in dogs: a study of diagnostic accuracy of bone cytology. *Vet Clin Path.* 2008;37:332-338.
- Sharkey LC, Berzina I, Ferasin L, Tobias A, Lulich J, Davies R. Evaluation of serum cardiac troponin I concentration in dogs with renal failure. J Am Vet Med Assoc. 2009;234:767-770.
- Sharkey LC, Gjevre K, Davies R, Torres S, Munoz-Zanzi C. Breed-associated variability in serum biochemical analytes in four large breed dogs. Vet Clin Path. 2009; 38:375-380.
- 28. Hill SA, **Sharkey LC**, Hardy RM, Wilke VL, Smith MA, Anderson GM. Nasal Rhinosporidiosis in a two dogs native to the upper Mississippi river valley region. *Journal of the American Animal Hospital Association*. 2010;46:127-131.
- **29. Sharkey LC.** Icterus and collapse in a Cavalier King Charles Spaniel. Clinician's Brief July 2010:19-22.
- Munson L, Craig LE, Miller MA, Kock ND, Simpson RM, Wellman ML, Sharkey LC, Birkebak TA. Elements of good training in anatomic pathology. Vet Pathol. 2010;47:995-1002.
- 31. Cordner AP, Armstrong PJ, Newman SJ, Novo R, **Sharkey LC**, Jessen C. Effect of pancreatic tissue sampling on serum pancreatic enzyme levels in clinically healthy dogs. J Vet Diag Invest. 2010 Sep;22(5):702-7.

- 32. Tamburini BA, Phang TL, Fosmire SP, Trapp SC, Slansky JE, **Sharkey LC**, Cutter GR, Bellgrau D, Gemmill RM, Hunter LE, Modiano JF. Gene Expression Profiling Identifies Inflammation and Angiogenesis as Distinguishing Features of Canine Hemangiosarcoma, BMC Cancer. 2010 Nov 9;10(1):619.
- 33. Overman J, Fino C, **Sharkey LC.** Increased total CO2 and negative anion gap in a foal.. Vet Clin Pathol. 2010;39:515-516.
- 34. Michael H, Willette M, **Sharkey LC**. Choanal discharge in a gyrfalcon. Vet Clin Pathol. 2010;39:511-512.
- 35. Berzina I, **Sharkey LC**. Trumble N, Novicki TJ. Conjunctival mycetoma in a horse. Vet Clin Pathol. 2011;40:84-88.
- 36. Sharkey LC, Simpson RM, Craig LE, Birkebak TA, Kock ND, Miller MA, Wellman ML, Munson L for the ACVP Training Program Development Task Force. The value of biomedical research training for veterinary anatomic and clinical pathologists. Vet Pathol. 2012 Jul;49(4):581-585.
- 37. Hui SK, **Sharkey LC**, Kidder LS, Zhang Y, Xian C, Yee D. The influence of therapeutic radiation on the patterns of bone marrow injry in ovary-intact and ovariectomized mice. PLoS ONE 2012. 7(8): e42668. doi:10.1371/journal.pone.0042668
- 38. **Sharkey LC, Michael H, LeBeau B, Center B, Wingert D. Outcomes assessment of case-based writing exercises in a veterinary clinical pathology course. J Vet Med Educ.** 2012;4:396-403.
- 39. Tinkler SH, Firshman AM, **Sharkey LC.** Premature parturition, edema, and ascites in an alpaca with Anaplasma phagocytophilum infection. Can Vet J. 2012;53:1199-1202.
- 40. Michael HT, **Sharkey LC,** Kovi RC, Manivel C, Wunschmann A, Hart T. Renal mass in a 16 week old Whippet. Journal of the American Veterinary Medical Association. 2013;242:471-473.
- 41. Feeney DA, **Sharkey LC**, Steward SM, Bahr KL, Henson MS, Ito D, O'Brien TD, Jessen CR, Husbands BD, Borgatti A, Modiano JF. Parenchymal organ signal intensity in 3T body MRI of canine hematopoietic neoplasia: a pilot animal model study. Comp Med. 2013;63:174-182.
- 42. Bahr K, **Sharkey LC**, Murakami T, Feeney D. Accuracy of ultrasound guided fine needle aspiration of focal liver lesions in dogs: 140 cases (2005-2008). J Am Anim Hosp Assoc. 2013;49:190-196
- 43. Feeney DA, **Sharkey LC**, Steward SM, Bahr KL, Henson MS, Ito D, O'Brien TD, Jessen CR, Husbands BD, Borgatti A, Modiano J. Applicability of the dog model for 3T body MRI in assessment of non-focal bone marrow involvement from hematopoietic neoplasia in dogs: A pilot study. J Vet Intern Med. 2013;27:1165-1171.
- 44. **Sharkey LC,** Radin MJ, Heller L, Rogers L, Tobias A, Wang Q, Matise I, Apple F, McCune SA. The effect of genetic predisposition to cardiovascular disease on multisystemic doxorubicin toxicity in SHHF, SHR, and WKY rats. Journal of Toxicology and Applied Pharmacology, 2013;273:47-57.
- 45. Kelley, J, **Sharkey LC**, Christopherson P, Rendahl A. Platelet count and plateletcrit in Cavalier King Charles Spaniels and Greyhounds using the Advia 120/2120.Vet Clin Pathol. 2014;43:43-49.
- 46. Gorden BH, Kim JH, Sarver AL Frantz AM, Breen M, Lindblad-Toh K, O'Brien TD, **Sharkey LC**, Modiano JF, Dickerson EB. Identification of three molecular and functional subtypes

- in canine hemangiosarcoma through gene expression profiling and progenitor cell characterization. Am J Pathol. 2014;184:985-995.
- 47. Yagi M, Arentsen L, Shanley RM, Rosen CJ, Kidder LS, **Sharkey LC**, Yee D, Kazuhiko O, Hui S. A dual isotope hybrid whole body micro-PET/CT system reveals functional heterogeneity and early local and systemic changes following targeted radiation to the murine caudal skeleton. Calcif Tissue Int. 2014;94:544-552.
- 48. Kim JH, Frantz AM, Anderson KL, Graef AJ, Scott MC, Robinson S, **Sharkey LC**, O'Brien TD, Dickerson EB, Modiano JF. Interleukin-8 promotes canine hemangiosarcoma growth by regulating the tumor microenvironment. Exp Cel Res. 2014;3233:155-164.
- 49. Schwartz D, **Sharkey LC**, Armstrong PJ, Knudson C, Kelley J. Platelet volume and plateletcrit in dogs with presumed primary immune-mediated thrombocytopenia. J Vet Intern Med 2014;28:1575-1579.
- 50. Rojas-Temahuay G, Crain S, Benson CJ, Nothnagel G, **Sharkey LC.** Cold agglutinin activity in two dogs. Vet Clin Pathol. 2014;43:330-336.
- 51. Cordner AP, **Sharkey LC**, Armstrong PJ, Dyne K. Cytologic findings and diagnostic yield in 92 dogs undergoing fine needle aspiration of the pancreas. J Vet Diagn Invest 2015;27:236-240.
- 52. Crain S, Armstrong PJ, **Sharkey LC**. Ultrasound-guided aspiration of the feline pancreas: a case-control study. J Fel Med Surg. 2015;17:858-863.
- 53. **Sharkey LC,** Wellman ML. Use of lactate in small animal clinical practice. Clin Lab Med. 2015;35:567-577.
- 54. Hegstad-Davies RL, Torres SM, **Sharkey LC**, Gresch SC, Munoz-Zanzi CA, Davies PR. Breed-specific reference intervals for assessing thyroid function in seven dog breeds. J Vet Diagn Invest. 2015; 27:716-727.
- 55. Wilke C, Holtan S, **Sharkey LC**, Defor T, Verneris M, Arora M, Premakanthan P, Yohe S, Vagge S, Zhou D, Chakrabarty JL, Mahe M, Corvo R, Dusenbery K, Storme G, Weisdorf D, Hui S. Marrow damage and hematopoietic recovery following allogeneic bone marrow transplantation for acute leukemias: effect of radiation dose and conditioning regimen. Radiother Oncol 2016;118:65-71.
- 56. Gorman L, **Sharkey LC**, Armstrong PJ, Little K, Rendahl A. Increases in serum beta hydroxybutyrate in cats with chronic kidney disease, hyperthyroidism, and hepatic lipidosis. J Vet Intern Med 2016;30:611-616.
- 57. Zordoky B, Radin MJ, Heller L, Tobias A, Matise I, Apple F, McCune SA, **Sharkey LC**. The interplay between genetic background and sexual dimorphism of doxorubicin-induced cardiotoxicity. Cardio Oncology. 2016:2:4-. DOI: 10.1186/s40959-016-0013-3
- 58. Schappa JT, Foutz C, Olson E, Armien A, Ward C, **Sharkey LC**. What is your diagnosis? Bicavitary effusion in a horse. Vet Clin Pathol. 2017;46:189-190.
- 59. Devine L, Armstrong PJ, Whittemore JC, Bailiff N, Griffith E, Huang A, **Sharkey LC**, Rishniw M. Presumed immune-mediated neutropenia in 35 dogs: A retrospective study 2006-2013. J of Small Anim Pract. 2017 Jun;58(6):307-313. doi: 10.1111/jsap.12636. Epub 2017 Feb 28.
- 60. Grant M, Seelig D, **Sharkey LC**, Zordoky BN. Sex-dependent alteration of cardiac cytochrome P450 gene expression by acute doxorubicin toxicity in C57BI/6 mice. Biology of Sex Differences. 2017;8: 10.1186/s13293-016-0124-4. eCollection 2017
- 61. Llewellyn EA, Todd JM, **Sharkey LC**, Rendahl A. A pilot study evaluating the prognostic utilite of platelet indices in dogs with septic peritonitis. J Vet Emerg Crit Care. 2017;27:569-578.
- 62. McAloney CA, **Sharkey LC,** Feeney DA, Seelig DM. Diagnostic utility of renal fine needle aspiration cytology and ultrasound in the cat. J Fel Med Surg. 2017 Jul 1:1098612X17720041. doi: 10.1177/1098612X17720041

- 63. Gwynn AD, **Sharkey LC**, Gerhold R, Holland A, Isaac EJ, Michalski S, Teigan L. What is your diagnosis: Blood film from a black bear (Ursus americanus). Vet Clin Pathol. 2017;46:643-644.
- 64. Hui S, Takahashi Y, Holtan SG, Azimi R, Seelig D, Yagi M, Ingvalson J, Alaei P, **Sharkey L,** Arentsen L, Godin L, Storme G, Piepenburg J, Domek A, Aubyn H, Ehrhardt M, Song CW, Panoskaltisis-Mortari A. Early assessment of dosimetric, physiological, and biological differences of total marrow irradiation versus total body irradiation in rodents. Radiother Oncol. 2017;124:468-474.
- 65. Henriksen M, Sharkey L, Esser M, Costello J. A clinical approach to fastidious and newly identified bacteria with unknown antibiotic sensitivity in superficial corneal ulcerations in horses. Equine Veterinary Education. 2017; https://doi.org/10.1111/eve.12813.
- 66. McAloney C, **Sharkey LC,** Seelig D, Feeney D, Jessen C, Avery A. Cytologic and ultrasound evaluation of canine kidney disease. J Am Vet Med Assoc. 2018 May 15;252(10):1247-1256.
- 67. **Sharkey LC**, Little KJ, Williams KD, Todd JM, Richardson R, Gwynn AD, Rendahl A. Performance charachteristics of the turbidometric ACL-TOP CTS 300 coagulation analyzer in dogs and cats. J Vet Emerg Crit Care. 2018;28:317-325.
- 68. Caswell JL, Bassel LL, Rothenberger JL, Grone A, Sargeant JM, Beck AP, Ekman S, Gibson-Corley KN, Kuiken T, LaDouceur EEB, Meyerholz DK, Origgi FC, Posthous H, Priestnall SL, Ressel L, Sharkey L, Teixeira LBC, Uchida K, Ward JM, Webster JD, Yamate J. Observational study design in veterinary pathology part 1: study design. Vet Pathol. 2018;55:607-621.
- 69. Caswell JL, Bassel LL, Rothenberger JL, Grone A, Sargeant JM, Beck AP, Ekman S, Gibson-Corley KN, Kuiken T, LaDouceur EEB, Meyerholz DK, Origgi FC, Posthous H, Priestnall SL, Ressel L, Sharkey L, Teixeira LBC, Uchida K, Ward JM, Webster JD, Yamate J. Observational study design in veterinary pathology part 2: methodology. Vet Pathol. 2018;55;774-785.
- 70. Carlson A, Alderete K, Grant M, Seelig D, **Sharkey LC**, Zordoky B. Anticancer effects of resveratrol in canine hemangiosarcoma cell lines. Vet Comp Onc. 2018;16:253-261
- 71. Yagneswar H, Todd J, **Sharkey LC**, Rendahl A, Tart K. Comparison of standard clotting tests and novel clot waveform parameters in dogs using the turbidimetric ACL TOP 300 coagulation analyzer. J Vet Diagn Invest. 2018 Sep 11:1040638718797386. doi: 10.1177/1040638718797386.
- 72. Richardson R, **Sharkey LC**, Todd J, Little K, Washabau R, Williams K. Characterization of canine coagulopathies using the turbidometric ACL-TOP 300 CTS analyzer. J Vet Emerg Crit Care. 2018;28:551-558.
- 73. Obeiter S, Henriksen MDL, **Sharkey LC**, MacAulay K, Reilly CM, Willette M. Pathology in Practice: Bald Eagle with ocular trauma. J Am Vet Med Assoc. In press.
- 74. Henriksen M, **Sharkey LC**, Franzen-Klein D, Wunschmann A, Teixieria LBC, Dubielzig R, Willette M. Bilateral anterior uveitis in a Northern Saw-Whet owl (*Aegolius acadicus*) with a metastatic pectoral malignant mesenchymoma. In press, Vet Clin Pathol.
- 75. Roberts J, Henriksen MdL, **Sharkey LC**, Reilly CM. Pathology in practice: Ocular melanosis with secondary glaucoma in a 13 year old female spayed English Setter. In press. J Am Vet Med Assoc
- 76. Grant MKO, Seelig D, **Sharkey LC**, Choi WSV, Zordoky BN. Sexual dimorphism of acute doxorubicin-induced nephrotoxicity in C57BI/6 mice. Submitted to PLoS ONE.

Invited reviews, books, and book chapters, on-line resources, non refereed sources

- 1. **Sharkey, LC**, Dial S, Metz, ME. Maximizing the Diagnostic Value of Cytology in Small Animal Practice. Veterinary Clinics of North America: Small Animal Practice 2007;37:351-372.
- 2. Radin MJ, **Sharkey LC.** Invited Review: Adipokines: Biological and analytical principles and an update in dogs, cats, and horses. *Vet Clin Path*. 2009;38:136-158.
- 3. 6 Chapters in the *Blackwell's 5-minute Veterinary Consult: Laboratory Tests and Diagnostic Procedures.* Shelly Vaden, Joyce Knoll, Francis Smith Jr, Larry Tilley, eds. 2009. White Blood Cell Count and Differential, White Blood Cells: Neutrophils, White Blood Cells: Lymphocytes, White Blood Cells: Eosinophils, White Blood Cells: Monocytes.
- 4. **Sharkey LC,** Hill SA. The Structure of Bone Marrow. In Schalm's Veterinary Hematology 6th ed 2010.Weiss DJ, Wardrop KJ eds. Blackwell Publishing, Ltd. Ames, IA. Pp 8-13.
- 5. **Sharkey LC,** Modiano JF. Bone Marrow-Derived Sarcomas. In Schalm's Veterinary Hematology 6th ed 2010.Weiss DJ, Wardrop KJ eds. Blackwell Publishing, Ltd. Ames, IA. Pp 447-450.
- 6. **Sharkey LC,** Radin MJ. Manual of Clinical Chemistry: A Case Study Approach. 2010 TetonNewMedia, Jackson, WY.
- 7. **Sharkey LC,** Wellman ML. Diagnostic Cytology in Veterinary Medicine: A Comparative and Evidence-based Approach. Laboratory Clinics of North America. 2011;31:1-19.
- 8. ASVCP Teaching casebank live 2011
- 9. **Sharkey, LC.** Guest Editorial: Evidence-based cytology in veterinary medicine: Progress and opportunities. Vet Clin Pathol. 2012 Sep;41(3):305-6
- 10. Modiano JF, **Sharkey LC** (2012). A Practical Guide to Diagnostic Testing for Veterinary Cancer Patients. *Land of Pure Gold Foundation*. Available at http://cancer.landofpuregold.com/the-pdfs/cancerdiagnostics.pdf
- 11. Sharkey LC, Wellman ML. Use of lactate in clinical practice. Veterinary Clinics of North America Small Animal Practice. 2013;43:1287-1297.
- 12. **Sharkey LC,** Seelig D, Overmann JO. All lesions great and small; Diagnostic Cytopathology in veterinary medicine. Part 1. Diagnostic Cytopathology. 2014;42:535-543.
- 13. **Sharkey LC,** Seelig D, Overmann JO. All lesions great and small; Diagnostic Cytopathology in veterinary medicine. Part 2. Diagnostic Cytopathology. 2014;42:544-552
- 14. **Sharkey LC,** Ruska T. "Cats are not small dogs, and other lessons from veterinary cytology." Newsletter for the American Society for Cytotechnology, July 2014.
- 15. **Sharkey LC,** Overman JO. Alternations in the leukogram. Smith's Large Animal Internal Medicine. 5th ed 2015.
- 16. Overmann JO, **Sharkey LC.** Alterations in the erythrogram. Smith's Large Animal Internal Medicine, 5th ed 2015.
- 17. **Sharkey LC**. Enzymes. Interpretation of Equine Laboratory Diagnostics. John Wiley & Sons. In press
- 18. **Sharkey LC.** Kidney function tests. Interpretation of Equine Laboratory Diagnostics. John Wiley & Sons. In press
- 19. **Sharkey LC**, Radin MJ. Carbohydrates. Interpretation of Equine Laboratory Diagnostics. John Wiley & Sons. In press
- 20. **Sharkey LC.** Miscellaneous solutes. Interpretation of Equine Laboratory Diagnostics. John Wiley & Sons. In press
- 21. **Sharkey LC.** Urine analysis. Interpretation of Equine Laboratory Diagnostics. John Wiley & Sons. In press.
- 22. **Sharkey LC**, Heinrich D. In-clinic hematology: the blood film review. Today's Veterinary Practice. July/August 2015: 43-49, 53.
- 23. Heinrich D, **Sharkey LC.** In-clinic hematology results: What's your diagnosis? Today's Veterinary Practice. July/August 2015:50-52.

- 24. **Sharkey LC.** 6 cases (osteosarcoma, chondrosarcoma, hemangiosarcoma, feline injection site sarcoma, peripheral nerve sheath tumor, and histiocytic sarcoma) in press Veterinary Cytology: Dog, Cat, Horse, and Cow: Self Assessment Color Review, 2nd ed, CRC Press, Francisco Cian and Kathleen Freeman, eds.
- 25. **Sharkey LC,** Zordoky B. Sexual dimorphism of doxorubicin-induced cardiotoxicity. Invited Opinion, EC Pharmacology and Toxicology. 2015;1S1:S4-S6.
- 26. Sample K, Johnson R, **Sharkey LC**, Walz E, Flynn K, Minicucci L. Student run free clinics: providing more than care. J Am Vet Med Assoc. 2017 Mar 15;250(6):612-614. doi: 10.2460/javma.250.6.612.
- 27. In contract with Wiley as first editor (MJ Radin second and DM Seelig third) of a 600-700 page internationally authored comprehensive academic text of Veterinary Cytology. In the process of editing and submitting chapters to the publisher

Abstracts

- 1. **Sharkey, LC**, Holycross, B.J., McCune, S.A., Park, S., Radin, M.J. The effects of ovariectomy on the progression of heart failure in SHHF/Mcc-fa^{cp} rats. FASEB J. 1996; 10:308.
- 2. McClure, J.T., Fiste, M., **Sharkey, L.**, Young, K.M. Immunophenotyping of leukemia in 3 horses. *J. Vet. Int. Med.* 1999;13:193A.
- 3. Radin, M.J., **Sharkey, LC,** Holycross, B.J., Shiry, L., McCune, S.A. Effects of gender and obesity on response to pharmacologic renin-angiotensin system modulation in SHHF/Mcc-*fa^{cp}* rats. *Vet. Path.* 1999;36: 29A.
- 4. **Sharkey, LC**, McCune SA, Fray JCS. Spontaneous sustained pregnancy associated hypertension in SHHF/Mcc-fa^{cp} rats: a possible model for impaired blood pressure regulation in pregnant women. 2000. *American Journal of Hypertension*.
- 5. Sanabria D, Sebek V, Suarez M, **Sharkey, LC**, Fray JCS. Small for gestational age offspring in rats may be induced by factors other than placental hypoperfusion. 2000. *American Journal of Hypertension*.
- 6. **Sharkey, LC**, Kirchain S, Fray JCS. Progesterone accelerates the development of hypertension in a rat model of genetic hypertension and congestive heart failure (SHHF/Mcc-fa^{cp}). *Vet Path* 2001; 38(5): 579.
- 7. **Sharkey, LC**, Kirchain S, Fray JC. Pregnancy and progesterone exacerbate hypertension in spontaneous hypertension/heart failure rats. Women's Health Research Conference September 13, 2004, Minneapolis, MN. *Recognized for excellence in women's health research
- 8. AM Firshman, AM Sage, SJ Valberg, HJ Kaese, LM Hunt, MJ Murphy, **LC Sharkey**, M Bouljihad. Idiopathic hemorrhagic pericardial effusion in 5 cows. Research abstract 23rd Annual ACVIM Forum, Baltimore, MD, 2005.
- 9. **Sharkey, LC**, Overmann J. Student Perceptions of Case-Based Writing Assignments and Effects on Overall Performance in a Core Clinical Pathology Course. Abstract *Vet Pathology* 2005; 42:703. Abstract 96
- 10. Overmann J, Borjesson D, Weiss D, **Sharkey, LC**. Performance of two canine Coombs' tests at a veterinary teaching hospital. *Vet Clin Pathol.* 2005;34:284. Abstract 13.
- 11. Fettig P, Tobias A, Heller L, Apple F, **Sharkey, LC**. Genetic predisposition to cardiovascular disease predicts development of delayed doxorubicin cardiotoxicity during pregnancy. *FASEB J*:Abstract #744.9, 2006.

- 12. Berzina I, **Sharkey, LC**, Hammel SP, Kramek B. Correlation between cytopathology and histopathologic diagnosis of bone lesions. Vet Path 2006;43:808 abstract #9.
- 13. **Sharkey LC**, Berzina I, Davies R, Tobias A, Ferasin L, Lulich J. The effect of renal insufficiency on serum cardiac troponin I concentrations in dogs. J Vet Intern Med. 2007:21:633 #222.
- 14. McNulty MA, **Sharkey, LC**, Curran C, Carlson CS. Effects of Doxorubicin on Bone Mineral Content and Density in Rats. 2007American Society for Bone and Mineral Research Annual Meeting
- 15. Gjevre K, **Sharkey, LC**, Torres S. Davies R. Breed-Specific Biochemical Parameters for the Siberian Husky, Alaskan Malamute, Golden Retriever and English Setter. 2007 Tufts' Canine & Feline Breeding and Genetics Conference, Sturbridge, MA.
- 16. Sharkey LC, Nazarian L, Overman JO, Wingert D, Center B. "Development of a shared clinical pathology teaching case bank." American Association of Veterinary Medical Colleges Annual Conference 2011, March 10-12, Alexandria, Virginia.
- 17. Michael H, **Sharkey LC**, Center B, Wingert D. Outcomes assessment and student perceptions of the use of case-based writing exercises in veterinary clinical pathology. Abstract 2011 American College of Veterinary Pathologists Annual meeting, Nashville, TN.
- 18. Kelley J, **Sharkey LC**, Christopherson PW. Plateletcrit as a measure of platelet mass in Cavlier King Charles Spaniels and Greyhounds. 2011 American Society for Veterinary Clinical Pathology Annual Meeting, Nashville, TN.
- 19. Radin MJ, Rogers L, **Sharkey LC**. Acute effect of doxorubicin on cardiac epoxyeicosatrienoic acid production in hypertensiove SHR and hypertensive-heart failure prone SHHF rats. ACVP Annual meeting, 2012 Seattle, WA.
- 20. Kim JH, Anderson KL, Frantz AM, Graef AJ, Scott MC, **Sharkey LC**, O'Brien TD, Dickerson EB, Modiano JF. Constitutive expression and roles of interleukin-8 in canine hemangiosarcoma. Presented at São Paulo Advanced School of Comparative Oncology Symposium 2012.
- 21. Modiano JF, Sarver AL, Scott MC, Frantz AM, Kim JH, Ito D, Graef AJ, Hwang TH, Dickerson EB, **Sharkey LC**, O'Brien TD, Breen M, Lindblad-Toh K, and Kisseberth WC. Heritable traits influence cell-intrinsic behavior of sporadic canine cancers. *Proceedings of the 2nd World Veterinary Cancer Congress.* 2012.
- 22. Kim JH, Frantz AM, Graef AJ, Hwang TH, Scott MC, Sarver AL, **Sharkey LC**, O'Brien TD, Dickerson EB, Modiano JF. Relationship between IL-8 and Slug in proliferation and survival of canine hemangiosarcoma cells. *Proceedings of the 2nd World Veterinary Cancer Congress*. 2012
- 23. Kim JH, Frantz AM, Graef AJ, Scott MC, Sarver AL, **Sharkey LC**, O'Brien TD, Dickerson EB, Modiano JF. IL-8 plays a role in self-renewal of cancer stem cells in canine hemangiosarcoma. *Proceedings of the 2nd World Veterinary Cancer Congress.* 2012
- 24. Schappa J, **Sharkey L**, Seelig D, Stepaniuk K, Goldstein G, Vicari E. Validation and optimization of cytology for hte screening of oral lesions in dogs and cats. 16th ESVCP Annual Congress, Milan, Italy. October 2014.
- 25. Gorman L, Armstrong PJ, **Sharkey LC**. Increases in serum beta hydroxybutyrate in cats with chronic kidney disease, hyperthyroidism, and hepatic lipidosis. ACVIM Forum 2015.
- 26. McAloney CA, **Sharkey LC,** Feeney DA, Seelig DM, Avery AC, Jessen CR. Determining the diagnostic value of renal cytology in canines. Student ACVP poster session, Minneapolis, MN October 2015.

- 27. Richardson R, **Sharkey LC**, Little K, Todd J, Washabau R, Williams K. Characterization of canine coagulopathies using the novel turbidometric ACL-TOP 300 CTS analyzer. Student ACVP poster session, Minneapolis, MN October 2015.
- 28. **Sharkey LC**, Flynn K, Bahr K, Baldwin A, Fakler T, Theobold K, Sample K, Scott K, tongen L, Yamashita S. VeTouch: a community-based veterinary student managed service learning outreach program in Minneapolis. Socioeconomic Barriers to Veterinary Medical Care conference, Madison, WI. November 2015.
- 29. Henriksen MdL, Lim C, **Sharkey LC**, Reilly C. Ocular melanosis with secondary chronic glaucoma in a 13 yeear old female spayed English Setter. ACVO 2016
- 30. Henriksen MdL, Reilly CM, **Sharkey LC**, Willete M. Septic vitritis, pectenitis, and retinal necrosis in a bald eagle. ACVO 2016.
- 31. Schappa JT, Borgatti A, Henson M, Seelig DM, **Sharkey LC**. Variation in biomarkers of inflammation during radiation therapy in dogs. Veterinary Cancer Society 2016.
- 32. Minicucci L, **Sharkey L**, Johnson R, Chanrasmi M, Haaland R, Jackson R, Fronk M, Reinicke E, Kubesczko C. Implementation of a service learning model to provide veterinary care to underserved communities and educational opportunities to Native American Youth. International One Welfare Conference, Winnipeg, MB, Canada September 2016.
- 33. Chanrasmi M, Minicucci L, **Sharkey L**. Building a framework to bring sustainable veterinary care to First Nations: Leech Lake Nation as a Model. International One Welfare Conference, Winnipeg, MB, Canada September 2016.
- 34. Grant, M, Seelig D, Sharkey L, and Zordoky B Sex-dependent Alteration of Cytochrome P450 Expression by Acute Doxorubicin Cardiotoxicity. 2016 Global Cardio-Oncology Summit, Vancouver BC, Canada, September 29-30, 2016
- 35. Harper L, Chanrasmi M, **Sharkey L.** Giganawenindimin: We all take care of each other. Overcoming Racism Conference 2016; Disrupt Racism as Usual. The Facilitating Racial Equity Collaborative, St Paul, MN October 28, 2016.
- 36. Gwynn A, Seelig D, Richardson R, Williams K and **Sharkey L**. Characterization of feline coagulopathies using the novel turbidometric ACL-TOP CTS analyzer: a retrospective analysis of 103 cats. The ACVP / ASVCP / STP Annual Meeting, New Orleans LA, December 3-7, 2016
- 37. Carlson AK, Herrera K, Grant M, **Sharkey L**, Zordoky B. The effects of metformin and resveratrol on canine hemangiosarcoma cell lines. The ACVP / ASVCP / STP Annual Meeting, New Orleans LA, December 3-7, 2016
- 38. Grant MK, Seelig D, **Sharkey LC**, Zordoky BN. Sex-dependent alteration of Cytochrome P450 enzymes by acute doxorubicin cardiotoxicity. Global Cardio-Oncology Meeting, Vancouver, Canada, 2016.
- 39. Zordoky BN, Radin MJ, Heller L, Tobias A, Matise I, Apple FS, McCuneg SA, **Sharkey LC**. The interplay between genetic background and sexual dimorphism of doxorubicin-induced cardiotoxicity. International Society of Heart Research (ISHR) World Congress, Buenos Aires, Argentina, 2016.
- 40. Henriksen MdL, Lim C, **Sharkey LC**, Reilly CM. Ocular melanosis with secondary chronic glaucoma in a 13 year old female spadyed English Setter. ACVO Monterey, CA 2016.
- 41. Henriksen MdL, MacAulay K, **Sharkey LC**, Reilly CM, Willette M. Septic vitritis, pectinitis, and retinal necrosis in a bald eagle. ACVO Monterey, CA 2016.
- 42. Walz E, Molgaard L, **Sharkey L.** Veterinary medicine and service learning: opportunities to support human health. Academic Health Center 1health Interprofessional Poster Showcase; 2016 Apr 19; Minneapolis, MN.

- 43. Sample K, Johnson R, Minicucci L, Sharkey L, Walz E, Flynn K. 2017. Extracurricular Professional and Clinical Skills Development through Community Outreach Initiatives. Society of Student Run Free Clinics Conference; 2017 Feb 11-12; Anaheim, CA.
- 44. Johnson R, Sample K, Minicucci L, Sharkey L, Walz E, Flynn K. Impact of University of Minnesota veterinary student run clinics on community and animal health. Society of Student Run Free Clinics Conference; 2017 Feb 11-12; Anaheim, CA.
- 45. Flynn K, Sample K, Johnson R, **Sharkey L**, Minicucci L, Walz E. The role of supervised service learning in underserved communities as a model for primary care instruction. American Veterinary Medical Association Conference; 2017 Jul 21-25; Indianapolis, IN.

Manuscript review

2018: J Vet Diag Invest (1), J Anim Phys Nutrition (1), Vet Clin Pathol (2), Am J Vet Res (1) **2019:** The Vet Journal (1),

Grants, Contracts, and Other Funding:

Previous:

"Impact of Case-based Writing Assignments and Instructor Feedback on Course Outcomes in Veterinary Clinical pathology" Principal investigator, University of Minnesota Center for Writing 2004-2005, \$3500

"Doxorubicin cardiotoxicity: effect of sex and genetic cardiovascular disease" Principle investigator, Graduate School Grant-In-Aid, January 2005-March 2007, \$32,000

"The effect of renal failure on serum troponin I levels in dogs" CVM Small animal companion grant Co-PI with Inese Berzina, \$8,000

"Determination of breed-specific reference intervals for assessing thyroid function in Golden Retrievers, Samoyeds, and Keeshonden, English Setters, Malamutes and Siberian Huskies" AKC Canine Health Foundation, Collaborator, \$88,176

"Determination of breed-specific reference intervals for assessing thyroid function in American collies" Collie Health Foundation Co-investigator, \$13,700

"Whole-body MRI bone marrow staging of canine lymphoma: a potential animal model" University of Minnesota Academic Health Center Seed grant, Co-investigator, \$25,000

"Multispecies hematology analyzer validation (contract) PI, 2010. Siemens Corporation, \$53,000.

"Genetic Background and the Angiogenic Phenotype in Cancer" AKC Canine Health Foundation, <u>Grant #1131</u>, Co-investigator, 01/01/10 – 12/30/12, Direct Costs \$235,399 Indirect Costs: 8%

"ASVCP member-access case bank" American Society for Veterinary clinical Pathology. Primary Investigator, 6/1/2010-5/30/2012. Direct costs: \$2,820

"Tumor-environment interactions in canine hemangiosarcoma." National Canine Cancer Foundation. Primary Investigator. 8/10/10-7/31/11. Direct: \$25, 430, Indirect costs: 11.1%.

AKC Canine Health Foundation, Grant #1759 "Targeting multipotency to arrest hemangiosarcoma progression and improve outcomes," Co-Investigator, Total direct costs-\$216,580, Indirect costs: 8%

Mentor for Jill Schappa, Canine Health Foundation Clinician Scientist Fellow 2012, \$12,000

Evaluation of beta hydroxybutyrate in feline catabolic states. CVM Small Companion Animal Grant 2013-2014, Co-Mentor for Lisa Gorman with PJ Armstrong, \$5,090

Validation and optimization of cytology for the screening of oral masses in dogs and cats. Academy of Veterinary Dentistry Veterinary Dental Research Grant. PI, Total \$5,000. (Funded but funds returned due to overlap with Foundation grant)

Validation and optimization of cytology for the screening of oral masses in dogs and cats. Foundation for Veterinary Dentistry Veterinary Dental Research Grant. Pl, Total \$7429.84.

Multispecies hematology analyzer validation (contract) PI, 2015-2016. Siemens Corporation, \$175,000, 33% indirect, 5% salary offset

Multispecies hematology analyzer validation (contract) PI, 2016. Siemens Corporation, \$126,000, 33% indirect, extension of previous project

Validation of a point of care avian coagulometer for use in birds. Julia Ponder Pl. My role is co-investigator. \$10,451, May 2016-April 2017. Morris Animal Foundation.

ASVCP, Share the Future Grant – Clinical Utility of Coaguation Testing in Cats Co-investigator with Seelig DM, Gwynn A. Annual direct costs: \$2,500

Teaching

1993 - 1996	Instructor for core hematology course, veterinary professional curriculum, Ohio State University College of Veterinary Medicine
1993 - 1996	Instructor for senior elective course in diagnostic cytology, veterinary professional curriculum, Ohio State University College of Veterinary Medicine
1996	Course director for Clinical Pathology course, Veterinary Technician Program, Columbus State Community College
1999	Course director for core Clinical Pathology course, veterinary professional curriculum, Tufts University School of Veterinary Medicine
1998 - 2003	Instructor for core senior rotation in clinical pathology, Tufts University School of Veterinary Medicine
2000 - 2003	Lecturer in General Pathology course, Tufts University School of Veterinary Medicine
2000 - 2003	Lecturer in Urinary Pathophysiology course, Tufts University School of Veterinary Medicine

2000 - 2003	Course Director and lecturer for Hematology/Clinical Pathology course, veterinary professional curriculum, Tufts University School of Veterinary Medicine
2000 - 2003	Instructor for senior veterinary students and medicine residents for elective rotations in clinical pathology, Tufts University School of Veterinary Medicine
2001 - 2003	Cytology/hematology seminar/rounds with Large Animal Residents and Interns, Tufts University School of Veterinary Medicine
2002 - 2003	Instructor in 4th year didactic courses in Hematology and Cytology, Tufts University School of Veterinary Medicine
2002 - 2003	Director for 4th year didactic course in Clinical Chemistry, Tufts University School of Veterinary Medicine
2003 - 2014	Instructor, Senior Rotation in Clinical Pathology, University of Minnesota College of Veterinary Medicine
2004 - 2008	Instructor for second year core Veterinary Pathology (CVM 6300) course, Circulatory Disorders, University of Minnesota College of Veterinary Medicine
2004	Instructor for third year Digestive System Disorders (CVM 6410)
2005 - 2013	Course Director for core Clinical Pathology course (CVM 6534), University of Minnesota College of Veterinary Medicine
2003 - 2017	Topics in Veterinary clinical pathology (VMED 5310), Instructor
2006 - 2008	Topics in Veterinary clinical pathology (VMED 5310), Course director
2007	Instructor in Descriptive Histopathology (VMED 5330), 2 sessions
2009	AnSci/CMB/VMed 8134-Ethical Conduct of Animal Research: Instructor
2011-2013 2014-2016	Instructor Problems in Small Animal Medicine Course director for Problems in Small Animal Medicine (CVM 6571, 2 credits, 2 sections and 4 credits beginning 2016)
2013	Instructor for Problems in Small Animal Medicine (CVM 6571)
2011-2017	Mentor Student Initiative for Reservation Veterinary Services (SIRVS), Leech Lake and White Earth Reservations
2012	Additional seminars and presentations: Hematology without the numbers for SIRVS, NAVLE review for seniors: hematology and endocrine testing, Immune-
2013-2017	mediated hemolytic anemia or not? For Student Pathology club VeTouch mentor and faculty sponsor (Urban outreach veterinary services in Minneapolis)
2014-2017	Course Director and sole instructor for Veterinary Clinical Pathology II CVM
2019	6942 (3 credits) Human Animal Relationships 1 credit, Tufts Cummings School of Veterinary Medicine
2019	Volunteer clinician mentor Little Earth Caring for the Animals Clinic, Minneapolis, MN February 9 th .

Professional Educational Presentations

1998 New England Comparative Pathology Colloguy - SHHF rat as a model for hypertension in pregnancy 2000 Partner cytology/hematology laboratory - Tufts Expo 2001 Partner cytology/hematology laboratory - Tufts Expo 2004 Clinical Hematology for Veterinary Teams - University of Minnesota Extension Service Cytology for the General Practitioner - University of Minnesota Extension Service Presenter for the ASVCP Clinical Cases Session: Hyperammonemia in a Horse, Orlando FL Presenter ASVCP Teaching Clinical Pathology Forum for Discussion: Continuing Education in Clinical Pathology for the General Practitioner Orlando, FL 2005 Developing a Constructive Approach When Clinical and Pathologic Diagnoses Diverge. 23rd Annual ACVIM Forum, Baltimore, MD Who Can I Trust? An Evidence Based Comparison of Cytologic and Histologic Biopsy Results. 23rd Annual ACVIM Forum, Baltimore, MD ACVP Town Hall panel member: Contemporary Veterinary Pathology Training: Where are we now and how do we get to where we want to be? Overview of Residency Training Programs in Pathology Discussant: ASVCP Discussion Forum: Developing Formal Training Opportunities for Clinical Pathology Residents at Pharmaceutical/Biotech Companies Mediated discussion group, ACVP meeting Salt Lake City: "Teaching Clinical Pathology to Residents in Other Specialties" Veterinary Information Network on-line rounds. "Communicating with Pathologists for Best Results" Invited Speaker New England Veterinary Medical Association Annual Meeting: Small Animal Clinical Pathology Track: Approach to the bleeding patient, Fluid Analysis, Cytology of Lumps and Bumps, Hematology for the Veterinary Practitioner

Teaching Writing Using Case Studies Panel Member April 12 Minnesota Commons Room, St. Paul Student Center

2006

Best Practices: Teaching in the Health Professions Small Group Presenter: Teaching with Writing in the Health Sciences May 12, 2006.

"Hypertensive disorders of pregnancy: lessons from animal models" 3rd annual animal models of metabolic disease and complications sponsored by Charles River Laboratories June 23, 2006 Boston MA

Student AVMA national meeting, Minneapolis, MN. Wet Lab: Medicine Case Studies with Dr. R. Hardy (2 hours) and Lecture: Fluid Analysis (1 hour)

University of Minnesota GI Symposium: What's new in the clinicopathologic diagnosis of pancreatic disease? And What to expect from cytology and biopsy of the gastrointestinal tract.

2007

American College of Veterinary Dermatology Forum, Lihue Hawaii April 2007 Proceedings: Cytology of Lumps and Bumps, Maximizing the diagnostic value of cytology in small animal practice, Conflict resolution: when the pathologic diagnosis does not support the clinical diagnosis, Dermatology/Clinical Pathology Challenge Cases

ACVP Annual meeting SC

Invited Plenary Speaker: Overview of the pathophysiology of obesity

University of Minnesota Fall Equine Conference: Clinical Pathology Cases (2 hours)

Invited Panelist: Discover the Value of Professional Community in the Academic Health Center, January 5th, 2007. Sponsored by AHC Faculty Consultative Committee.

2008

University of Minnesota Mather Lecture: Cytology from A to Z, May 1, 2008, St. Paul, MN

2009

American Veterinary Medical Association Annual meeting, Seattle, WA.

Laboratory Diagnosis of Pancreatic disease

Cytology of the Liver and Spleen

Cytology of the ear, nose, and oral cavity

Fluid analysis

Instant Gratification: In-house cytology for the small animal practioner all day lab practicum

2010

Invited workshop: Bone marrow Evaluation July 10-11

University of Utrecht, The Netherlands

2 day workshop consisting of lecture presentations on the collection and evaluation of bone marrow and diagnostic approach alternating with hands-on practicum with group and then individual review of slide sets prepared for the workshop. Attendees from the Netherlands, Switzerland, Germany, Finland, UK, Spain.

American Veterinary Medical Association Annual meeting, Atlanta, GA, Aug 1

Bone marrow evaluation

Approach to the Bleeding Patient

Hemotropic parasites

Laboratory Diagnosis of Common Toxicoses in Dogs and Cats

Invited speaker, ACVP Annual meeting Baltimore, MD

"Translating advances in comparative oncology to diagnostic medicine: the role of clinical pathology"

2011 Facilitator Teaching with Writing Event:

"Better next time: A workshop to revise our course designs" University of Minnesota, Tuesday, May 10

MidWest Veterinary Conference Invited Speaker February 25-28, Columbus, OH 6 hours of lectures on cytology topics

ASVCP Track Chair and Invited Speaker, ACVIM Forum, Denver, CO

"The Pathophysiology of Obesity"

"The Biology of Obesity in Dogs and Cats"

Invited Keynote Speaker European Society for Veterinary Clinical Pathology, August 31-September 3, Dublin, Ireland

"Diagnostic Cytology: an evidence-based approach"

"Optimisation of the use of diagnostic clinical biochemistry"

2012

Invited speaker:

15th Biennial Congress International Society for Animal Clinical Pathology & 14th Conference of the European Society of Veterinary Clinical Pathology, July 3-6, Ljubljana, Slovenia

"Oncologic cytology of the canine liver and pancreas" (with primary research data) "Successful training in clinical chemistry" (with SOTAL data)

Invited Guest Lecturer, American Society for Cytopathology, Las Vegas NV "Diagnostic Cytology in Veterinary Medicine: What can Human and Veterinary Cytopathologists Learn from Each Other" November 3, 2012

Facilitator for Friday CVM Seminar on Teaching series 6/2/12 "Students with Academic Difficulties"

Facilitator for Friday CVM seminar on Teaching series 9/21/12 Teaching with a case-based format

2013

Invited Speaker Co-speaker with Dr. Jennifer Brazzell for "Dueling Cytologists," Minnesota Veterinary Medical Association meeting. 16th Annual meeting, February 7-9,, 2013, Minneapolis, MN. 6 hours of cytology instruction and mystery cases.

Invited speaker: Minnesota Society of Cytology Spring meeting, April 13, 2013, Bloomington, MN "Veterinary Cytology"

Invited speaker: Baystate Annual Cytology Symposium, May 10, 2013, Springfield, MA. "Diagnostic Cytology in Veterinary Medicine: What can Human and Veterinary Cytopathologists Learn from Each Other"

ACVIM Forum Seattle, WA. ASVCP Track Moderator and speaker: Liver cytology: A crtical Approach Pancreatic cytology: a research update

2014

Invited Speaker, North American Veterinary Conference Clinical Chemistry Mystery Cases Master Class: 6 hours In-hospital Hematology: How to Save a Life with a Bloodsmear Approach to the bleeding patient

Minnesota Veterinary Medical Association Cutting Edge Topics: Cytology of oral masses

Invited speaker: Radiation and its impact at the cellular level. Japanese Society for the Promotion of Science and Center for Integrated Radiation Research Program sponsored symposium "Forming research and educational hubs of medical physics" 2011-2016. July 25th, 2014. Minneapolis, MN.

2015 Invited Speaker: Massachusetts Veterinary Medical Association: 6 hours CBC challenge cases May 2015

Clinical chemistry challenge cases

In-clinic laboratory testing: Do's and Don'ts for quality data and financial sustainability

New test evaluation: 5 questions you should ask when someone is marketing a new test to your practice

Research Seminar, Ontario Veterinary College, May 8, 2015. "Translational studies of complications of radiation therapy for cancer."

Minnesota Veterinary Institute

4 hours lecture/lab for technicians: Feline hematology and fluid analysis 7 hours lecture/lab for veterinarians: Feline fluid analysis and solid tissue cytology June/July 2015

CanWest Conference; Alberta Veterinary Medical Association, Banff AB, 6 hours CBC challenge cases October 2015
Clinical chemistry challenge cases
Fluid analysis challenge cases
New test evaluation

2016 Seoul National University, Seoul, South Korea: 2.5 hours

Cytology of cutaneous and subcutaneous neoplasia Cytology of infectious and inflammatory diseases May 10, 2016

New Jersey VMA 2015-2016 Speaker Series Clinical Chemistry Challenge Cases Newark, NJ May 18, 2016

2016 University of Minnesota International Small Animal Veterinary Conference Diagnostic cytology in clinical practice, Bone marrow disorders, Challenging Anemia Cases, Feline Solid Tissue Cytology Cases Nanjing, China

North Dakota VMA Clinical Chemisty Challenge Cases, Hematology Challenge Cases, Fluid analysis August 16, 2016 Minot, ND

2019 Minnesota Veterinary Medical Association

Challenging Clinical Pathology Cases, Advanced CBC Interpretation, When Normal Results Aren't Normal, Clinical Pathology of Small Mammals February 7th,

Research Students 2000 Tufts School of Veterinary Medicine NIH Summer Research student – First Place Winner	
	Sharron Kirchain "Progesterone accelerates the development of hypertension in SHHF rats"
2002	NIH sponsored Summer Research Fellowship at University of Massachusetts Medical School for Minority Undergraduate Students
	Georgina Ushi "Renal electrolyte excretion as a function of estrous cycle and age in normotensive and hypertensive SHHF rats"
2003	Worcester Polytechnic Institute Major Qualifying Project – First Place in WPI Research Competition in Biology/Biochemistry
	Elizabeth Archambault, Naomi Boatright, Erin Hicks "Gestational hypertension in the SHHF rat is associated with altered renal handling of electrolytes and enhanced expression of progesterone receptor B in the kidney"
2005	University Of Minnesota College of Veterinary Medicine Summer Scholars Program Mentor:
	Pamela Fettig, Class of 2007, Effect of pregnancy on cardiac function in doxorubicin treated Wistar Kyoto, Spontaneously Hypertensive, and Spontaneous Hypertension Heart Failure rats.
	Tess DeBlieck, Class of 2007, The effect of gender and genetic predisposition to cardiovascular disease on doxorubicin cardiotoxicity
2007	University of Minnesota College of Veterinary Medicine Summer Scholars Program Mentor: Karen Gjevre, Class of 2010,
	Sharkey LC , Gjevre K, Davies R, Torres S, Munoz-Zanzi C. Breed-associated variability in serum biochemical analytes in four large breed dogs. Vet Clin Path. 2009; 38:375-380.
2011	University of Minnesota College of Veterinary Medicine, Katie Bahr, Class of 2011
	Bahr K, Sharkey LC, Murakami T, Feeney D. Accuracy of ultrasound guided fine needle aspiration of focal liver lesions in dogs: 140 cases (2005-2008). Journal of the American Animal Hospital Association. 2013;49:190-196.
2013	University of Minnesota College of Veterinary Medicine, Diana Schwartz, Class of 2013, currently clinical pathology resident at UC Davis
	Schwartz D, Sharkey LC , Armstrong PJ, Knudson C, Kelley J. Platelet volume and plateletcrit in dogs with presumed primary immune-mediated thrombocytopenia. J Vet Intern Med 2014
2014-2016	University of Minnesota College of Veterinary Medicine, Camille McAloney, Class of 2017,Characaterization of renal cytology in dogs and cats. Summer Scholars. ACVP student abstract 2015.

McAloney C, **Sharkey LC**, Seelig D, Feeney D, Jessen C, Avery A. Cytologic and ultrasound evaluation of canine kidney disease. J Am Vet Med Assoc In press

McAloney CA, **Sharkey LC**, Feeney DA, Seelig DM . Diagnostic utility of renal fine needle aspirate cytology and ultrasound in the cat, J Fel Med Surg, in press

2015-2016 Rae Richardson, Class of 2018. Characterization of canine coagulopathies using

the novel turbidometric ACL-TOP 300 CTS analyzer, ACVP student abstract

submitted 2015, manuscript in preparation

Ariel Carlson, Class of 2018. The effects of metformin and resveratrol on canine hemangiosarcoma cells lines. Co-mentor with Beshay Zordoky, Summer Scholars,

Carlson AK, Herrera K, Grant M, **Sharkey L**, Zordoky B. The effects of metformin and resveratrol on canine hemangiosarcoma cell lines. 1st place poster in this category at Points of Pride Research day. Student ACVP abstract, New Orleans 2016.

Susan Baley Class of 2018. Evaluation of a Point-of-Care Coagulometer on Red-Tailed Hawks (Buteo jamaicensis) and Great Horned Owls (Bubo virginianus) and its application in the conservation of avian species.

Second Place, Exemplary Veterinary Student Scholar, awarded by the Morris Animal Foundation Scientific Advisory Board

Sara Obeiter Class of 2018, Evaluation of D-dimers in canine hepatobiliary disease

Graduate Student Education

Katherine Kreiser MS (C. St Hill Major advisor) Committee member: degree awarded 2008 Tsuoshi Murakami-PhD (D Feeney Major advisor) Chair of Committee degree awarded 2010 Jessica Kelly, primary mentor, MS in Clinical Laboratory Sciences program 2010-2012 Examiner Masters in Veterinary Science (Clinical) University of Melbourne Veterinary and Agricultural Sciences, Rebekah Liffman "Update on clinicopathological assessment of renal health in non-racing greyhounds."

Residents

Dr. Jennifer Brazzell, Boarded 2006, Currently staff pathologist, Marshfield Laborarotories

Dr. Inese Berzina, 2005-2007, currently PhD Program, Univesity of Bern, Switzerland

Dr. Jed Overmann, Boarded 2007, Currently Assistant professor, University of Minnesota

Dr. Cleverson Souza, 2007-2008, Boarded 2011, Currently Tenure-track assistant professor, Washington State University

Dr. Sara Hill, 2007-2010, Currently independent clinical pathologist

- Dr. Helen Michael, 2008-2012, Currently fellow Comparative Biomedical Scientist Training Program (NIH, NCI)
- Dr. Catherine Benson, 2010-2013, boarded 2016
- Dr. Jill Schappa, 2012-2015, boarded 2015
- Dr. Gabriela Rojas-Temahuay, visiting scholar from Universidad Nacional Autónoma de México, Mexico City, Mexico, September 3-November 30, 2012
- Dr. Barbara Rütgen, University of Veterinary Medicine, Vienna, Austria, visiting scholar Fall 2013
- Dr. Danny Heinrich, 2013-2016, boarded 2016
- Dr. Angela Gwynn, 2015-2018

Research mentoring for residents in other disciplines

Dr. Amy Cordner (Small animal internal medicine 2000-2012)

Cordner AP, Armstrong PJ, Newman SJ, Novo R, **Sharkey LC**, Jessen C. Effect of pancreatic tissue sampling on serum pancreatic enzyme levels in clinically healthy dogs. J Vet Diag Invest. 2010 Sep;22(5):702-7.

Dr. Sarah Crain (Small animal internal medicine 2010-2013)

Crain S, Armstrong PJ, **Sharkey LC.** Ultrasound-guided aspiration of the feline pancreas: a case-control study. J Fel Med Surg. 2015;17:858-863.

Dr. Lisa Gorman (Small animal internal medicine 2012-2015)

Evaluation of beta hydroxybutyrate in feline catabolic states. CVM Small Companion Animal Grant 2013-2014, Co-Mentor for Lisa Gorman with PJ Armstrong, \$5,090

Gorman L, **Sharkey LC**, Armstrong PJ, Little K, Rendahl A. Increases in serum beta hydroxybutyrate in cats with chronic kidney disease, hyperthyroidism, and hepatic lipidosis. J Vet Intern Med 2016;30:611-616.

Dr. Efa Llewellyn (Emergency Critical Care Resident 2013-2016)

Llewellyn EA, Todd JM, **Sharkey LC**, Rendahl A. Evaluation and prognostic utility of platelet indices in dogs with septic peritonitis. J Vet Emerg Crit Care, in press.

Academic Committees at the University of Minnesota

2003 - 2004	Chair of Clinical Pathology Resident Search Committee
2004 - 2007	Faculty Council, chair - elect 2004, chair 2005 - 2007
2004 - 2006	Faculty Writing Consultant for the College of Veterinary Medicine through the University of Minnesota Center for Writing
2004	Assessment Taskforce member – Center for Writing
2005 - 2006	Administrative Council
2005 - 2006	Anesthesia Faculty Search Committee

2006	Mentor and Founder, University of Minnesota Chapter of the Student ACVP
2006	Planning Group for Best Practices Institute: Teaching in the Health Professions
2007-2008	Clinical Pathology Faculty Search Committee
2008-2012	Student Progress Committee, Chair 2010-2012
2008-present	ACVP Student Pathology Club Sponsor
2008-2011	Faculty Writing Consultant, University of Minnesota Center for Writing
2010-2011	Committee on Committees, University of Minnesota
2012	Clincal Pathology faculty search chair
2013	Comparative oncology contract assistance professor faculty search chair
	Veterinary Medical Center Medical Review Board
	College of Veterinary Medicine Research Committee
2016	Diversity and Inclusion Committee

National/International Committees

- ASCVP Education Committee 2001-2003
- Chair of ASCVP Education Committee 2002-2006
- ASVCP Program Committee 2002-2006
- Contributed case material for the 2002-2004 ACVP Board Examination in Clinical Pathology
- Proctor National Board Exam American College of Veterinary Pathologists 2006
- ACVP Residency Training Taskforce 2006-2008
- ACVP Training Program Development Task Force (Training Program Subcommittee) 2007-2011
- Invited Focus group participant, ACVP Role Delineation Taskforce 2007: one of approximately 30 pathologists nationwide chosen to represent the discipline for updating of the Board Certification Examination preparation process
- ACVP Plenary Session Co-Chair and Invited Speaker "Pathophysiology of Obesity" 2007
- National Board of Veterinary Medical Examiners 2008 Qualifying Examination Standard Setting Committee
- ACVP Clinical Pathology Test Plan Working Group 2008-2009 (creation of testing parameters for the ACVP board certification examination)
- Executive Board Member, American Society for Veterinary Clinical Pathology 2008-2013, President 2012
- Veterinary Clinical Pathology journal Editor-in-Chief search committee 2010-2011
- Chair ASVCP sponsored session ACVIM Forum Denver, CO 2011
- Chair ASVCP Scientific Session Nashville, TN, 2011
- ACVP Training Program Committee Chair 2011-present
- European College of Veterinary Clinical Pathology and International Society for Animal Clinical Pathology Cytology and Oncology Track Co-Chair, 2012
- European College of Veterinary Clinical Pathology and International Society for Animal Clinical Pathology abstract reviewer, 2012
- Exam Reviewer for the European College of Veterinary Clinical Pathology certification examination 2013
- Chair ASVCP Lifetime Achievement Award Selection Committee 2013
- ASVCP Young Investigator Award Committee Chair 2013

ACVP Credential Exam Board 2013-2015