Curriculum Vitae Chad Mitchell Johannes, DVM, DACVIM (SAIM, Oncology)

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CURRENT POSITION

Iowa State University, College of Veterinary Medicine – Ames, Iowa Assistant Professor of Oncology, July 2018 – present Assistant Professor of Small Animal Internal Medicine and Oncology, July 2015 – June 2018 Oncology Section Leader, May 2017 – present Oncology ACVIM Residency Training Program Director, August 2017 – July 2018

EDUCATION

Kansas State University, College of Veterinary Medicine – Manhattan, Kansas Doctor of Veterinary Medicine, *Summa Cum Laude*, May 1997

University of Nebraska – Lincoln, Nebraska Bachelor of Science in Agriculture Honors/Veterinary Science, with Highest Distinction, May 1993

CERTIFICATION

Diplomate American College of Veterinary Internal Medicine Small Animal Internal Medicine – 2002 Oncology – 2013

PROFESSIONAL EXPERIENCE

Aratana Therapeutics, Inc. (now Elanco) – Kansas City, Kansas Medical Director, April 2014 – June 2015

VCA Mission Animal Referral & Emergency Center – Mission, Kansas Medical Oncology Associate, October 2013 – April 2014 Internship Coordinator, January 2014 – April 2014

North Carolina State University, College of Veterinary Medicine – Raleigh, North Carolina
 Sage Centers for Veterinary Specialty Care – San Mateo, California
 Residency in Medical Oncology, July 2010 – July 2013
 Medical Oncology Associate, July 2013 – September 2013

Pfizer Animal Health (now Zoetis) – New York, New York Product Manager – Palladia®, March 2008 – December 2010 Small Animal Internal Medicine Specialist, Veterinary Specialty Team, June 2006 – March 2008

Mississippi State University, College of Veterinary Medicine – Starkville, Mississippi Assistant Professor of Small Animal Internal Medicine, October 2005 – June 2006

- Veterinary Specialty & Emergency Center Overland Park, Kansas Small Animal Internal Medicine Specialist, June 2004 – September 2005
- **Kansas State University**, College of Veterinary Medicine Manhattan, Kansas Clinical Assistant Professor of Small Animal Internal Medicine, July 2002 – June 2004
- **University of Missouri**, College of Veterinary Medicine Columbia, Missouri Residency in Small Animal Internal Medicine, July 1999 – July 2002
- Nebraska Animal Medical Center Lincoln, Nebraska Associate Veterinarian (AAHA Accredited Hospital), July 1998 – June 1999
- **Colorado State University**, College of Veterinary Medicine Fort Collins, Colorado Rotating Internship in Small Animal Medicine and Surgery, June 1997 – July 1998

LICENSURE

Veterinary Medical License, State of Nevada (#LTD-131-A), 2019 – present
Veterinary Medical License, State of Iowa (#8137), 2015 – present
Veterinary Medical License, State of California (#20044), 2012 – present
Veterinary Medical Faculty License, State of North Carolina (FC53394), 2010 – 2012
Veterinary Medical License, State of Tennessee (#5043), 2007 – 2008
Veterinary Medical Faculty License, State of Mississippi (#F327), 2005 – 2006
Veterinary Medical License, State of Kansas (#6998), 2004 – present
Veterinary Medical License, State of Missouri (#0R6203) 1999 – 2007
Veterinary Medical License, State of Nebraska (#2915), 1998 – present
Veterinary Medical License, State of Colorado (#6573), 1997 – 2000

ORCID IDENTIFIER

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BOOK CHAPTERS

[1] Johannes CM, Musser ML. Anorexia and the Cancer Patient. *Vet Clin North Am Small Anim Pract,* 49(5): 837-854, 2019 DOI: 10.1016/j.cvsm.2019.04.008. [Epub 06JUN2019]

[2] Johannes CM. Fungal and miscellaneous causes of diarrhea. *Secrets of Feline Internal Medicine*. Melendez L (section editor), Lappin MR (editor). Hanley & Belfus, Inc., Philadelphia, 2001, pp. 105-107.

REFEREED PUBLICATIONS, SUBMITTED/IN REVIEW – IOWA STATE

[1] Brown GK, Jones P, Campbell JE, De Ridder TR, Reddell P, **Johannes CM**, Pruitt JB, White J, Pittenger ST, Geller S, Kozak W, Burek-Schwarz C. Intratumoural treatment of canine high-grade mast cell tumours with tigilanol tiglate. Submitted to *Vet Comp Oncol*, January 2021.

[2] Coto GM, Musser ML, Tropf M, Ward JL, Seo YJ, Mochel JP, **Johannes CM**. A multi-institutional, retrospective analysis of prognostic factors and treatment options for presumed or confirmed canine aortic body chemodectomas. Submitted to *Front Vet Sci*, December 2020.

[3] Minkler S, Lucien F, Kimber M, Bourgois-Mochel A, Musser M, **Johannes C**, Frank I, Cheville J, Allenspach K, Mochel J. Emerging roles of urine-derived components for the management of bladder cancer: One man's trash is another man's treasure. *Preprints*, November 2020. DOI: 10.20944/preprints202011.0364.v1). Submitted to *Cancers*, December 2020.

[4] Sheppard-Olivares S, Bello N, **Johannes CM**, Hocker S, Biller B, McKee T, McMillan M, Husbands B, Wood E, Wouda RM. Management of canine insulinomas with toceranib phosphate: 30 cases (2009-2019). Submitted to *BMC Vet Res*, August 2020.

[5] Makielski KM, Jeffery U, Fox LE, **Johannes CM**, Schulte AJ, Kim JH, Husbands BD, Walz JZ, Henson MS, Modiano JF, LeVine DN. Coated platelet potential in canine cancer patients. Submitted to *Am J Vet Res*, January 2020.

REFEREED PUBLICATIONS, PRIMARY/LEAD/CORRESPONDING AUTHOR – IOWA STATE*

[1] Rassnick KM, Bailey DB, Kamstock DA, LeBlanc CJ, Berger EP, Flory AB, Kiselow MA, Intile JL, Malone EK, Regan RC, Musser ML, Yanda N, **Johannes CM**. Evaulation of factors associated with survival in dogs with lymphoma treated with prednisone The Canine Lymphoma Steroid Only prospective clinical study: 109 cases (2016-17). Accepted by *J Am Vet Med Assoc*, June 2020. *In Press*

[2] Musser ML, Viall AK, Phillips RL, Hostetter JM, **Johannes CM**. RNA expression of prostaglandin EP4 receptor in canine osteosarcoma. Accepted by *Can J Vet Res*, April 2020. *In Press*

[3] Johannes CM, Heinrich ERE, Musser ML, Andreasen CB. Hypercalcemia of malignancy associated with exocrine pancreatic adenocarcinoma in a dog. *Vet Rec Case Rep*;8:e001190, 2020. DOI: 10.1136/vetreccr-2020-001190.

[4] *Fowler BL, **Johannes CM**, O'Connor A, Collins D, Lustgarten J, Yuan C, Weishaar K, Sullivan K, Hume KR, Mahoney J, Vale B, Schubert A, Ball V, Cooley-Lock K, Curran KM, Nafe L, Gedney A, Weatherford M, LeVine DN. Ecological level analysis of primary lung tumors in dogs and cats and environmental radon activity. *J Vet Intern Med*, 34:2660-2670, 2020. DOI: 10.1111/jvim.15936. [Epub 03NOV2020]

[5] Musser ML, Berger EP, Tripp CD, Clifford CA, Bergman PJ, **Johannes CM**. Safety evaluation of canine osteosarcoma vaccine, live listeria vector. *Vet Comp Oncol*, 2020. DOI: 10.1111/vco.12642 [Epub 30JUL2020]

[6] Musser ML, Viall AK, Phillips RL, Hostetter JM, **Johannes CM**. Gene expression of prostaglandin EP4 receptor in three canine carcinomas. *BMC Vet Res*, 16:213, 2020. DOI: 10.1186/s12917-020-02431-2

[7] Musser ML, Berger EP, Parsons C, Kathariou S, **Johannes CM**. Vaccine strain Listeria monocytogenes abscess in a dog: a case report. *BMC Vet Res*, 15:467, 2019. DOI: 10.1186/s12917-019-2216-y

[8] Musser ML, Mahaffey A, Fath M, Buettner G, Wagner B, Schneider B, Seo YJ, Mochel J, **Johannes CM**. In vitro cytotoxicity and pharmacokinetic evaluation of pharmacological ascorbate in dogs. *Front Vet Sci*, 6:385, 2019. DOI: 10.3389/fvets.2019.00385.

[9] Johannes CM, Musser ML. The use of capromorelin for the clinical problem of inappetence. *Today's Veterinary Practice*, pp. 70-74, July/August 2019.

[10] *Garraway K, **Johannes CM**, Bryan A, Peauroi J, Rossi G, Zhang M, Wang C, Allenspach K, Jergens AE. Relationship of the mucosal microbiota to gastrointestinal inflammation and small cell intestinal lymphoma in cats. *J Vet Intern Med*, 32(5):1692-1702, 2018. DOI: 10.1111/jvim.15291. [Epub 07AUG2018]

[11] Musser ML, Toone KE, Berger EP, Viall AK, Fox LE, **Johannes CM**. Selective dysmegakaryocytopoeisis secondary to chemotherapy in a dog with lymphoblastic lymphoma: a case report. *J Vet Med Surg*, 2(1):21, 2018. DOI: 10.4172/2574-2868.100021.

[12] *Berger EP, **Johannes CM**, Jergens AE, Allenspach K, Powers BE, Du Y, Mochel JP, Fox LE, Musser ML. Retrospective evaluation of toceranib phosphate (Palladia®) use in the treatment of gastrointestinal stromal tumors of dogs. *J Vet Intern Med*, 32(6):2045-2053, 2018. DOI: 10.1111/jvim.15335. [Epub 110CT2018]

[13] Musser M, Berger E, Flaherty HA, Fox L, **Johannes CM**. Marked paraneoplastic hypereosinophilia associated with a low grade, metastatic canine mast cell tumour. *Vet Rec Case Rep*, 6:e000563, 2018. DOI: 10.1136/vetreccr-2017-000563 [Epub 26MAY2018]

[14] *Berger EP, **Johannes CM**, Post GS, Rothchild G, Shiu KB, Wetzel S, Fox LE. Retrospective evaluation of toceranib phosphate (PALLADIA®) use in cats with mast cell neoplasia. *J Feline Med Surg*, 20(2):95-102, 2018. DOI: 10.1177/1098612X17695898. [Epub 01MAR2017]

[15] Viall AK, McLeland SM, McQuinn ER, Ho-Eckart LK, **Johannes CM**. Haemophagocytic syndrome in a dog with granulomatous splenitis. *Vet Rec Case Rep*, 4:e000396, 2017. DOI: 10.1136/vetreccr-2016-000396

*Indicates primary mentor for resident/graduate student author.

REFEREED PUBLICATIONS, CONTRIBUTING AUTHOR – IOWA STATE (CONTINUED)

[1] Reddell P, De Ridder T, Campbell J, Jones P, Morton J, **Johannes CM**, Brown G, Schmidt P, Gordon V. Wound formation, wound size and progression of wound healing following intratumoral treatment of canine mast cell tumors with tigilanol tiglate. Accepted by *J Vet Intern Med*, November 2020. *In Press*

[2] Jones PD, Campbell JE, Brown G, **Johannes CM**, Reddell P. Recurrence free interval 12 months after local treatment of mast cell tumors in dogs using intratumoral injection of tigilanol tiglate. *Vet Intern Med*, 2020. DOI: 10.1111/jvim.16018 [Epub 22DEC2020]

[3] De Ridder TR, Campbell JE, Burke-Schwarz C, Clegg D, Elliot EL, Geller S, Kozak W, Pittenger ST, Pruitt JB, Riehl J, White J, Weist ML, **Johannes CM**, Morton J, Jones PD, Schmidt PF, Gordon V, Reddell P. Randomized controlled clinical study evaluating efficacy and safety of intratumoral treatment of canine mast cell tumors with tigilanol tiglate (EBC-46). *J Vet Intern Med*, 2020. DOI: 10.1111/jvim.15806 [Epub 16JUN2020]

[4] Fenger JM, Eward WC, Hendricks WPD, McNeil EA, **Johannes C**, Richard SB, Treml LS, Bruyette D, Mutsaers AJ, Woods JP, Clifford CA, Simons T, Zipfel S, Kang W, Thamm MD, Dybdal N, Lappin M, Khanna C. Delivering innovation to oncology drug development through cancer drug DISCO (Development Incentive Strategy using Comparative Oncology): Perspectives, Gaps and Solutions. *Annal Med Clin Oncol* 3:120, 2020. DOI: 10.29011/AMCO-120.000120.

[5] Mochel JP, Ekker SC, **Johannes CM**, Jergens AE, Allenspach K, Bourgois-Mochel A, Knouse M, Benzekry S, Wierson W, LeBlanc AK, Kenderian SS. CAR T-cell immunotherapy in human and veterinary oncology: Changing the odds against hematologic malignancies. *AAPS J*, 21(3):50, 2019. DOI: 10.1208/s12248-019-0322-1.

[6] Musser ML, Taikowski KL, **Johannes CM**, Bergman PJ. Retrospective evaluation of toceranib phosphate (PALLADIA®) use in the treatment of inoperable, metastatic or recurrent canine pheochromocytomas: 5 dogs (2014-2017). *BMC Vet Res*, 14(1):272, 2018. DOI: 10.1186/s12917-018-1597-7.

[7] Filion MC, Rodrigues L, **Johannes C**, Masic A. The *in vitro* and *in vivo* anti-cancer potential of mycobacterium cell wall fraction (MCWF) against canine transitional cell carcinoma of the urinary bladder. *Acta Veterinaria-Beograd*, 67(4):477-494, 2017. DOI: 10.1515/acve-2017-0039.

[8] Gieger TL, Nettifee-Osborne J, Hallman B, **Johannes C,** Clarke D, Nolan MW, Williams LE. The impact of carboplatin and toceranib phosphate on serum vascular endothelial growth factor (VEGF) and metalloproteinase-9 (MMP-9) levels and survival in canine osteosarcoma. *Can J Vet Res*, 81(3):199-205, 2017. PMC5508385, PMID: 28725110.

REFEREED PUBLICATIONS – PRIOR TO IOWA STATE

[1] Kidder AC, **Johannes C**, Obrien DP, Harkin KR, Schermerhorn T. Feline dysautonomia in the Midwestern United States: a retrospective study of nine cases. *J Fel Med Surg*, 10(2):130-136, 2008. DOI: 10.1016/j.jfms.2007.08.005

[2] Johannes CM, Henry CJ, Turnquist SE, Hamilton TA, Smith AN, Chun R, Tyler JW. Hemangiosarcoma in cats: 53 cases (1992-2002). *J Am Vet Med Assoc*, 231(12):1851-1856, 2007. DOI: 10.2460/javma.231.12.1851

[3] Cohn LA, Stoll MR, Branson KR, Roudabush AD, Kerl ME, Langdon PF, **Johannes CM**. Fatal hemothorax following management of an esophageal foreign body. *J Am Anim Hosp Assoc*, 39(3):251-6, 2003. DOI: 10.5326/0390251

[4] Cohn LA, Reeves Cook C, Priddy N, **Johannes CM**. What is your diagnosis? Emphysematous cystitis in a non-diabetic dog. *J Am Vet Med Assoc*, 218(5):703-704, 2001. PMID: 11280398

[5] Johannes CM, Cohn LA. A clinical approach to patients with fever of unknown origin. *Veterinary Medicine*, 95(8):633-644, 2000.

NON-REFEREED PUBLICATIONS – IOWA STATE

[1] Johannes CM. The future is now: New oncology therapeutics impacting practice. *American Veterinarian*. 1.19, V.4, N.1, 2019.

[2] Johannes CM. Inappetence case reports (2). Aratana Therapeutics, educational handouts September 2018.

[3] Burney D, Cook A, Freeman L, **Johannes C**. Inappetence: Its many forms and clinical management. Expert views from a Roundtable on Canine Inappetence. Clinicians Brief/*Forum*, February 2018, pp. 1-5.

[4] Clifford C, Garrett LD, Henry C, Hohenhaus AE, **Johannes C**, Jones PD, Klein MK, London CA, Mitchener K, Thamm DH, Vail DM, Gloyd KS. Veterinary Oncology Roundtable: The role of prognostic factors in patient selection for canine mast cell tumor therapy with Palladia®. Zoetis (online and print distribution), 2017.

[5] Clifford C, Garrett LD, Henry C, Hohenhaus AE, **Johannes C**, Jones PD, Klein MK, London CA, Mitchener K, Thamm DH, Vail DM, Gloyd KS. Veterinary Oncology Roundtable: Palladia® treatment protocols and consensus on current best practices. Zoetis (online and print distribution), 2017.

PROJECTS/MANUSCRIPTS IN PROGRESS (* denotes abstract planned concurrently)

[1] Johannes CM, Bidgood TL, Trettien AL, Frank RK, Merritt DA, Lesman SP, Viall AK, London CA, Malpas PB. Exploratory safety and toxicokinetic study in cats treated with toceranib phosphate (PALLADIA®, SU11654), an oral multireceptor tyrosine kinase inhibitor. Planned submission to *Front Vet Sci*. [Submitted/not accepted by *Vet Comp Oncol*, May 2016]

[2] Rhodes L, Zollers B, Allen JA, Musser ML, Viall AK, **Johannes CM**. A prospective, multi-center clinical survey evaluating inappetence in 43 dogs with cancer receiving chemotherapy. Planned submission to *Vet Rec Open*. [Submitted/not accepted by *J Small Anim Pract*, July 2016]

[3] *Allen J, **Johannes CM**, Musser ML, Lund K. Cancer anorexia cachexia syndrome (CACS) and associated biomarkers in dogs with lymphoma. Planned submission to *J Vet Intern Med*.

[4] *Ortiz C, **Johannes CM**, Mochel J, Berger EP, Musser ML. Retrospective evaluation of toceranib phosphate (PALLADIA®) use in the treatment of feline exocrine pancreatic carcinoma: 15 cats (2009-2020). Planned submission to *J Vet Intern Med*.

[5] *Musser ML, Viall AK, Phillips RL, Hostetter JM, **Johannes CM**. RNA expression of prostaglandin EP4 receptor in canine lymphoma. Planned submission to *Vet Comp Oncol*.

[6] Nenninger AS, Viall AK, **Johannes CM**, Servantez JM, Berger EP, Fox LE. Complete blood cell count changes noted in dogs with lymphoma treated with a standardized multi-agent chemotherapy protocol. Planned submission to *Front Vet Sci*.

[7] Gettinger M, LeVine DN, **Johannes CM**. Retrospective evaluation of splenectomy as treatment for immune-mediated hemolytic anemia or thrombocytopenia in dogs. Planned submission to *J Vet Intern Med*.

[8] *Viall AK, LeVine DN, **Johannes CM**, Musser ML, Hostetter SJ. Evaluation of plasma cell-free DNA as a diagnostic, therapeutic response, and prognostic marker for dogs with multicentric lymphoma. Planned submission to *Vet Comp Oncol*.

[9] *Coto G, Musser M, Mochel J, Johannes CM. Randomized, open-label study evaluating the use of ImmunocidinTM non-specific immunotherapy with concurrent doxorubicin-based chemotherapy for canine splenic hemangiosarcoma. Planned submission to *Vet Comp Oncol*.

[10] *Musser ML, **Johannes CM**. Prospective, multi-center, randomized study investigating quality of life and overall progression free interval in dogs with urinary bladder transitional cell carcinoma treated with single agent piroxicam or grapiprant. Planned submission to *J Vet Intern Med*.

PROJECTS/MANUSCRIPTS IN PROGRESS (CONTINUED) (* denotes abstract planned concurrently)

[11] *Johannes CM, Musser ML, Clifford CA, Bergman PJ, Treml L, Cook McAnulty L, McNeil EA. A multicenter, placebo-controlled study of anti-CD52 monoclonal antibody in combination with CCNU chemotherapy in the treatment of canine intermediate and high grade, peripheral T-cell lymphoma. Planned submission to *Vet Comp Oncol*.

[12] *Musser ML, **Johannes CM**, Clifford CA, Bergman PJ, Treml L, Cook McAnulty L, McNeil EA. A multicenter, placebo-controlled study of anti-CD52 monoclonal antibody in combination with CHOP chemotherapy in the treatment of canine intermediate and high grade, peripheral T-cell lymphoma. Planned submission to *Vet Comp Oncol*.

[13] *Lawson H, Musser ML, **Johannes CM**. Case management and outcomes of mitoxantrone overdoses in dogs. Planned submission to *J Vet Intern Med*.

[14] *Musser ML, **Johannes CM**. Retrospective evaluation of toceranib phosphate (Palladia®) use in the treatment of exocrine pancreatic carcinomas in dogs. Planned submission to *J Vet Intern Med*, December 2021.

[15] *Musser ML, **Johannes CM**, Jones PD. Clinical utility of Stelfonta[®] in canine mast cell tumors. Planned submission to *Vet Comp Oncol*.

[16] *Musser ML, **Johannes CM**, Jones PD. Clinical utility of Stelfonta[®] in canine non-mast cell solid tumors. Planned submission to *Vet Comp Oncol*.

INVITED MANUSCRIPT REVIEWER – IOWA STATE

Frontiers Veterinary Science, 2020 Scientific Reports, 2020 Journal of the American Veterinary Medical Association, 2020 Veterinary Radiology and Ultrasound, 2020 Canadian Veterinary Journal, 2019 BMC Veterinary Research, 2018, 2019 Journal of Veterinary Internal Medicine, 2018, 2019 Journal of Veterinary Internal Medicine, 2018, 2019 Journal of the American Animal Hospital Association, 2017, 2018 (2), 2020 Journal of Veterinary Medical Science, 2017 The Veterinary Journal, 2017 Journal of Small Animal Practice, 2016 (2), 2018 (2), 2020 Veterinary and Comparative Oncology, 2012, 2015, 2019 (2) Australian Veterinary Journal, 2015

ABSTRACTS/RESEARCH REPORTS - IOWA STATE (* denotes Presenter)

[1] Brown G, Campbell J, Jones P, **Johannes C**, Reddell P. Intratumoral treatment of canine high-grade mast cell tumors with tigilanol tiglate (EBC-46). Veterinary Cancer Society, October 2020. (Poster) *[Virtual due to COVID-19 travel restrictions.]*

[2] Musser ML, Berger EP, Tripp CD, Clifford CA, Bergman PJ, **Johannes CM**. Adverse event profile of the therapeutic canine osteosarcoma vaccine, live Listeria vector. Veterinary Cancer Society, October 2020. (Oral) [*Virtual due to COVID-19 travel restrictions.*]

[3] Jones P, Campbell J, De Ridder T, **Johannes CM**, Brown G, Morton J, Reddell P. Determinants of efficacy in a pivotal clinical study of intratumoral treatment of canine mast cell tumours with tigilanol tiglate. World Veterinary Cancer Congress, Tokyo Japan, March 2020. (Oral) *[Accepted but not presented due to COVID-19 travel restrictions.]*

[4] Brown G, Campbell J, Jones P, **Johannes CM**, DeRidder T, Reddell P. Treatment of canine soft tissue sarcomas (STS) with intratumoural tigilanol tiglate with 40% tumour volume dosing. World Veterinary Cancer Congress, Tokyo Japan, March 2020. (Poster) *[Accepted but not presented due to COVID-19 travel restrictions.]*

[5] Musser ML, Mahaffey A, Fath M, Buettner G, Wagner B, Schneider B, Seo YJ, Mochel J, **Johannes CM**. Evaluating high-dose intravenous vitamin C pharmacokinetics in healthy Beagle dogs. University of Iowa Hospitals & Clinics, Sarcoma Symposium, Iowa City IA, February 2020. (Oral)

[6] Coto GM, Musser ML, Tropf M, Ward JL, Seo YJ, Mochel JP, **Johannes CM**. A multi-institutional, retrospective analysis of prognostic factors and treatment options for presumed or confirmed canine aortic body chemodectomas. Veterinary Cancer Society, Houston TX, October 2019. (Oral)

[7] Campbell JE, **Johannes CM**, Reddell P. Durability of response to intratumoral tigilanol tiglate in canine MCT. Veterinary Cancer Society, Houston TX, October 2019. (Oral)

[8] Wiest ML, Geller S, Pittenger ST, Burke-Schwarz C, **Johannes CM***, Reddell P, Gordon V, Schmidt P, Lowden S. Controlled, randomized study of intratumoral tigilanol tiglate (EBC-46) for treatment of canine mast cell tumors. ACVIM Forum, Phoenix AZ, June 2019. (Research Report)

[9] Musser ML, Mahaffey AL, Fath MA, Buettner GR, Wagner BA, Mochel JP, **Johannes CM**. *In vitro* and *in vivo* evaluation of high-dose ascorbate in dogs. ACVIM Forum, Phoenix AZ, June 2019. (Research Report)

[10] Gettinger M, LeVine D, Viall A, Vier J, Glanemann B, **Johannes C**, Van Vertloo L. Retrospective evaluation of splenectomy in the treatment of canine primary immune thrombocytopenia. ACVIM Forum, Phoenix AZ, June 2019. (Oral)

[11] Musser ML, Mahaffey AL, Fath MA, Buettner GR, Wagner BA, Mochel JP, **Johannes CM***. *In vitro* and *in vivo* evaluation of high-dose ascorbate in dogs. European Society of Veterinary Oncology (ESVONC) Annual Congress, Frankfurt Germany, May 2019. (Poster)

[12] Wiest ML, Geller S, Pittenger ST, Burke-Schwarz C, **Johannes CM***, Reddell P, Gordon V, Schmidt P, Lowden S. Controlled, randomized study of intratumoral tigilanol tiglate (EBC-46) for treatment of canine mast cell tumors. European Society of Veterinary Oncology (ESVONC) Annual Congress, Frankfurt Germany, May 2019. (Oral)

[13] Musser ML, Phillips RL, Hostetter JM, **Johannes CM**, Viall A. Intratumoral expression of prostaglandin EP4 receptor gene PTGER4 in multiple canine malignancies. Annual Meeting of the American College of Veterinary Pathologists and the American Society for Veterinary Clinical Pathology, Washington DC, November 2018. (Poster)

[14] Marnin SA, Berger DJ, Viall AK, Schrunk D, Musser ML, **Johannes CM**. Evaluation of the potency and accuracy of compounded toceranib phosphate formulations. Veterinary Cancer Society Conference, Louisville KY, October 2018. (Oral)

[15] Musser M, Viall A, Phillips R, Hostetter J, **Johannes C**. Expression of prostaglandin EP4 receptor in multiple canine malignancies. Veterinary Cancer Society Conference, Louisville KY, October 2018. (Oral)

[16] Musser ML, Viall AK, Phillips RL, Hostetter JM, **Johannes CM***. Expression of prostaglandin EP4 receptor in canine osteosarcoma. ECVIM Congress, Rotterdam, Netherlands, September 2018. (Poster)

ABSTRACTS/RESEARCH REPORTS - IOWA STATE (CONTINUED) (* denotes Presenter)

[17] Fowler BL, **Johannes CM***, O'Connor AM, Collins D, Lustgargen J, Weishaar KM, Sullivan KE, Hume KR, Mahoney J, Vale BA, Schubert A, Ball V, Cooley-Lock KM, Curran K, Nafe LA, Gedney A, Weatherford M, LeVine DN. Ecological-level analysis of canine and feline primary lung tumors and environmental radon levels. ACVIM Forum, Seattle WA, June 2018. (Poster)

[18] Viall AK, Phillips RL, McLeland SM, Hostetter JM, Bracha S, Musser M, **Johannes CM**. Intratumoral expression of serotonergic signaling system genes htr1b, htr2a, htr2b, tph1, and slc6a4 in canine osteosarcoma. ACVIM Forum, Seattle WA, June 2018. (Poster)

[19] Musser M, Taikowski K, **Johannes C**, Bergman P. Retrospective evaluation of Palladia® use in the treatment of inoperable, metastatic, or recurrent canine pheochromocytomas. ACVIM Forum, Seattle WA, June 2018. (Poster)

[20] Kelly J, Padget M, **Johannes CM**, Masic A. Safety evaluation of multiple intravenous administrations of Immunocidin[®] in cats and dogs with malignancies. ACVIM Forum, Seattle WA, June 2018. (Research Report)

[21] Musser M, **Johannes C**, Mochel J, Mahaffey A. Evaluating high-dose intravenous vitamin C pharmacokinetics in healthy Beagle dogs. University of Iowa Hospitals & Clinics, Sarcoma Symposium, Iowa City IA, February 2018. (Oral)

[22] Nenninger AS, Servantes J, Hostetter S, **Johannes C**, Viall A. Erythrocyte cytomorphologic changes in dogs receiving the CHOP chemotherapy protocol for treatment of multicentric lymphoma. American College of Veterinary Pathologists Annual Meeting, Vancouver, Canada, December 2017. (Student Poster)

[23] Johannes CM*, Rassnick KM, Bailey DB, Yanda NM, Regan R, Malone E, Intile JL, Kiselow M, Lucroy MD, Berger EP, Fox LE, Kamstock DA, LeBlanc CJ. Evaluation of factors associated with survival in dogs with lymphoma treated with prednisone. The Canine Lymphoma Steroid Only (CALYPSO) open-label prospective clinical trial: 69 cases (2016-2017). Veterinary Cancer Society Conference, Portland OR, October 2017. (Oral)

[24] Fowler BL, **Johannes CM**, O'Connor AM, Collins D, Lustgargen J, Weishaar KM, Sullivan KE, Hume KR, Mahoney J, Vale BA, Schubert A, Ball V, Cooley-Lock KM, Curran K, Nafe LA, Gedney A, Weatherford M, LeVine DN. Ecological-level analysis of canine and feline primary lung tumors and environmental radon levels. Veterinary Cancer Society Conference, Portland OR, October 2017. (Oral)

[25] Punt N, Johannes CM, Hackbarth L, Fox L. Current clinical management of chemotherapy-induced vomiting and inappetence in dogs. ACVIM Forum, National Harbor MD, June 2017. (Poster)

[26] Berger E, **Johannes CM**, Jergens A, Allenspach K, Fox LE. Evalation of toceranib phosphate (Palladia®) in the treatment of canine gastrointestinal stromal tumors. ACVIM Forum, National Harbor MD, June 2017. (Oral)

[27] Garraway K, **Johannes CM**, Allenspach K, Ackermann M, Peauroi J, Jergens A. Relationship of the mucosal microbiota to inflammation and disease activity in cats with intestinal lymphoma. ACVIM Forum, National Harbor MD, June 2017. (Oral)

[28] Makielski K, Jeffery U, Fox L, **Johannes C**, Graef A, Kim J, Husbands B, Walz J, Henson M, Modiano J, LeVine D. Coated platelet potential in canine cancer patients. Veterinary Cancer Society Conference, Orlando FL, October 2016. (Poster)

[29] Johannes CM*, Romansik EM, Lewis M, Jackson E. Tactress[™]clinical experience program (T-CEP): Summarizing early use of a monoclonal antibody for canine T-cell llymphoid malignancies. Veterinary Cancer Society Conference, Orlando FL, October 2016. (Poster)

[30] Makielski K, Jeffery U, Fox L, **Johannes C**, Graef A, Kim J, Husbands B, Walz J, Henson M, Modiano J, LeVine D. Coated platelet potential in canine cancer patients. Platelets International Symposium, Wellesley MA, September 2016. (Poster)

[31] Berger E, **Johannes CM**, Post GS, Rothchild G, Shiu KB, Wetzel S, Tripp C, Arteaga T, Crawford-Jukubiak M, Serras AR, Gillings S, Swanson C, Greene S, O'Neill K, Pressel M, Fox L. Evaluation of toceranib phosphate (Palladia®) in the treatment of feline mast cell neoplasia: 53 cases. ACVIM Forum, Denver CO, June 2016. (Poster)

ABSTRACTS/RESEARCH REPORTS - IOWA STATE (CONTINUED) (* denotes Presenter)

[32] Gieger TL, Nettifee-Osborne J, Hallman B, **Johannes C**, Clarke D, Nolan NW, Williams LE. The impact of carboplatin and toceranib phosphate on angiogenesis and survival in canine osteosarcoma. ACVIM Forum, Denver CO, June 2016. (Poster)

[33] Johannes CM*, Snyder S, Hauck M. Expression of hedgehog signaling molecules in canine osteosarcoma. World Veterinary Cancer Congress, Foz do Iguacu, Brazil, May 2016. (Poster)

[34] Rhodes L, Zollers B, **Johannes CM***. A prospective, multi-center clinical survey evaluating inappetence in 43 dogs with cancer receiving chemotherapy. Veterinary Cancer Society Conference, Vienna VA, October 2015. (Poster)

ABSTRACTS/RESEARCH REPORTS – PRIOR TO IOWA STATE (* denotes Presenter)

[1] Musser M, Jamadar-Shroff V, **Johannes CM**, Richards K, Suter S. In vitro effects of masitinib mesylate and toceranib phosphate on canine lymphoid cell lines. Veterinary Cancer Society Conference, Minneapolis MN, October 2013. (Oral)

[2] Johannes CM*, Kavlakov B, Trettien A, Bidgood T, Meikle S. Palladia[™] year one clinical experience: Online case entry summary. Veterinary Cancer Society Conference, San Diego CA, October 2010. (Oral)

[3] Johannes CM*, Henry CJ, Hamilton T, Smith AN, Turnquist SE. Feline hemangiosarcoma: A retrospective of 36 cases. Veterinary Cancer Society Conference, Pacific Grove CA, October 2000. (Oral)

VIDEOS/VLOGs – IOWA STATE

[1] Tigilanol tiglate (Stelfonta®)/Canine Mast Cell Tumor CE modules (3). **Chad Johannes**, DVM, DACVIM (SAIM, Oncology) with Sue Ettinger, DVM, DACVIM (Oncology). QBiotics/Virbac website for DVMs. <u>https://vet-uk.virbac.com/stelfonta/education</u>

[2] ENTYCE: What does the availability of the first FDA-approved appetite stimulant for dogs mean to us? **Chad Johannes**, DVM, DACVIM (SAIM, Oncology) with Sue Ettinger, DVM, DACVIM (Oncology). Dr. Sue Cancer Vet Facebook page, December 2017.

[3] Cost Differential Between Cancer Drugs for Humans and Pets. **Chad Johannes**, DVM, DACVIM (SAIM, Oncology) explains why there's such a huge cost differential between therapeutics for people with cancer and pets with cancer. American Veterinarian website (<u>www.americanveterinarian.com</u>), August 6, 2017.

[4] Pharmaceutical Companies Embrace One Health Approach. **Chad Johannes**, DVM, DACVIM (SAIM, Oncology) talks about how the One Health approach is becoming increasingly embraced by pharmaceutical companies. American Veterinarian website (<u>www.americanveterinarian.com</u>), July 23, 2017.

[5] Veterinary Oncology: One Health. **Chad Johannes**, DVM, DACVIM (SAIM, Oncology) talks about how veterinary oncology has helped lead the growth and awareness of One Health. American Veterinarian website (<u>www.americanveterinarian.com</u>), July 17, 2017.

[6] Veterinary Oncology: Growing Awareness. **Chad Johannes**, DVM, DACVIM (SAIM, Oncology) talks about how pet owners are becoming increasingly aware of veterinary oncology therapies. American Veterinarian website (<u>www.americanveterinarian.com</u>), July 13, 2017.

[7] Veterinary Oncology: Biggest Economic Challenge. **Chad Johannes**, DVM, DACVIM (SAIM, Oncology) describes the biggest economic challenge veterinary oncology faces today. American Veterinarian website (<u>www.americanveterinarian.com</u>), July 9, 2017.

[8] Veterinary Oncology: Opportunities for Advancement. **Chad Johannes**, DVM, DACVIM (SAIM, Oncology) talks about the most readily advanceable opportunities for veterinary oncology. American Veterinarian website (<u>www.americanveterinarian.com</u>), July 1, 2017.

[9] The Growing Field of Veterinary Oncology. **Chad Johannes**, DVM, DACVIM (SAIM, Oncology) talks about how veterinary oncology has experienced tremendous growth in the last 25 to 30 years. American Veterinarian website (<u>www.americanveterinarian.com</u>), June 23, 2017.

[10] Chemotherapy: Pets vs People. **Chad Johannes**, DVM, DACVIM (SAIM, Oncology) talks about the experience of chemotherapy for pets compared to the experience for people. American Veterinarian website (<u>www.americanveterinarian.com</u>), June 9, 2017.

CLINICAL TRIAL PARTICIPATION – IOWA STATE

 [1] Multi-center prospective study investigating survival in dogs with lymphoma, presumed intermediatehigh grade, treated with prednisone alone.
 Date initiated: 01APR2016
 Date completed: 30SEP2017
 Lead site: Iowa State University
 Ancillary sites: 14

[2] Correlation of circulating plasma levels of cytokeratin 18 (CK18) with diarrhea in dogs with mast cell tumor treated with toceranib phosphate (Palladia®)
 Date initiated: 01MAR2017
 Date completed: 30SEP2017
 Lead site: The Ohio State University
 Ancillary sites: 3 (including Iowa State University)

[3] Cancer anorexia and cachexia syndrome (CACS) and associated biomarkers in dogs with lymphoma Date initiated: 01JUL2017 Date completed: 01FEB2018 Lead site: Iowa State University Ancillary sites: 1 (North Carolina State University)

[4] Clinical proof of concept study to evaluate the safety and effectiveness of crofelemer (SP-303) for the treatment of chemotherapy-induced diarrhea in dogs
 Date initiated: 23MAR2018
 Date completed: 01AUG2018
 Lead site: Jaguar Animal Health
 Ancillary sites: 12 (including Iowa State University)

[5] Additional field safety testing of canine osteosarcoma vaccine, live listeria vector Date initiated: 30MAR2018 Date completed: 01FEB2019 Lead site: Aratana Therapeutics, Inc. Ancillary sites: 26 (including Iowa State University)

[6] Study to determine the efficacy and safety of alternating rabacfosadine and doxorubicin treatments against multicentric lymphoma in previously untreated dogs
 Date initiated: 01APR2019
 Date completed: TBD
 Lead site: VetDC
 Ancillary sites: 7 (including Iowa State University)

[7] Randomized, open-label study evaluating the use of Immunocidin non-specific immunotherapy with concurrent doxorubicin-based chemotherapy for canine splenic hemangiosarcoma
 Date initiated: 01MAR2019
 Date completed: TBD
 Lead site: Iowa State University
 Ancillary sites: 9

[8] COTC028: Preclinical assessment of an oral p97 inhibitor, CB-5339, in tumor-bearing dogs. Date initiated: 01APR2019 Date completed: 01SEP2019 Lead site: Leidos Biomedical Research, Inc. Ancillary sites: 3 (including Iowa State University)

RESEARCH GRANTS – IOWA STATE (FUNDED, EXTERNAL)

[1] Musser M, **Johannes CM (Co-PI)**. BIAH anti-lymphoma IVP pilot clinical trial in dogs. Boehringer Ingelheim Animal Health USA Inc., 2020-2022, \$139,860.

[2] Musser M, Johannes CM (Co-PI). Pilot study of high-dose ascorbate combined with carboplatin for canine osteosarcoma. American Holistic Veterinary Medical Foundation, 2020-2022, \$22,172.

[3] Miller B, Goetz J, Allen B, Coleman M, **Johannes CM (Co-I)**, Musser M, Mickelson M. A study to explore the effect of external beam radiation on the strength and histology of long bones in a canine model. University of Iowa Hospitals & Clinics, Sarcoma Program, \$50,000.

[4] Musser M, **Johannes C (Co-PI)**, Viall A, Hostetter J. Expression of the prostaglandin receptors EP1-4 in five canine malignancies. Fetch-a-Cure Foundation, 2019, \$10,000.

[5] Johannes CM (PI), Musser ML, Mochel J, Allenspach K. COTC028: Preclinical assessment of an oral p97 inhibitor, CB-5339, in tumor-bearing dogs. Leidos Biomedical Research, Inc., 2019, \$37,382.

[6] Musser M, **Johannes C (Co-PI)**, Viall A, Hostetter J. Expression of the prostaglandin receptors EP1-4 in five canine malignancies. Fetch-a-Cure Foundation, 2018, \$7000.

[7] Musser M, Coto G, **Johannes CM (Co-I)**. Randomized, open-label study evaluating the use of Immunocidin[™] non-specific immunotherapy with concurrent doxorubicin-based chemotherapy for canine splenic hemangiosarcoma. NovaVive, Inc., 2018, \$25,000.

[8] Musser M, **Johannes C (Co-PI)**, Viall A, Hostetter J. Expression of the prostaglandin receptors EP1-4 in five canine malignancies. Fetch-a-Cure Foundation, 2018, \$10,000.

[9] Musser M, **Johannes C (Co-PI)**, Rassnick K. Prospective, multi-center, randomized study investigating quality of life and overall progression free interval in dogs with urinary bladder transitional cell carcinoma treated with single agent piroxicam or grapiprant. Investigator Initiated Trial Proposal, Elanco Animal Health, 2018-2021, \$5000 plus complimentary grapiprant for study (n=60).

[10] Johannes CM (PI), Fox L. Additional field safety testing of canine osteosarcoma vaccine, live listeria vector. Aratana Therapeutics, April 2018 – March 2019, \$14,460.

[11] Johannes CM (PI), Musser M, Fox L. Clinical proof-of-concept study to evaluate the safety of crofelemer (SP-303) in dogs with chemotherapy-induced diarrhea. Jaguar Animal Health, 2018-2019, \$2952.

[12] Musser M, **Johannes C (Co-PI)**, Mochel J, Mahaffey A. Evaluating high-dose intravenous vitamin C pharmacokinetics in healthy Beagle dogs. University of Iowa Hospitals & Clinics, Sarcoma Program, March 2018. \$6000.

[13] Allenspach K, Jergens AE, **Johannes C (Co-I)**, Mochel JP. *Ex-vivo evaluation of SGM-1019 in canine inflammatory bowel disease.* Second Genome, 2017, \$119,000.

[14] Garraway K, **Johannes CM (Co-PI)**, Jergens AE, Allenspach K. Do bacteria drive transformation from feline IBD to small cell lymphoma? Comparative Gastroenterology Society/WALTHAM, 2017, \$12,000.

[15] Johannes CM (PI), Rassnick K. Multi-center prospective study investigating survival in dogs with lymphoma, presumed intermediate-high grade, treated with prednisone alone. Merial, 2016 – 2017, \$15,000.

[16] Johannes CM (PI). Current clinical management of chemotherapy-induced vomiting and inappetence in dogs. Zoetis, 2016 – 2017, \$2000.

RESEARCH GRANTS – IOWA STATE (FUNDED, INTERNAL)

[1] Allenspach K, Mochel JP, Jergens AE, **Johannes CM (Co-I)**, Musser M, Palerme JS, Mickelson M, Jernigan RL, Ramsey SA. Using canine urothelial organoids to predict therapeutic response in human and canine bladder cancer: A one health approach. Iowa State University Barry Grant, 2020-2021, \$120,000.

[2] Musser M, Johannes C (Co-PI), Viall A, Phillips R, Hostetter J. Investigation of prostaglandin EP4 receptor expression in canine B and T-cell lymphoma. Iowa State College of Veterinary Medicine Seed Grant, 2019, \$3,000.

[3] Viall AK, LeVine DN, **Johannes CM (Co-I)**, Musser ML, Hostetter SJ. Evaluation of plasma cell-free DNA as a diagnostic, therapeutic response, and prognostic marker for dogs with multicentric lymphoma. Iowa State University College of Veterinary Medicine Seed Grant, 2018, \$12,455.

[4] Johannes CM (PI), Allen J, Fox L. Cancer anorexia cachexia syndrome (CACS) and associated biomarkers in dogs with lymphoma. Iowa State University, CVM Seed Grant, 2016 – 2017, \$20,000.

[5] Musser M, **Johannes C (Co-PI)**, Viall A, Hostetter J. Investigation of prostaglandin EP4 receptor as a potential therapeutic target in common canine tumors. VCS Departmental Research Incentive Grant, Iowa State University, 2018, \$1000.

[6] Mochel JP, Allenspach K, Jergens AE, **Johannes CM (Co-I)**, et al. One Health: Using canine intestinal stem cells to advance drug development, precision and regenerative medicine. Iowa State University, Miller Research Award, 2017 – 2018, \$150,000.

[7] Johannes CM (PI), Musser M. Biotechnology Seminar Funding Award: Revolutionizing cancer care with radiosurgery by Dr. Michael Nolan. Biotechnology Council, Iowa State University, November 2017, \$500.

[8] Garraway K, **Johannes CM (Co-PI)**, Jergens AE. Relationship of the mucosal microbiota to intestinal inflammation and clinical disease activity in cats with intestinal lymphoma. Iowa State University, VCS Incentive Grant, 2016, \$3,000.

[9] Johannes CM (PI). Foreign Travel Grant, Iowa State University. Expression of hedgehog signaling molecules in canine osteosarcoma (Poster). World Veterinary Cancer Congress, Foz do Iguacu, Brazil, May 2016, \$750.

RESEARCH GRANTS – PRIOR TO IOWA STATE (FUNDED)

[1] Musser ML, Suter S, **Johannes CM** (Co-PI), Hauck M. Effect of toceranib on cell proliferation and downstream signaling in canine leukemia cell lines harboring FLT3 mutations. Pfizer Animal Health, submitted March 2012 – June 2013, \$4325.

[2] Williams LE, Clarke DM, **Johannes CM** (Co-PI). The impact of carboplatin chemotherapy and the multi-kinase inhibitor toceranib phosphate (PALLADIA[™]) on angiogenesis and survival in canine osteosarcoma. Bone Cancer Dogs, Inc., January 2012, \$12,272.

[3] Williams LE, Clarke DM, **Johannes CM** (Co-PI). The impact of the multi-kinase inhibitor toceranib phosphate (PALLADIA[®]) on angiogenesis and survival in canine osteosarcoma. Pfizer Animal Health, October 2011, \$10,650.

[4] Johannes CM (PI), Hauck M. Expression of hedgehog signaling molecules in canine osteosarcoma. Firestone Canine Research Endowment, North Carolina State University, January 2011 – June 2012, \$2500.

[5] Johannes CM (PI), Henry CJ, Tyler J. Mitoxantrone and piroxicam versus piroxicam alone for the treatment of feline oral squamous cell carcinoma. The Winn Feline Foundation, 2002-2005, \$14,250.

[6] Johannes CM (PI), Henry CJ, Tyler J, Turnquist SE. Mitoxantrone and piroxicam versus piroxicam alone for the treatment of feline oral squamous cell carcinoma. American Association of Feline Practitioners, January 2002-2005, \$10,000.

[7] Johannes CM (PI), Estes DM. P2X7 purinergic receptor signaling and activation of the caspase cascade in bovine alveolar macrophages. University of Missouri Phi Zeta (Pi Chapter), 2002, \$750.

[8] Johannes CM (PI), Estes DM. Effects of estrogen receptor signaling on macrophage function. University of Missouri Phi Zeta (Pi Chapter), 2001, \$500.

RESEARCH GRANTS – IOWA STATE (PENDING)

[1] Musser M, **Johannes CM (Co-PI)**. Pilot study of high-dose ascorbate combined with carboplatin for canine osteosarcoma. American Kennel Club Canine Health Foundation (Acorn), 2021-2023, \$12,528.

[2] Musser M, Johannes CM (Co-PI), Rassnick K. Prospective, multi-center, randomized study investigating quality of life and overall progression free interval in dogs with urinary bladder transitional cell carcinoma treated with piroxicam or grapiprant. American Kennel Club Canine Health Foundation (Oak), 2021-2025, \$82,164.

[3] Allenspach K, Mochel JP, Jergens AE, **Johannes CM (Co-I)**, Musser M, Palerme JS, Mickelson M, Jernigan RL, Ramsey SA. Using canine urothelial organoids to predict therapeutic response in human and canine bladder cancer: A one health approach. Puppy Up Foundation Grant, 2020-2021, \$100,000.

[4] Mochel J, Allenspach K, Jergens A, **Johannes CM (Co-I)**. Dog-sensitive bladder cancer pilot study using nanoparticle drug delivery and non-invasive real time monitoring. NIH R33/44 PA-19-272, 2020-2022, \$382,393.

RESEARCH GRANTS – IOWA STATE (NOT FUNDED, EXTERNAL)

[1] Ortiz C, **Johannes CM (Co-PI)**, Musser M, Viall A. Prostaglandin EP4R as a potential therapeutic target for feline oral squamous cell carcinoma. American College of Veterinary Internal Medicine, 2021-22, \$7235.

[2] Musser ML, Johannes CM (Co-PI). Reviving high-dose vitamin C for canine cancer. CureAccelerator, 2020, \$23,672.

[3] Musser ML, Johannes CM (Co-I), Allen BG. Pilot study of high-dose ascorbate combined with carboplatin for canine osteosarcoma. Morris Animal Foundation Pilot Study, 2020, \$10,368.

[4] Mochel J, Allenspach K, Jergens A, **Johannes CM (Co-I)**. Dog-sensitive bladder cancer pilot study using nanoparticle drug delivery and non-invasive real time monitoring. AKC, 2019, \$180,000.

[5] Musser ML, **Johannes CM (Co-I)**, Viall A. Prostaglandin EP4 receptor as a potential therapeutic target for feline oral squamous cell carcinoma. Winn Feline Foundation Miller Trust Grant, 2019, \$14,688.

[6] Musser ML, **Johannes CM (Co-I)**. High-dose ascorbate combined with carboplatin for canine osteosarcoma: A pilot study. Doberman Pinscher Health Foundation Grants Program, 2019, \$10,368.

[7] Musser M, Hostetter J, **Johannes C (Co-I)**, Phillips R, Viall A. Investigation of prostaglandin EP4 receptor expression in common feline tumors. Morris Animal Foundation Pilot Study, 2018, \$10,800.

[8] Viall AK, LeVine DN, **Johannes CM (Co-I)**, Musser ML, Hostetter SJ. Evaluation of plasma cell-free DNA as a diagnostic, therapeutic response, and prognostic marker for dogs with multicentric lymphoma. Morris Animal Foundation Pilot Study, 2018, \$10,800.

[9] Musser M, Bracha S, Hostetter J, **Johannes C (Co-I)**, Phillips R, Viall A. Expression and therapeutic blockade of prostaglandin receptors EP1-4 in canine malignancies. Morris Animal Foundation First Award, 2018, \$108,000.

[10] Musser M, **Johannes C (Co-PI)**, Viall A, Berger E, Bracha S, Hostetter J. Investigation of prostaglandin EP4 receptor as a potential therapeutic target in common feline tumors. Winn Feline Foundation, 2018, \$25,000.

[11] Bigelow TA, **Johannes CM (Co-I)**, Wu H. Feasibility of ultrasound histotripsy to treat bladder cancer. NIH, July 2018 – June 2020, \$394,250.

[12] Allenspach K, Jergens AE, Johannes C **(Co-I)**, Mochel JP, Skala M, Burney DP, Rassnick K. Using canine intestinal stem cells to advance drug development and precision medicine in colorectal cancer in humans and dogs. Puppy Up Foundation, 2017-2018, \$101,670.

[13] Allen J, **Johannes CM (Co-PI)**, Lund K. Cancer anorexia cachexia syndrome (CACS) and associated biomarkers in dogs with lymphoma. Animal Cancer Foundation, 2016, \$50,000.

[14] Allen J, **Johannes CM (Co-PI)**, Lund K. Cancer anorexia cachexia syndrome (CACS) and associated biomarkers in dogs with lymphoma. Morris Animal Foundation, 2016, \$30,000.

[15] Johannes CM (Co-PI), Garraway K, Jergens AE, Allenspach K. Relationship of mucosal microbiota to GI inflammation and development of lymphoma in cats. Miller Trust/Winn Feline Foundation, 2016, \$17,154.

RESEARCH GRANTS – IOWA STATE (NOT FUNDED, INTERNAL)

[1] Musser ML, Johannes CM (Co-I), Allen BG. Pilot study of high-dose ascorbate combined with carboplatin for canine osteosarcoma. ISU CVM Seed Grant, 2020, \$19,872.

[2] Musser ML, Allen BG, Dodd R, **Johannes CM (Co-I)**, Miller B, Monga V, Varga S. Evaluation of the immunological impact of high-dose ascorbate combined with carboplatin for canine osteosarcoma. Iowa State University Barry Grant, 2020-2021, \$78,000.

[3] Musser ML, Allen BG, Dodd R, **Johannes CM (Co-I)**, Miller B, Monga V, Varga S. Evaluation of the immunologiocal impact of high-dose ascorbate combined with carboplatin for canine osteosarcoma. ISU-UI Partnership Seed Grant Program, 2019, \$44,500.

[4] Musser ML, Allen BG, **Johannes CM (Co-I)**. Evaluation of the immunologiocal impact of pharmacological ascorbate combined with carboplatin for canine osteosarcoma. Iowa State University College of Veterinary Medicine Seed Grant, 2019, \$17,500.

[5] Allenspach K, Jergens AE, **Johannes C (Co-PI)**, Mochel JP, Musser M, Fernandez-Zapico M. Using canine intestinal stem cells to advance drug discovery and precision medicine in human and dog patients with colorectal cancer. Iowa State University Barry Grant, 2018-2019, \$120,000 (\$60,000/year for 2 years).

[6] Musser M, **Johannes C (Co-I)**, Viall A, Hostetter J. Expression of the prostaglandin receptors EP1-4 in five canine malignancies. Iowa State College of Veterinary Medicine Seed Grant, 2018, \$20,000.

[7] Berger EP, Johannes CM (Co-PI), Ostrander E, Musser M. Genomic evaluation of canine gastrointestinal stromal tumors. VCS Departmental Research Incentive Grant, Iowa State University, 2018, \$3850.

[8] Claussen JC, Musser M, **Johannes C (Co-PI)**. Rapid screening of oral melanoma at the point-of-care with carbon nanotube-based electrochemical biosensors. McGee-Wagner Interdisciplinary Research Fund, Iowa State University, 2018-2020, \$30,000 (\$10,000/year for 3 years).

[9] Jergens AE, **Johannes CM (Co-PI)**, Garraway K, Ackerman M. Relationship of the mucosal microbiota to tumor-infiltrating immune cells and disease activity in cats with intestinal lymphoma. Iowa State University, CVM Seed Grant, 2016, \$10,250.

INVITED GRANT REVIEWER – IOWA STATE

AKC Canine Health Foundation, 2016

Veterinary Cancer Society Resident Grants, 2017, 2018

BASIC SCIENCE RESEARCH EXPERIENCE

Expression of hedgehog signaling molecules in canine osteosarcoma. Funded by Firestone Canine Research Endowment grant, North Carolina State University. Department of Clinical Sciences, Dr. Marlene Hauck Laboratory, January 2011 – present.

P2X7 purinergic receptor signaling and activation of caspase cascade in bovine alveolar macrophages. Funded primarily by National Institute of Health grant, Dr. D.M. Estes (PI), University of Missouri Department of Veterinary Pathobiology, August 2001 – April 2003.

Effects of estrogen receptor signaling on macrophage function. Funded primarily by National Institute of Health grant, Dr. D.M. Estes (PI), University of Missouri Department of Veterinary Pathobiology, October 1999 – December 2000.

Ceroid lipofuscinosis in Tibetan Terriers.

Martin Katz, M.D. (PI). Coordinated collection of skin and colonic biopsies for evaluation, July 2000.

INDUSTRY AND REGULATORY CONSULTATION/ADVISORY BOARDS

Anivive Lifesciences

Oncology Advisory Board: June 2020 – present

AskGene Pharma

Consultant: June – December 2018

Aratana Therapeutics, Inc.

Consultant: July 2015 – October 2019 Inappetence Advisory Board: July 2015 – October 2019 Immuno-Oncology Advisory Board: July 2015 – October 2019

Boehringer Ingelheim

Oncology Advisory Board: September 2020 – present

Elanco Animal Health

Consultant: September 2019 – present Oncology Advisory Board: April 2020 – present Entyce (capromorelin) Advisory Board: May 2020 – present

Hill's Pet Nutrition, Inc.

Oncology Advisory Board: August 2020 – present

Immix Biopharma, Inc.

Advisor: November 2018 – June 2019

Innogenics

Scientific Advisory Board: April 2017 - December 2019

LifEngine Animal Health Laboratories

Advisor: January 2019 – present

Midmark Animal Health

Consultant: June – October 2017

NantKwest / Coneksis

Consultant: December 2016 – December 2017

NovaVive

Consultant: March 2017 – January 2019

QBiotics

Consultant: March 2017 – present Advisory Board: October 2018 – present

Scout Bio

Consultant: August 2017 – May 2018

Second Genome

Consultant: March – December 2016

Verte Therapeutics

Consultant: November 2019 – present

VetDC

Consultant: July 2016 – December 2018

WeCannHeal

Advisor: February 2017 – May 2018

USDA Center for Veterinary Biologics

Veterinary Oncology Technical Stakeholder Group: 2017 – present

Virbac

Advisor: April 2020 – present

Zoetis

Oncology Advisory Board: 2011 – 2013 Emesis Advisory Board: November 2016 – December 2017

DIDACTIC TEACHING LECTURES

Iowa State University College of Veterinary Medicine

- VCS 444 Small Animal Medicine: Oncology lectures. 4 hours. Fall 2020.
- VCS 313 Veterinarian in Society III (Ethics): Ethics in the Veterinary Industry. 1 hour. Fall 2020.
- VCS 311 Veterinarian in Society I (Careers): Introduction to Industry. 1 hour. Fall 2020.
- VCS 318X Oncology Elective: Oncology lectures/discussions. 1 hour. Spring 2020.
- VCS 444 Small Animal Medicine: Oncology lectures. 5 hours. Fall 2019.
- VCS 313 Veterinarian in Society III (Ethics): Ethics in the Veterinary Industry. 1 hour. Fall 2019.
- VCS 311 Veterinarian in Society I (Careers): Introduction to Industry. 1 hour. Fall 2019.
- VMED 654 (University of Nebraska-Lincoln PPVM) Oncology Pharmacology. 1 hour. Spring 2019.
- VCS 318X Oncology Elective: Oncology lectures/discussions. 4 hours. Spring 2019.
- VCS 444 Small Animal Medicine: Oncology lectures. 5 hours. Fall 2018.
- VCS 313 Veterinarian in Society III (Ethics): Ethics in the Veterinary Industry. 1 hour. Fall 2018.
- VCS 311 Veterinarian in Society I (Careers): Introduction to Industry. 1 hour. Fall 2018.
- VCS 676 Advanced Medicine: Osteosarcoma immunotherapy. 1 hour. Spring 2018.
- VCS 444 Small Animal Medicine: Endocrinology lectures. 2 hours. Fall 2017.
- VCS 444 Small Animal Medicine: Oncology lectures. 6 hours. Fall 2017.
- VCS 313 Veterinarian in Society III (Ethics): Ethics in the Veterinary Industry. 1 hour. Fall 2017.
- VCS 311 Veterinarian in Society I (Careers): Introduction to Industry. 1 hour. Fall 2017.
- VCS 407 Feline Medicine Elective: Oncology lecture. 1 hour. Fall 2017.
- VCS 444 Small Animal Medicine: Endocrinology lectures. 7 hours. Fall 2016.
- VCS 407 Feline Medicine Elective: Oncology lecture. 1 hour. Fall 2016.
- VCS 444 Small Animal Medicine: Oncology lectures. 2 hours. Fall 2016.
- VCS 676 Advanced Medicine: Oncology lectures. 1 hour. Spring 2016.
- VCS 444 Small Animal Medicine: Endocrinology lectures. 7 hours. Fall 2015.
- VCS 676 Advanced Medicine: Oncology lectures. 2 hours. Spring 2015.

North Carolina State University College of Veterinary Medicine

Oncology Procedures Laboratory. 2 hours. Fall 2010.

Mississippi State University College of Veterinary Medicine

CVM Onc – Small Animal Oncology Elective: Course Coordinator/Lead Lecturer. 30 hours. Spring 2006.
CVM 5195 – Small Animal Medicine & Surgery II: Hyperadrenocorticism lecture. 2 hours. Spring 2006.
CVM 5195 – Small Animal Medicine & Surgery II: Hypothyroidism lecture. 1 hour. Spring 2006.
CVM 5195 – Small Animal Medicine & Surgery II: Hypothyroidism lecture. 1 hour. Spring 2006.
NAVLE Board Review: Infectious disease lecture. 1 hour. Spring 2006.
NAVLE Board Review: Endocrinology and infectious disease lecture. 2 hours. Fall 2005.

DIDACTIC TEACHING LECTURES

St. George's University School of Veterinary Medicine (Grenada, West Indies)

Small Animal Internal Medicine (5th Term students): Gastrointestinal (6 hours), hepatobiliary (3 hours), exocrine pancreas (1 hour), and emergency/triage and trauma (1 hour) lectures. Fall 2005.

Kansas State University College of Veterinary Medicine

CS 750 – Systems Integration for Small Animal Medicine: Problem-oriented case management (multiple myeloma). 2 hours. Spring 2004.

CS 740 – Small Animal Emergency Medicine Elective: Oncologic emergencies lecture. 1 hour. Spring 2004.

CS 740 – Small Animal Emergency Medicine Elective: Triage and trauma lecture. 1 hour. Spring 2004.

CS 745 – Grand Rounds: Case presentation and discussion. 2 hours. Spring 2004.

CS 711 – Small Animal Medicine: Medicine procedures laboratory. 2 hours. Fall 2003.

NAVLE Board Review: Endocrinology. 2 hours. Fall 2003.

CS 745 – Grand Rounds: Case presentation and discussion. 1 hour. Spring 2003.

CS 740 – Small Animal Emergency Medicine Elective: Triage and trauma lecture. 1 hour. Spring 2003.

CS 711 – Small Animal Medicine: Medicine procedures laboratory. 2 hours. Fall 2002.

NAVLE Board Review: Endocrinology. 2 hours. Fall 2002.

University of Missouri College of Veterinary Medicine

VMS 605 – Small Animal Medicine II: Polyuria and polydipsia lecture. 1 hour. Summer 2002.

VMS 604 – Small Animal Medicine I: Medicine procedures laboratory. 5 hours. Spring 2002.

VMS 604 – Small Animal Medicine I: Small intestinal disease lecture. 1.5 hours. Spring 2002.

VMS 605 – Small Animal Medicine II: Polyuria and polydipsia lecture. 1 hour. Summer 2001.

VMS 604 – Small Animal Medicine I: Small intestinal disease lecture. 1.5 hours. Spring 2001.

VMS 604 – Small Animal Medicine I: Medicine procedures laboratory. 5 hours. Spring 2001.

VMS 604 – Small Animal Medicine: Physical examination laboratory. 2 hours. Spring 2001.

VBS 505A – GI Physiology: GI endoscopy indications and procedures laboratory. 2 hours. Spring 2001.

VMS 609 – Small Animal Critical Care (Lab): Esophagostomy tube placement. 3 hours. Summer 2000.

VMS 604 – Small Animal Medicine I: Medicine procedures laboratory. 5 hours. Spring 2000.

VBS 505A – GI Physiology: GI endoscopy indications and procedures laboratory. 1 hour. Spring 2000.

Emergency and Critical Care Conference: Procedures laboratory (continuing education laboratory for veterinarians). 6 hours. Fall 1999.

PROFESSIONAL DVM ADVISING

Carlos Ortiz, DVM, Oncology Resident, Iowa State University: Faculty Advisor, July 2020 - present

Haylie Lawson, DVM, Oncology Resident, Iowa State University: Clinical Advisor, July 2020 - present

- Giovanna Coto, DVM, Oncology Resident, Iowa State University: Clinical Advisor, July 2018 present
- **Erika Berger, DVM**, Oncology Resident, Iowa State University: Faculty Advisor, August 2017 August 2020 *Received the Resident Seminar Presentation Award, 2018 and 2020* Clinical Research Coordinator, National Cancer Institute, August 2020 – present
- Erika Berger, DVM, Oncology Intern, Iowa State University: Faculty Advisor, July 2016 July 2017
- Kayode Garraway, DVM, SAIM Resident, Iowa State University: Faculty Advisor, July 2015 July 2018 Received the Russ and Lora Talbot Research Graduate Scholarship (\$2000), August 2017 Received Resident/Intern/Graduate Student/Post Doc of the Year Award, August 2018 Small Animal Internal Medicine Specialist, BluePearl, Seattle WA, September 2018 – present

Erika Berger, DVM, Rotating Intern, Iowa State University: Faculty Advisor, August 2015 – June 2016

Natalie Punt, DVM, Rotating Intern, Iowa State University: Faculty Advisor, December 2015 – June 2016

GRADUATE STUDENT ADVISING

Kayode Garraway, DVM, Iowa State University: Master's Committee, December 2015 – July 2018 Master's Degree conferred, August 2018

VETERINARY STUDENT ADVISING

VCS 419 Preceptorship Advisor, Iowa State University Class of 2021: 1 student/preceptorship VCS 419 Preceptorship Advisor, Iowa State University Class of 2019: 4 students/preceptorships VCS 419 Preceptorship Advisor, Iowa State University Class of 2018: 6 students/preceptorships VCS 419 Preceptorship Advisor, Iowa State University Class of 2017: 5 students/preceptorships Grand Rounds, Iowa State University Class of 2020: 2 student/presentation Grand Rounds, Iowa State University Class of 2019: 2 student/presentation Grand Rounds, Iowa State University Class of 2018: 3 student/presentation Grand Rounds, Iowa State University Class of 2017: 3 students/presentation Grand Rounds, Iowa State University Class of 2017: 3 students/presentations Grand Rounds, Iowa State University Class of 2017: 3 students/presentations

Brittany Fowler, Veterinary Student, Iowa State University: Faculty Co-Supervisor, Ecological-level analysis of canine and feline primary lung tumors and environmental radon levels, February 2016 – present.

Nathan Yanda, Veterinary Student, Iowa State University: Faculty Supervisor, Multi-center prospective study investigating survival in dogs with lymphoma, presumed intermediate-high grade, treated with prednisone alone project, May 2016 – May 2018.

Jeremy Servantez, Veterinary Student, Iowa State University: Faculty Supervisor, Complete blood cell count changes noted in dogs with lymphoma treated with a standardized multi-agent chemotherapy protocol project, May 2016 – February 2017.

Angela Bryan, Summer Scholar Program, Iowa State University: Faculty Co-Sponsor, Relationship of mucosal microbiota to gastrointestinal inflammation and development of lymphoma in cats, May – August 2016.

Jiafeng Gao, Visiting Veterinary Student, China Agricultural University: Faculty Mentor, May – July 2016

Sarah Marnin, Veterinary Student, Iowa State University: Faculty Supervisor, Accuracy, precision and stability of compounded toceranib phosphate formulations for use in dogs project, 2017 – 2019.

Kayden Toone, Veterinary Student, Iowa State University: Faculty Supervisor, Selective dysmegakaryocytopoeisis secondary to chemotherapy in a dog with lymphoblastic lymphoma case report, May – August 2017.

Stefanie Hurt, Veterinary Student, Iowa State University: Faculty Supervisor, Cerebral meningioma with prescapular lymph node metastasis in an English Springer Spaniel case report, May – August 2017.

UNDERGRADUATE STUDENT ADVISING

Lauren Hackbarth, Iowa State University, First-Year Honors Mentor Program: Faculty Advisor, Chemotherapy-induced vomiting and inappetence project, January – May 2016

Katharine Richards, Grinnell College, Summer Research Intern: Faculty Supervisor, Marked paraneoplastic hypereosinophilia associated with a low grade, metastatic canine mast cell tumor case report, May – August 2017.

VETERINARY TECHNICIAN SPECIALTY ADVISING

Rachael Rail, Veterinary Technician, Iowa State University: Faculty Mentor; boarding process for VTS in Oncology. Received Veterinary Cancer Society VTS Specialty License Scholarship (\$2500), October 2020.

STUDENT LETTERS OF RECOMMENDATION WRITTEN

Iowa State University, 2020 VIRMP: Student (1) Iowa State University, 2020 VIRMP: Student (1) Iowa State University, 2019 VIRMP: Student (1) Iowa State University, 2019 Professional Programs: Student (1) Iowa State University, 2018 Professional Programs: Student (2) Iowa State University, 2018 VIRMP: Student (2) Iowa State University, 2017 VIRMP: House Officer (1); Student (4) Iowa State University, 2016 VIRMP: House Officer (2); Student (3)

CONTINUING EDUCATION PRESENTATIONS

International / National

Veterinary Oncology Market Potential Initiatuve (VOMPI) Update (US) Global Initiative for Veterinary Cancer Surveillance, Lisbon, Portugal, 0.5 hour, October 2020. *[Given via webinar to COVID-19 travel restrictions.]*

Tigilanol tiglate: Potential Impact of a New Intratumoral Treatment Option for Canine Mast Cell Tumors Educational presentation scheduled to specialist veterinarians, World Congress of Veterinary Dermatology, Sydney, Australia, 0.5 hour, October 2020. *[Given via webinar to COVID-19 travel restrictions.]*

Evolving the Clinical Management of Chronic Inappetence in Dogs Educational presentation to veterinarians, American Veterinary Medical Association Convention, San Diego CA, 1 hour, August 2020. *[Given via webinar to COVID-19 travel restrictions.]*

What Your Clients Want to Know About Canine Lymphoma Treatment Options Educational presentation to veterinarians, American Veterinary Medical Association Convention, San Diego CA, 1 hour, August 2020. *[Given via webinar due to COVID-19 travel restrictions.]*

Controversial Oncologic Therapeutics and Diagnostics: A Panel Discussion (with Drs. Kristen Weishaar, Philip Bergman and Craig Clifford)

Educational presentation to veterinarians, American College of Veterinary Internal Medicine Forum, Baltimore MD, 2 hours, June 2020. *[Cancelled due to COVID-19 travel restrictions.]*

Clinical Management of Canine Mast Cell Tumors with Tigilanol tiglate (Stelfonta®) Educational presentation to oncology specialists and primary care veterinarians (350 attendees), Virbac Oncology Summit, Nice, France, 1 hour, April 2020. *[Given via webinar due to COVID-19 travel restrictions.]*

New Immunotherapeutic Options for Canine Osteosarcoma Educational presentation to veterinarians and technicians (~30 attendees), Western Veterinary Conference, Las Vegas NV, 1 hour, February 2020.

Evolving the Clinical Management of Chronic Inappetence in Dogs Educational presentation to veterinarians and technicians (~50 attendees), Western Veterinary Conference, Las Vegas NV, 1 hour, February 2020.

Palladia®: How it Works and it's Many Uses in Dogs and Cats Educational presentation to technicians (~75 attendees), Veterinary Cancer Society Conference, Houston TX, 1 hour, October 2019.

Panel Discussion: Entyce - *Best Practices and Clinical Integration* (w/ Drs. Chelsea Tripp, Katie Stroda and Kelvin Kow) Educational presentation to veterinarians and technicians (~125 attendees), Veterinary Cancer Society Conference, Houston TX, 1 hour, October 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (~50 attendees), webinar (Aratana Therapeutics), 1 hour, July 2019.

Evolving the Clinical Approach to Canine and Feline Gastrointestinal Cancers Educational presentation to veterinarians and technicians (~50 attendees), American College of Veterinary Internal Medicine Forum, Phoenix AZ, 1 hour, June 2019.

Oncology Refresher: Diagnostic and Treatment Advances in Feline Oncology Educational presentation to veterinarians and technicians (~60 attendees), American College of Veterinary Internal Medicine Forum, Phoenix AZ, 1 hour, June 2019.

Oncology Refresher: New Therapeutics Impacting Clinical Practice Educational presentation to veterinarians and technicians (~75 attendees), American College of Veterinary Internal Medicine Forum, Phoenix AZ, 1 hour, June 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (~100 attendees), American College of Veterinary Internal Medicine Forum, Phoenix AZ, 1 hour, June 2019.

International / National (Continued)

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (~125 attendees), Western Veterinary Conference, Las Vegas NV, 1 hour, February 2019.

Pre-Conference Workshop: How Will Our Patients Survive the Next Drug Shortage? (Panel discussion with Drs. Kevin Hahn, Andy Abbo and Chelsea Tripp)

Educational presentation to veterinarians and technicians (~75 attendees), Veterinary Cancer Society Conference, Louisville KY, 0.5 hour, October 2018.

New Science Impacting the Clinical Approach to Feline Gastrointestinal Cancer Educational presentation to veterinarians (~250 attendees), European College of Veterinary Internal Medicine Congress, Rotterdam, Netherlands, 0.75 hour, September 2018.

Evolving the Clinical Approach to Canine Gastrointestinal Cancer Educational presentation to veterinarians (~250 attendees), European College of Veterinary Internal Medicine Congress, Rotterdam, Netherlands, 0.75 hour, September 2018.

What Clinical Oncologists Would Like to See When New Treatments or Diagnostics are Commercialized (Panel Coordinator w. Drs. Craig Clifford, Philip Bergman MK Klein, David Vail, Doug Thamm) Educational presentation to veterinarians (~125 attendees), American College of Veterinary Internal Medicine Forum, Seattle WA, 1 hour, June 2018.

Future Therapies for Small Animal Oncology: New Targets, New Techniques (w. Dr. Linda Rhodes) Educational presentation to veterinarians (~150 attendees), American College of Veterinary Internal Medicine Forum, Seattle WA, 1 hour, June 2018.

Clinical Impact of Inappetence in Canines Educational presentation to veterinarians and technicians (~200 attendees), webinar (Aratana Therapeutics/Henry Schein Animal Health), 1 hour, May 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (~75 attendees), webinar (Aratana Therapeutics), 1 hour, March 2018.

Clinical Impact of Inappetence in Canines Educational presentation to veterinarians (~100 attendees), Western Veterinary Conference, Las Vegas NV, 1 hour, March 2018.

Tanovea: A New Option for Canine Lymphoma Educational presentation to veterinarians (~100 attendees), Veterinary Meeting & Expo (formerly NAVC), Orlando FL, 0.5 hour, February 2018.

How We Treat Mast Cell Tumors: 2 Points of View (w/ Dr. Sue Ettinger) Educational presentation to veterinarians (~250 attendees), Veterinary Meeting & Expo (formerly NAVC), Orlando FL, 1 hour, February 2018.

CHOP Talk: What Clients Want to Know About Lymphoma Treatments Educational rounds presentation to veterinarians (15 attendees), Veterinary Meeting & Expo (formerly NAVC), Orlando FL, 1.5 hours, February 2018.

Palladia: How it Works and its Many Uses in Dogs

Educational presentation to veterinarians (~225 attendees), Veterinary Meeting & Expo (formerly NAVC), Orlando FL, 1 hour, February 2018.

Feline Oncology: Diagnostic and Treatment Advances

Educational rounds presentation to veterinarians (12 attendees), Veterinary Meeting & Expo (formerly NAVC), Orlando FL, 2 hours, February 2018.

Oncoeconomics: The Economics of Oncology in your Practice

Educational presentation to veterinarians (~75 attendees), Veterinary Meeting & Expo (formerly NAVC), Orlando FL, 1 hour, February 2018.

International / National (Continued)

Clinical Impact and Management of Inappetence in Oncology Patients Educational presentation to veterinarians and technicians (~400 attendees), Veterinary Cancer Society Conference, Portland OR, 1 hour, October 2017.

Indications and Emerging Therapies for the use of Appetite Stimulants Educational presentation to veterinarians (~225 attendees), American College of Veterinary Internal Medicine Forum, National Harbor MD, 0.5 hour, June 2017.

The Economics of Veterinary Oncology: Opportunities and Challenges (Panel w. Drs. Craig Clifford, Philip Bergman and Sylvester Price)

Educational presentation to veterinarians (~150 attendees), American College of Veterinary Internal Medicine Forum, National Harbor MD, 1 hour, June 2017.

Clinical Impact and Management of Chemotherapy-Induced Vomiting and Inappetence (CIVI) Educational presentation to veterinarians (~150 attendees), American College of Veterinary Internal Medicine Forum, National Harbor MD, 1 hour, June 2017.

The Future of Small Animal Oncology Therapeutics

Educational presentation to veterinarians (~100 attendees), American College of Veterinary Internal Medicine Forum, National Harbor MD, 1 hour, June 2017.

Inappetence Roundtable (w. Drs. Lisa Freeman and Derek Burney) Educational presentation to veterinarians (~50 attendees), Western Veterinary Conference, Las Vegas NV, 1 hour, March 2017.

Clinical Impact and Management of Inappetence in Oncology Patients Educational presentation to veterinarians (~50 attendees), Western Veterinary Conference, Las Vegas NV, 1 hour, March 2017.

Inappetence Roundtable (w. Drs. Lisa Freeman and Audrey Cook) Educational presentation to veterinarians (~125 attendees), North American Veterinary Conference, Orlando FL, 1 hour, February 2017.

Clinical Impact and Management of Inappetence in Oncology Patients Educational presentation to veterinarians (~75 attendees), North American Veterinary Conference, Orlando FL, 1.5 hour, February 2017.

The Evolution of Veterinary Oncology

Educational presentation to veterinarians and industry representatives (~75 attendees), USDA Center for Veterinary Biologics and Animal Health Institute Joint Summer Meeting, Ames IA, 1.25 hour, June 2016.

Progress and pitfalls: Differentiating IBD vs. lymphoma in cats (w. Dr. Al Jergens) Continuing education presentation to veterinarians (30 attendees), American College of Veterinary Internal Medicine Forum, Denver CO, 2 hours, June 2016.

New Therapeutics Impacting Oncology Practice

Continuing education presentation to veterinarians (~200 attendees), American College of Veterinary Internal Medicine Forum, Denver CO, 1 hour, June 2016.

New Therapeutics Impacting Small Animal Oncology Practice

Continuing education presentation to technicians (30 attendees), American College of Veterinary Internal Medicine Forum, Denver CO, 1 hour, June 2016.

The future is now: New oncology therapeutics

Educational presentation to veterinary students (~75 attendees), Student American Veterinary Medical Association Symposium, Ames IA, 1 hour, March 2016.

Immunotherapeutics in canine osteosarcoma: Hope for the future? (w/ Dr. Laura Treml) Continuing education presentation to veterinarians (~90 attendees), Western Veterinary Conference, Las Vegas NV, 1 hour, March 2016.

International / National (Continued)

Osteosarcoma in Dogs: New Therapeutic Advances (w/ Dr. Nicola Mason) Continuing education presentation to veterinarians (~120 attendees), North American Veterinary Conference, Orlando FL, 1 hour, January 2016.

New oncology therapeutics on the horizon

Continuing education presentation to technicians (100 attendees), Veterinary Cancer Society Conference, Vienna VA, 1.5 hour, October 2015.

Evolving science and clinical applications of immunotherapeutics in veterinary oncology (w/ Dr. Phil Bergman) Continuing education presentations to veterinarians (~100 attendees), American College of Veterinary Internal Medicine Forum, Indianapolis IN, 2 hours, June 2015.

Antiemesis therapeutic considerations for the oncology patient

Practical guide to diagnosis and prevention of canine leptospirosis

Continuing education presentations to technicians, American College of Veterinary Internal Medicine Forum, New Orleans LA, 2 hours, May 2012.

Toceranib phosphate (PALLADIA™): A new treatment option for canine MCT Continuing education presentation to technicians, American College of Veterinary Internal Medicine Forum, Anaheim CA, 1 hour, June 2010.

Canine leptospirosis – are your patients protected? Pfizer Animal Health continuing education teleconference presentations to veterinarians and support personnel (1000 attendees), 4 hours, April & June, 2008.

Effectively maneuvering those feline diabetic disasters

Continuing education presentation to veterinarians, American Veterinary Medical Association Annual Conference, Washington DC, 1 hour, July 2007.

Effectively maneuvering those feline diabetic disasters

Continuing education presentation to veterinarians, American Animal Hospital Association Conference, Denver CO, 1 hour, March 2007.

Mitoxantrone and piroxicam versus piroxicam alone for the treatment of feline oral squamous cell carcinoma Research update to the American Association of Feline Practioners annual conference, San Francisco CA, 1 hour, October 2004.

CONTINUING EDUCATION PRESENTATIONS

Regional

What Your Clients Want to Know About Canine Lymphoma Treatment Options Educational presentation to veterinarians and technicians (30 attendees), Boston MA, 1 hour, October 2020. [Given via webinar due to COVID-19 travel restrictions.]

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (20 attendees), Dallas TX, 1 hour, August 2020. *[Given via webinar due to COVID-19 restrictions.]*

Tigilanol tiglate: Potential Impact of a New Intratumoral Treatment Option for Canine Mast Cell Tumors Educational presentation scheduled to specialist veterinarians, Veterinary Eastern Cooperative Oncology Group, New York NY, 1 hour, April 2020. *[Cancelled due to COVID-19 restrictions.]*

Oncology in Primary Care Practice: Protocol Options and Monitoring Educational presentation to veterinarians and technicians (25 attendees), Florida Veterinary Medical Association, Orlando FL, 1 hour, March 2020.

Palladia: It's Many Uses in Dogs and Cats

Educational presentation to veterinarians and technicians (20 attendees), Florida Veterinary Medical Association, Orlando FL, 1 hour, March 2020.

Palliative Care in Veterinary Oncology: The Most Important Things We Do Educational presentation to veterinarians and technicians (25 attendees), Florida Veterinary Medical Association, Orlando FL, 1 hour, March 2020.

CHOP Talk: What Clients Want to Know about Lymphoma Educational presentation to veterinarians and technicians (20 attendees), Florida Veterinary Medical Association, Orlando FL, 1 hour, March 2020.

Mast Cell Tumors: Practical Approach to a Complicated Cancer Educational presentation to veterinarians and technicians (25 attendees), Florida Veterinary Medical Association, Orlando FL, 1 hour, March 2020.

Osteosarcoma: Best Use of New Treatment Options Educational presentation to veterinarians and technicians (25 attendees), Florida Veterinary Medical Association, Orlando FL, 1 hour, March 2020.

Hope vs. Hype in Veterinary Oncology Educational presentation to veterinarians and technicians (10 attendees), Florida Veterinary Medical Association, Orlando FL, 2 hours, March 2020.

New Oncology Therapeutics Impacting Clinical Practice Educational presentation to veterinarians and technicians (20 attendees), Florida Veterinary Medical Association, Orlando FL, 1 hour, March 2020.

Diagnostic and Treatment Advances in Feline Oncology Educational presentation to veterinarians and technicians (10 attendees), Florida Veterinary Medical Association, Orlando FL, 1 hour, March 2020.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (8 attendees), McLean VA, 1 hour, October 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (20 attendees), Arlington VA, 1 hour, October 2019.

Evolving the Clinical Approach to Management of Inappetence for Cancer and Chronic Disease Educational presentation to veterinarians and technicians (80 attendees), Long Island Veterinary Medical Association, Ronkonkoma NY, 2 hours, June 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (8 attendees), Harborside Veterinary Hospital, Huntington NY, 1 hour, June 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians (35 attendees), MedVet Columbus, Worthington OH, 1 hour, June 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (10 attendees), MedVet Cincinnati and Dayton, West Chester OH, 1 hour, June 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (10 attendees), Veterinary Specialty Center, Buffalo Grove IL, 1 hour, May 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (5 attendees), Midwest Animal Hospital, Orland Park IL, 1 hour, May 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (20 attendees), MedVet, Chicago IL, 1 hour, May 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (15 attendees), VCA Veterinary Specialty Center, Middleton WI, 1 hour, May 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (30 attendees), Madison Veterinary Specialists, Madison WI, 1 hour, May 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (20 attendees), Animal Referral Center, Fox Valley WI, 1 hour, May 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (10 attendees), Waukesha Veterinary Referral Center, Waukesha WI, 1 hour, May 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (15 attendees), Lakeshore Veterinary Specialists, Glendale WI, 1 hour, May 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (20 attendees), Aratana Therapeutics, Irvine CA, 1 hour, April 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (10 attendees), Laguna Hills Animal Hospital, Laguna Woods CA, 1 hour, April 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (40 attendees), Aratana Therapeutics, Scottsdale AZ, 1 hour, April 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (10 attendees), AZ Pet Vet, Glendale AZ, 1 hour, April 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (50 attendees), Angell Animal Medical Center, Boston MA, 1 hour, March 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (10 attendees), Angell Animal Medical Center (West), Waltham MA, 1 hour, March 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (40 attendees), Aratana Therapeutics, Burlington MA, 1 hour, March 2019.

How I Treat Mast Cell Tumors: One Point of View Educational presentation to veterinarians (30 attendees), The Gulf-Atlantic Veterinary Conference, Boca Raton FL, 1 hour, December 2018.

Gastrointestinal Tumors: Updates and Advances

Educational presentation to veterinarians (5 attendees), The Gulf-Atlantic Veterinary Conference, Boca Raton FL, 1 hour, December 2018.

Entyce: Clinical Role of Appetite Stimulant Therapy

Educational presentation to veterinarians (30 attendees), The Gulf-Atlantic Veterinary Conference, Boca Raton FL, 1 hour, December 2018.

Osteosarcoma: Best Use of New Treatment Options

Educational presentation to veterinarians (15 attendees), The Gulf-Atlantic Veterinary Conference, Boca Raton FL, 1 hour, December 2018.

Feline Oncology: Diagnostic and Treatment Advances

Educational presentation to veterinarians (25 attendees), The Gulf-Atlantic Veterinary Conference, Boca Raton FL, 1 hour, December 2018.

CHOP Talk: What Clients Want to Know About Lymphoma Treatments Educational presentation to veterinarians (50 attendees), The Gulf-Atlantic Veterinary Conference, Boca Raton FL, 1 hour, December 2018.

Palladia: How it Works and its Many Uses in Dogs

Educational presentation to veterinarians (60 attendees), The Gulf-Atlantic Veterinary Conference, Boca Raton FL, 1 hour, December 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (15 attendees), Aratana Therapeutics, Charlotte NC, 1 hour, October 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (15 attendees), Aratana Therapeutics, Cary NC, 1 hour, October 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (30 attendees), Aratana Therapeutics, Portland OR, 1 hour, October 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (25 attendees), Aratana Therapeutics, Denver CO, 1 hour, October 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (15 attendees), Aratana Therapeutics, Englewood CO, 1 hour, October 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (10 attendees), Aratana Therapeutics, Parker CO, 1 hour, October 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (25 attendees), Aratana Therapeutics, New York NY, 1 hour, September 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (20 attendees), Aratana Therapeutics, New Milford NJ, 1 hour, September 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (30 attendees), Aratana Therapeutics, Alpharetta GA, 1 hour, September 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (30 attendees), Aratana Therapeutics, Detroit MI, 1 hour, September 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (30 attendees), Aratana Therapeutics, HOPE Veterinary Specialists, Malvern PA, 1 hour, May 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (50 attendees), Aratana Therapeutics, Baltimore MD, 1 hour, May 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (15 attendees), Aratana Therapeutics, Eastern Animal Hospital, Baltimore MD, 1 hour, May 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (25 attendees), Aratana Therapeutics, Bellevue WA, 1 hour, March 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (12 attendees), Aratana Therapeutics, Blue Pearl Veterinary Partners, Tacoma WA, 1 hour, March 2018.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians and technicians (25 attendees), Aratana Therapeutics, Tustin CA, 1 hour, March 2018.

The future of small animal oncology therapeutics

Continuing education presentation to veterinarians (60 attendees), VCA West LA, Los Angeles CA, 1.5 hours, October 2017.

New diagnostic tests for lymphoma

Continuing education presentation to veterinarians (60 attendees), North Dakota Veterinary Medical Association Annual Meeting, Bismark ND, 1 hour, August 2017.

Feline IBD vs. GI lymphoma: Pitfalls and progress

Continuing education presentation to veterinarians (60 attendees), North Dakota Veterinary Medical Association Annual Meeting, Bismark ND, 1 hour, August 2017.

The future of small animal oncology therapeutics

Continuing education presentation to veterinarians (60 attendees), North Dakota Veterinary Medical Association Annual Meeting, Bismark ND, 1.5 hours, August 2017.

Suspicious for lymphoma: Molecular techniques helpful for diagnosing lymphoid neoplasia Continuing education presentation to veterinarians (100 attendees), Lewis and Clark Veterinary Meeting, South Sioux City NE, 1 hour, October 2016.

Progress and pitfalls: Differentiating IBD vs lymphoma in cats Continuing education presentation to veterinarians (100 attendees), Lewis and Clark Veterinary Meeting, South Sioux City NE, 1 hour, October 2016.

The many clinical uses of Palladia® (w/ Dr. Erika Berger) Continuing education presentation to veterinarians (60 attendees), Lewis and Clark Veterinary Meeting, South Sioux City NE, 1 hour, October 2016.

The role of stereotactic radiation therapy (SRT) in cancer case management Continuing education presentation to veterinarians (60 attendees), Lewis and Clark Veterinary Meeting, South Sioux City NE, 1 hour, October 2016.

The future is now: New oncology therapeutics

Continuing education presentation to veterinarians (60 attendees), Lewis and Clark Veterinary Meeting, South Sioux City NE, 2 hours, October 2016.

Practical approach to antiemetic therapy

Continuing education presentation to veterinarians/technicians, Frostbite Symposium, Overland Park KS, 0.5 hour, February 2014.

Medical implications of canine obesity; Current thoughts on canine MCT; What's new in internal medicine? Continuing education presentations to veterinarians, Southern Veterinary Conference, Birmingham AL, 4 hours, August 2008.

Medical implications of canine obesity Continuing education presentation to veterinarians, Great Smokies Veterinary Conference, Asheville NC, 1 hour, October 2007.

Managing microbes; Feline heartworm disease; Leptospirosis; Tick-borne diseases Continuing education presentations to veterinarians, Southern Veterinary Conference, Birmingham AL, 4 hours, August 2006.

State

Radiation Therapy – What You Need to Know (w/ Dr. Meg Musser) Educational presentation to veterinarians (~35 attendees), Iowa State University Radiation Treatment Facility Open House, Ames IA, 1 hour, December 2018.

Oncoeconomics: The Economics of Oncology in your Practice Educational presentation to veterinarians (~50 attendees), Iowa Veterinary Medical Association Winter Conference, Altoona IA, 0.5 hour, February 2018.

Osteosarcoma: Best Use of New Treatment Options (w/ Dr. Mike Nolan) Educational presentation to veterinarians (~100 attendees), Iowa Veterinary Medical Association Winter Conference, Altoona IA, 0.5 hour, February 2018.

ENTYCE: Clinical Role of Appetite Stimulant Therapy Educational presentation to veterinarians (~75 attendees), Iowa Veterinary Medical Association Winter Conference, Altoona IA, 0.5 hour, February 2018.

The role of stereotactic radiation therapy (SRT) in cancer case management Continuing education presentation to veterinarians (~20 attendees), Iowa Veterinary Medical Association Fall Conference, Ames IA, 1 hour, September 2016

Feline IBD vs GI Lymphoma: Pitfalls & Prognosis (w/ Dr. Al Jergens) Continuing education presentation to veterinarians (~125 attendees), Iowa Veterinary Medical Association Winter Conference, Altoona IA, 1 hour, February 2016.

Canine Leptospirosis: Practical Guide to Diagnosis and Prevention Continuing education presentation to veterinary technicians, North Carolina Association of Veterinary Technicians, Raleigh NC, 1 hour, March 2012.

Oncologic emergencies

Continuing education presentation to referring veterinarians, Mississippi Veterinary Medical Association, Starkville MS, 1 hour, February 2006.

Antifungal therapies for dogs and cats

Continuing education presentation to referring veterinarians/technicians/students, Kansas State University College of Veterinary Medicine, Manhattan KS, 1 hour, September 2003.

Canine hypothyroidism

Continuing education presentation to referring veterinarians/technicians/students, Kansas State University College of Veterinary Medicine, Manhattan KS, 1 hour, March 2003.

Clinical approach to the patient with PU/PD

Continuing education presentation to referring veterinarians/technicians/students, Kansas State University College of Veterinary Medicine, Manhattan KS, 1 hour, September 2002.

CONTINUING EDUCATION PRESENTATIONS

Local

Clinical impact and management of inappetence Continuing education presentation to veterinarians (20 attendees), Greater Des Moines Veterinary Medical Association, Urbandale IA, 1 hour, October 2017.

The future of small animal oncology therapeutics

Continuing education presentation to veterinary technicians (25 attendees), Central Iowa Veterinary Technician Association, Ankeny IA, 1 hour, April 2017.

Recognizing cancer symptoms in dogs and cats

Educational presentation to clients/pet owners (25 attendees), webinar for Iowa State University College of Veterinary Medicine, Ames IA, 1 hour, August 2016.

What's new in canine lymphoma?

Continuing education presentation to veterinarians (10 attendees), Greater Des Moines Veterinary Medical Association, Urbandale IA, 1 hour, December 2015.

New oncology therapeutics on the horizon

Continuing education presentation to veterinarians/technicians (25 attendees), Iowa Veterinary Specialties Fall Symposium, Des Moines IA, 1 hour, November 2015.

Canine leptospirosis – are your patients protected?

Continuing education presentation to veterinarians, Pfizer Animal Health Key Account Meeting, Leesburg VA, 2 hours, February 2008.

Practical small animal endocrinology with case presentations

Continuing education presentation to referring veterinarians, Tuscaloosa County (Alabama) Veterinary Medical Association, Tuscaloosa AL, 5 hours, February 2006.

Current thoughts on feline asthma

Presentation to the Boone County Veterinary Medical Association, Columbia MO, 1 hour, September 2001.

University

Evolving the Clinical Approach to Management of Inappetence

Educational presentation to veterinarians and technicians (20 attendees), Aratana Therapeutics, University of Wisconsin-Madison School of Veterinary Medicine, Madison WI, 1 hour, October 2019.

Evolving the Clinical Approach to Management of Inappetence

Educational presentation to veterinarians and technicians (20 attendees), Aratana Therapeutics, Cornell University College of Veterinary Medicine, Ithaca NY, 1 hour, September 2019.

Evolving the Clinical Approach to Management of Inappetence

Educational presentation to veterinarians, technicians and students (15 attendees), Aratana Therapeutics, The Ohio State University College of Veterinary Medicine, Columbus OH, 1 hour, June 2019.

Clinical Impact of Inappetence in Canines

Educational presentation to veterinarians, technicians and students (25 attendees), Aratana Therapeutics, University of Pennsylvania School of Veterinary Medicine, Philadelphia PA, 1 hour, May 2018.

Clinical impact and management of inappetence in oncology patients

Continuing education presentation to veterinary technicians (11 attendees), Iowa State University, College of Veterinary Medicine, 1 hour, July 2017.

New therapeutics impacting small animal oncology practice

Continuing education presentation to veterinary technicians (8 attendees), Iowa State University, College of Veterinary Medicine, 1 hour, August 2016.

ADDITIONAL (NON-CE) PRESENTATIONS

University

ISU Pet Cancer Clinic Update

Informational presentation (15 attendees) to LVMC clients and donors. Iowa State University, Lloyd Veterinary Medical Center, 30 minutes, October 2020.

Radiation therapy logistics at ISU

Informational presentation (40 attendees) to prepare faculty, house officers and staff for upcoming launch of ISU radiation treatment facility. Iowa State University, Department of Veterinary Clinical Sciences, 30 minutes, January 2019.

CAR T-cell therapy for canine lymphoma (with Wesley Wierson)

Research funding pitch to potential investors, Walleye Tank, University of Minnesota, Medical School, 5 minutes, April 2018.

Veterinarian perspectives on sarcoma

Educational and collaborative research opportunity presentation (40 attendees), Holden Comprehensive Cancer Center, Sarcoma Symposium, University of Iowa Hospital & Clinics, 0.5 hour, February 2018.

Stereotactic radiation therapy at ISU: Clinical and research opportunities

Research update to faculty (75 attendees), Iowa State University, College of Veterinary Medicine, 5 minutes, January 2018.

Veterinary academia: An oncologist's perspective

Educational lecture/research update to graduate students (8 attendees), Iowa state University College of Veterinary Medicine Association of Graduate Students (CVMAGS), 1 hour, October 2017.

Comparative oncology research opportunities: Sarcomas

Research update and collaborative opportunity planning to faculty (12 attendees), Holden Comprehensive Cancer Center, Sarcoma Program, University of Iowa Hospital & Clinics, 1 hour, August 2017.

Radiation Oncology Facility Update

Project and facility update to faculty (20 attendees), Iowa State University, Department of Veterinary Clinical Sciences, Service Leader Meeting, 30 minutes, July 2017.

Comparative oncology clinical research at ISU

Research update to faculty (20 attendees), Iowa State University, Department of Veterinary Clinical Sciences, Works in Progress, 20 minutes, October 2016.

Radiation Oncology Center at ISU

Clinical planning and vision update to IVMA Executive Committee (40 attendees), Iowa State University, 30 minutes, April 2016.

Comparative oncology clinical research at ISU

Research update to faculty (75 attendees), Iowa State University, College of Veterinary Medicine, 20 minutes, January 2016.

Oncologic emergencies.

Educational lecture to rotating small animal interns (5 attendees), Iowa State University, Department of Veterinary Clinical Sciences, 2 hours, Fall 2015.

ADDITIONAL (NON-CE) PRESENTATIONS

Student

Introduction to stereotactic radiation therapy

Educational presentation to students (20 attendees), Student Chapter of the American College of Veterinary Medicine, Iowa State University, College of Veterinary Medicine, 1 hour, January 2020.

Oncoeconomics: The economics of oncology in your practice

Educational presentation to 4th-year students (20 attendees), Iowa State University, College of Veterinary Medicine, 1 hour, August 2019.

What's new in oncology?

Educational presentation to students (12 attendees), Student Chapter of the American College of Veterinary Medicine, Iowa State University, College of Veterinary Medicine, 1 hour, April 2019.

CHOP Talk: What Clients Want to Know About Lymphoma Treatments

Educational presentation to 4th-year students (20 attendees), Iowa State University, College of Veterinary Medicine, 1 hour, August 2018.

What's new in veterinary oncology?

Educational presentation to 4th-year students (20 attendees), Iowa State University, College of Veterinary Medicine, 1 hour, July 2017.

The role of stereotactic radiation therapy in cancer case management

Educational presentation to students (25 attendees), Student Chapter of the American College of Veterinary Medicine, Iowa State University, College of Veterinary Medicine, 1 hour, March 2017.

What's new in veterinary oncology?

Educational presentation to 4th-year students (20 attendees), Iowa State University, College of Veterinary Medicine, 1 hour, July 2016.

Introduction to veterinary oncology

Educational presentation to students (30 attendees), Student Chapter of the American College of Veterinary Medicine, Iowa State University, College of Veterinary Medicine, 1 hour, February 2016.

What's new in canine lymphoma?

Educational presentation to 4th-year students (20 attendees), Iowa State University, College of Veterinary Medicine, 1 hour, December 2015.

PROFESSIONAL/INDUSTRY PRESENTATIONS

Tigilanol tiglate in Clinical Practice

Presentation to Australian veterinary oncology specialists (20 attendees), 0.5 hour, September 2020. *[Given via webinar due to COVID-19 restrictions.]*

Tanovea-CA1: Where Does It Best Fit in Lymphoma Treatment Protocols? Presentation to veterinarians and technicians (~60 attendees), Western Veterinary Conference, Las Vegas NV, 1 hour, February 2020.

Evolving the Clinical Approach to Management of Inappetence Presentation to veterinarians and sales professionals (40 attendees), Elanco, Orlando FL, 1 hour, January 2020.

Tanovea-CA1: Where Does It Best Fit in Lymphoma Treatment Protocols? Presentation to veterinarians and sales professionals (40 attendees), Elanco, Orlando FL, 1 hour, January 2020.

Where may tigilanol tiglate fit into canine MCT treatment? Presentation to veterinary oncology specialists (15 attendees), Houston TX, 1 hour, October 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (20 attendees), Aratana Therapeutics, Metropolitan Animal Specialty Hospital, Los Angeles CA, 1 hour, April 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinarians and technicians (30 attendees), Aratana Therapeutics, ACCESS Specialty Animal Hospitals, Culver City CA, 1 hour, April 2019.

Evolving the Clinical Approach to Management of Inappetence Educational presentation to veterinary specialists and technicians (10 attendees), Aratana Therapeutics, Arizona Veterinary Oncology and Desert Veterinary Medicine Specialists, Gilbert AZ, 1 hour, April 2019.

QBiotics briefing on tigilanol tiglate (EBC-46) pivotal efficacy and safety trial results Presentation to veterinary oncology specialists (~15 attendees), Sydney Australia, 1 hour, February 2019.

Understanding the U.S. veterinary oncology market to QBiotics leadership team Presentation to leadership/management team in preparation for anticipated oncology therapeutic launch (8 attendees), Yungaburra Australia, 2 hours, February 2019.

New Considerations in the Treatment of Canine Mast Cell Tumors (with Drs. Victoria Gordon, Stewart Lowden) Presentation to veterinarians and technicians (~350 attendees), Veterinary Cancer Society Conference, Louisville KY, 1 hour, October 2018.

ENTYCE case discussions and Q&A session with Aratana sales and management teams Presentation of inappetence and capromorelin clinical utility with case examples (60 attendees), Webinar, 0.5 hour, July 2018.

Clinical impact and management of inappetence

Educational presentation to veterinary specialists (15 attendees), Southern California Veterinary Specialty Hospital, Irvine CA, 1 hour, October 2017.

Inappetence in practice – Role play training with Aratana sales and management teams Small group/team training and discussion regarding inappetence and capromorelin (35 attendees), Overland Park KS, 4 hours, September 2017.

Clinical impact and management of inappetence to Aratana sales and management teams Presentation of inappetence and capromorelin physiology, scientific data and clinical/market dynamics (60 attendees), Overland Park KS, 1.5 hour, September 2017.

New beginnings in cancer treatments

Introduction of the anti-CD52 canine monoclonal antibody to veterinary oncology community (400+ attendees), Veterinary Cancer Society Conference, St Louis MO, 20 minutes, October 2014.

Pfizer Animal Health continuing education presentations & labs Presented 550 hours of lecture and 50 hours of labs in 200 clinics across the US, June 2006 – 2010.

PROFESSIONAL/INDUSTRY PRESENTATIONS (CONTINUED)

Introduction to Palladia™

Educational presentation to first-year veterinary students involved in the Pfizer Animal Health Student Representative program (40 attendees), New York NY, 1 hour, July 2009.

Introduction to receptor tyrosine kinase inhibitors in veterinary oncology

Pathophysiology rounds presentation to residents, interns and faculty (25 attendees), Tufts University School of Veterinary Medicine, 1 hour, July 2009.

Palladia™ clinical trial efficacy data

Teaching presentation to Pfizer veterinarians (60 attendees), Chicago IL, 3 hours, November, 2008.

Veterinary oncology market and Palladia[™] clinical trial webinars Teaching presentations via webinar to Pfizer veterinarians (60 attendees), 3 hours, August & September, 2008.

Leveraging lepto resources

Teaching presentation to Pfizer Animal Health sales team reviewing clinically important aspects of canine leptospirosis (225 attendees), 1 hour, February 2008.

Cerenia™ presentations to Pfizer Animal Health sales & management teams Presentation of scientific data (1 hour) to sales team June 2007 (150 attendees) & July 2007 (400 attendees).

RESIDENCY PRESENTATIONS

Antiemesis therapeutic considerations for the oncology patient Resident seminar to faculty/house officers/students, North Carolina State University College of Veterinary Medicine, 1 hour, July 2012.

Expression of hedgehog signaling molecules in canine osteosarcoma Research update to faculty, North Carolina State University, 0.25 hour, February 2012.

Expression of hedgehog signaling molecules in canine osteosarcoma Resident seminar to faculty/house officers/students, North Carolina State University College of Veterinary Medicine, 0.5 hour, September 2011.

Palladia[™] year one clinical experience: Online case entry summary Abstract presentation, Veterinary Cancer Society Conference, San Diego CA, October 2010.

P2X7 purinergic receptor activation and caspase cascade induction in bovine alveolar macrophages Resident seminar to faculty/house officers/students, University of Missouri College of Veterinary Medicine, 1 hour, January 2002.

Feline hemangiosarcoma: a retrospective of 42 cases Phi Zeta Research Day presentation, University of Missouri College of Veterinary Medicine, May 2001.

Effects of estrogen receptor signaling on macrophage function Resident seminar to faculty/house officers/students, University of Missouri College of Veterinary Medicine, 1 hour, January 2001.

Feline hemangiosarcoma: a retrospective of 36 cases Abstract presentation, Veterinary Cancer Society Conference, Pacific Grove, California, October 2000.

Feline hemangiosarcoma

Resident seminar to faculty/house officers/students, University of Missouri College of Veterinary Medicine, 1 hour, February 2000.

IOWA STATE UNIVERSITY SERVICE / DEVELOPMENT ACTIVITIES

COMMITTEES/PROJECTS

VCS Department Chair Search Committee, member, 2019 - 2020

VCS PRS Mediator, 2019 - present

Dean's Budget Advisory Committee, member, 2019 - present

Ophthalmology Faculty Search Committee, member, 2019 - present

CVM Research Advisory Committee, member, 2015 – present (appointment through 2021) *CVM Faculty Research Symposium,* planning sub-committee member, 2016 – 2018 *CVM Research Space Recommendations (VDL Vacated Space),* sub-committee member, 2017

One Health Advisory Group (CVM), August 2018 - present

UNL PPVM Interview Committee, ISU-CVM representative (4 days), December 2017

ISU Pet Cancer Clinic Design and Planning Team (CVM), medical lead, 2017 - present

ISU Pet Cancer Clinic Core Planning Committee (VCS), chair, 2017 - 2018

Comparative Oncology Trials Consortium (NIH), ISU site approval coordinator, 2017

ISU ACVIM Oncology Residency Training Program, director, August 2017 - July 2018

ISU ACVIM Oncology Residency Training Program Approval, coordinator, 2017

VCS House Officer Committee, member, August 2017 - July 2018

Oncology Section Leader, May 2017 - present

ISU LVMC Director of Hospital Operations Search Committee, co-chair, 2017 - 2018

VCS Research Committee, member, 2016 - present

ISU Radiation Oncology Center Development Team, medical lead, 2016 – present Radiation Oncology Consultant, coordination and liaison with administration Radiation Oncology Physicist, coordination and liaison with administration

Surgery Faculty Search Committee, member, 2016 - present

Oncology Faculty Search Committee, chair, 2016 - 2017

LVMC Hospital Appearance Committee, member, 2017 - 2018

Shawna Greene, DVM, MS, DACVIM (Oncology) Affiliate Faculty status, lead/coordinator, December 2016

ACVIM Student Chapter, Faculty Advisor, 50 members, August 2015 – May 2017

VCA Residency Sponsorship Facilitator (SAIM, Oncology), 2015 - present

PROFESSIONAL DEVELOPMENT

ISU Documenting Your Research Impact and Increasing Visibility, participant, February 2018 ISU Teaching Partners Program, participant, August 2017 – April 2018 Provost's Writing Accountability Team, participant, September 2016 – May 2017 Writing Winning Grant Proposals Workshop, Iowa State University, nominated attendee, November 2016 VCS Professional Development, PowerPoint Tips (1 hour), attendee, January 2016 ISU Grants Hub Series: Finding Research Opportunities, attendee, September 2015

ISU-CVM PRESENTATIONS

ISU CVM Development, Pet Cancer Clinic Update presentation (0.5 hour), October 2020 Elanco Animal Health, Collaborative Research Opportunities (1 hour), July 2020 ISU Student Chapter of the ACVIM, Oncology presentation (1 hour), January 2020 ISU Student Chapter of the ACVIM, Oncology presentation (1 hour), April 2019 VCS Department Special Meeting, Radiation Therapy Logistics (30 minutes), January 2019 IVS Board Meeting, update on possible clinical trial strategy to increase case volume (5 min), May 2018 CVM Faculty Research Symposium, speed talk presentation (5 min), January 2018 ISU CVM Association of Graduate Students (CVMAGS), research update (1 hour), October 2017 LVMC Technician Education Series, CE presentation (1 hour), July 2017 VCS Service Leader Meeting, Radiation Oncology update (30 minutes), July 2017 ISU Student Chapter of the ACVIM, Oncology presentation (1 hour), March 2017 CVM Faculty Research Symposium, poster presentation, January 2017 Works in Progress (VCS Department), faculty research update (20 minutes), October 2016 LVMC Technician Education Series, CE presentation (1 hour), August 2016 ISU Student Chapter of the ACVIM, Oncology presentation (1 hour), February 2016 CVM Faculty Research Symposium, research update (15 minutes) and poster presentations, January 2016

FACULTY EVENTS

Ramsey Lecture Host, Dr. Doug Thamm (2 days), Colorado State University, February 2020 ISU Class of 2023 White Coat Ceremony, participant, August 2019 ISU VM4 Graduation Ceremony, attendee, May 2019 ISU Radiation Therapy Facility Open House, coordinator, 200+ quests, December 2018 ISU Class of 2022 White Coat Ceremony, participant, August 2018 Matt Arkans, VMD, DACVR (RO), research collaboration visit co-host (12 hours), May 2018. ISU VM4 Graduation Ceremony, attendee, May 2018 UNL PPVM/ISU Student Mentor, 9 students, August 2016 - present ISU Veterinary Medical Student Mentor, 4 students, August 2017 - present CVM Student Recruitment Open House, faculty speaker, October 2017 ISU VM4 Graduation Ceremony, attendee, May 2017 UNL PPVM Awards Luncheon, attendee and award presenter, April 2017 ISU Class of 2020 White Coat Ceremony, participant, August 2016 ISU CVM Retired Faculty Breakfast, Oncology update presentation (0.5 hour, 20 attendees), June 2016 ISU VM4 Graduation Ceremony, attendee, May 2016 ISU One Health Lecture Host, Dr. Rodney Page (2 days), Colorado State University, April 2016 ISU Graduate Faculty Orientation, attendee, January 2016 Ramsey Lecture Host, Dr. David Vail (1 day), University of Wisconsin-Madison, October 2015 ISU Class of 2019 White Coat Ceremony, participant, August 2015 ISU New Faculty Orientation, attendee, August 2015

REGIONAL OUTREACH

Vet Tech Colleges Interview: How precise radiation therapy is helping pets beat cancer, June 2020. <u>https://www.vettechcolleges.com/blog/veterinary-radiation-therapy-interview</u>

Just Labs Interview: Treating cancerous tumors: a new option, May 2020.

Iowa State Daily Interview: Precise radiation therapy helps pets at small animal hospital, January 2020. https://www.iowastatedaily.com/news/iowa-state-university-ames-radiation-therapy-hixson-lied-small-animal-hospital-stereotactic-college-of-veterinary-medicine-dogs-cats-therapy-ratclinical-sciences-chad-johannes-rats-computed-tomography-ct-scan-treatment-anesthesiologist-tumor-tissue-side-effects-radiation-centers-patients-clients-pets-pet-owners-drema-lopezveterinary-medical-center-animal-anesthesia-magnetic-resonance-imaging-chemotherapy/article_521684c8-4163-11ea-8ea4-735a041868fb.html

Radiation Therapy Education and Marketing, Eastern Iowa Veterinary Specialty Center (5 attendees, 1 hour), Cedar Rapids IA, October 2019.

Radiation Therapy Tours, Iowa Veterinary Medical Association Annual Meeting (50 attendees, 2 hours), Ames IA, September 2019.

Radiation Therapy Education and Marketing, VCA MidWest Veterinary Referral & Emergency Center (12 attendees, 1 hour), Omaha NE, August 2019.

Radiation Therapy Education and Marketing, Gentle Doctor Animal Hospitals (12 attendees, 1 hour), Omaha NE, August 2019.

Radiation Therapy Education and Marketing, Sirius Veterinary Orthopedic Center (3 attendees, 1 hour), Omaha NE, August 2019.

KOKX 1310 Radio (Keokuk IA) Interview (1 hour): Cancer basics in dogs and cats + ISU Radiation Therapy Facility Q&A, August 2019.

Radiation Therapy Education and Marketing, BluePearl Specialty and Emergency Pet Hospital (15 attendees, 1 hour), Des Moines IA, August 2019.

Radiation Therapy Education and Marketing, Mission Animal Referral and Emergency Center (12 attendees, 2 hours), Mission KS, July 2019.

Radiation Therapy Education and Marketing, BluePearl Specialty and Emergency Pet Hospital (10 attendees, 2 hours), Overland Park KS, July 2019.

William R. Bliss Cancer Center at Mary Greeley Medical Center, ISU Radiation Therapy visit and tour (15 attendees, 1 hour), July 2019.

WHO-TV (NBC, Des Moines) Interview: New Radiation Center Provides Accessible Options for Pets with Cancer, May 2019. <u>https://whotv.com/2019/05/30/new-radiation-center-provides-accessible-options-for-pets-with-cancer/</u>

Ames Tribune Interview: New Radiation Therapy Option Offers Accessible Cancer Treatment at Iowa State University Animal Hospital, May 2019. <u>https://www.amestrib.com/business/20190518/new-radiation-therapy-option-offers-accessible-cancer-treatment-at-iowa-state-university-animal-hospital</u>

Mercy Cancer Center Radiation Oncology Team, ISU Radiation Therapy visit and tour (15 attendees, 1.5 hours), May 2019.

Dr. Richard Deming, Medical Director, Mercy Cancer Center, ISU Radiation Therapy visit and tour (1 hour), April 2019.

John Stoddard Cancer Center Radiation Oncology Team, ISU Radiation Therapy visit and tour (15 attendees, 2 hours), April 2019.

ISU Day at the Capitol, education and networking event at Iowa State Capitol (3 hours), March 2019

Dakota Country Magazine, Cancer in Hunting Dogs Interview, May 2019

ISU Radiation Therapy Facility Open House, CE presentation (1 hour), December 2018

University of Missouri Clinical Trial Collaboration in Kansas City, strategy and planning committee member (30 hours), May – December 2018.

ISU Day at the Capitol, education and networking event at Iowa State Capitol (3 hours), February 2018

REGIONAL OUTREACH (Continued)

IVMA Winter Conference, CE presentation (1.5 hours), February 2018 Greater Des Moines Veterinary Medical Association, CE presentation (1 hour), October 2017 Central Veterinary Conference (Kansas City, MO), ISU Booth coordination, August 2017 SDVMA Annual Conference (Sioux Falls, SD), ISU Booth coordination, August 2017 NDVMA Annual Conference (Bismark, ND), CE presentations (3.5 hours), August 2017 Central Iowa Veterinary Technician Association (Ankeny IA), CE presentation (1 hour), April 2017 Lewis and Clark Veterinary Meeting, CE presentations (6 hours), October 2016 IVMA Fall Conference, CE presentation (1 hour), September 2016 LVMC Client Education Series, webinar presentation (1 hour), August 2016 IVMA Executive Committee, Radiation Oncology update presentation (0.5 hour, 40 attendees), April 2016 IVMA Winter Conference, CE presentation (1 hour), February 2016 Greater Des Moines Veterinary Medical Association, CE presentation (1 hour), December 2015 Iowa Veterinary Specialties Fall Symposium, CE presentation (1 hour), November 2015 Eastern Iowa VMA Fall Conference, attendee, October 2015 Primary Care Clinic Visits (Lincoln, NE), 10 practices, October 2015 IVMA Fall Conference, attendee, September 2015

FINANCIAL DEVELOPMENT/FUNDRAISING

Side by Side in Cancer Research, collaborative research development initiative with Holden Comprehensive Cancer Center, September 2018 – present ISU Foundation Development Survey, faculty signee, October 2017 ISU Oncology Clinical Trial Update, donor presentation development for Dean Halbur, September 2017 Vino with the Vet, CVM Development Team fundraising event, faculty speaker, July 2017 CVM Fundraising Development Workshop for Faculty Leadership (by Peneolope Hunt), attendee, May 2017 VCA Sponsored Oncology Resident, Dr. Giovanna Coto, lead/coordinator, 2017 VCA Sponsored SAIM Resident, Dr. Elle Donnini, lead/coordinator, August – December 2016 VCA Sponsored SAIM Resident, Dr. Claudia Bowman, lead/coordinator, September – November 2015 ISU Oncology Excellence Fund, established 2015

NATIONAL ENGAGEMENT/ROLES

ACVIM Oncology Specialty President Elect, 2019 - present

Veterinary Cancer Society, Veterinary Oncology Market Potential Initiative Co-chair, 2018 – present

ACVIM Oncology Specialty Examination Rating Committee, 2017 – 2020

VMX (Orlando FL), Oncology CE Coordinator, 2020 - 2021

Comparative Oncology Trials Consortium (NIH), meeting with Director (3 hours), April 2018

Comparative Oncology Trials Consortium (NIH), member institution, October 2017

USDA Center for Veterinary Biologics, Veterinary Oncology Technical Stakeholder Group, 2017 – present

OUTSIDE UNIVERSITY COLLABORATIONS

Holden Comprehensive Cancer Center, Sarcoma Symposium, University of Iowa Hospital & Clinics. Research and comparative/collaborative opportunity conference (8 hours), February 2020.

Courage Ride supporting the Sarcoma Cancer Research Program at University of Iowa Holden Comprehensive Cancer Center, volunteer, August 2019.

Holden Comprehensive Cancer Center, George Weiner, MD, Director. Coordinated and hosted 1-day visit to ISU College of Veterinary Medicine and meeting with VPR (8 hours), May 2018.

Holden Comprehensive Cancer Center, Sarcoma Symposium, University of Iowa Hospital & Clinics. Research and comparative/collaborative opportunity conference (8 hours) + presentation (0.5 hour), February 2018

Kenneth Wang, MD, Professor of Medicine, Mayo, comparative oncology and collaborative research opportunity presentation and discussion (1 hour), December 2017

Mayo Clinic (Rochester, MN), collaborative research planning session in oncology and gastroenterology (6 hours), November 2017

Holden Comprehensive Cancer Center, Sarcoma Program, University of Iowa Hospital & Clinics Research, Research update and collaborative opportunity planning presentation/meeting (2 hours), August 2017

University of Nebraska-Lincoln PPVM, meeting/tour with Dr. Donald Reynolds, Director (2 hours), October 2016

University of Minnesota/ISU Research Retreat, Collaborative research meeting (6 hours), September 2016

AWARDS

Service Team of the Year Award (Oncology) – Iowa State University College of Veterinary Medicine, September 2019

Award for Early Achievement in Extension or Professional Practice – Iowa State University College of Veterinary Medicine, September 2019

Faculty Member of the Year - Iowa State University College of Veterinary Medicine, August 2017

PROFESSIONAL ORGANIZATIONS

American College of Veterinary Internal Medicine, 2002 – present Veterinary Cancer Society, member, 2000 - present American Veterinary Medical Association (AVMA), member, 1997 - present Kansas State University & CVM Alumni Associations, lifetime member, 1997 - present University of Nebraska Alumni Association, lifetime member, 1993 - present American Association of Corporate and Public Practice Veterinarians, member, 2006 – 2010 Nebraska Veterinary Medical Association, associate member, 1998 – 2008; 2015 – 2020 American Association of Human Animal Bond Veterinarians, member, 1997 – 2008 Kansas Veterinary Medical Association, member, 2002 – 2006 Iowa Veterinary Medical Association, member, 2015 - 2020 Iowa State University Alumni Association, member, 2015 – present Comparative Gastroenterology Society, member, 2016 – 2020 American Association of Veterinary Clinicians, member, 2017 - present European Society of Veterinary Oncology, member, 2018 - present Iowa Cancer Consortium, member, 2019 – present Pride VMC, member, 2020 – present

OTHER PROFESSIONAL ACTIVITIES

National Organizations

ACVIM Oncology Specialty President Elect, 2019 – present

Veterinary Cancer Society, Veterinary Oncology Market Potential Initiative Subcommittee Chair, 2018 - present

ACVIM Oncology Specialty Examination Rating Committee, 2017 – 2020

Veterinary Cancer Society Conference, abstract session moderator, 2015

Veterinary Cancer Society Executive Committee, Member At-Large, 2015 – 2016 (2-year term)

ACVIM Communications Committee, member, 2006 - 2010

ACVIM Forum, abstract reviewer, 2009

ACVIM Forum, abstract session moderator, 2006 & 2007.

ACVIM Small Animal Internal Medicine Examination Committee, essay examination grading, June 2004.

University

Department of Clinical Sciences Leadership Team (House Officer Representative), North Carolina State University College of Veterinary Medicine, 2011 – 2012

Resident/Intern Selection Committee, Mississippi State University College of Veterinary Medicine, 2006.

KSU Pet Trust Board of Directors, Kansas State University College of Veterinary Medicine, 2004 – 2006.

New Student Mentor, Kansas State University College of Veterinary Medicine, 2003 – 2004.

Selection Committee (Exotic Medicine Position), Kansas State University Veterinary Medical Teaching Hospital, 2003.

Intern Selection Committee, Kansas State University Veterinary Medical Teaching Hospital, 2003 & 2004.

Canine and Feline Blood Donor Program, coordinator, Kansas State University Veterinary Medical Teaching Hospital, 2003 – 2004.

Canine and Feline Blood Donor Program, clinical supervisor, University of Missouri Veterinary Medical Teaching Hospital, 2001 – 2002.

Clinicopathologic Case Conference Series, coordinator, University of Missouri College of Veterinary Medicine, 2001 – 2002.

Pet Loss and Grief Support Committee, coordinator, University of Missouri College of Veterinary Medicine. Developed informational packets regarding pet loss for clinical use in the VMTH, 2000.

Student Board of Ethical Behavior, member, Kansas State University College of Veterinary Medicine, 1995-1997.

Private Practice

Internship, Performance Improvement, Marketing and Doctor Review Committees, member, Veterinary Specialty and Emergency Center, 2004 – 2005.

PROFESSIONAL DEVELOPMENT (INDUSTRY)

Media Training Session, April 2009, Chicago, IL

6 hours of instruction on addressing the print and television media, presented by Mr. Rick Goulart, Pfizer Animal Health, New York, NY.

Excellence in Speaking Institute (ESI)[©], November 2006, Exton, PA

20 hours of instruction on effective public speaking techniques, presented by Ty Boyd Executive Learning Systems, Charlotte, NC.

Media Training Session, November 2006, New York, NY

4 hours of instruction on addressing the print and television media, presented by Mr. Bob Fauteux, Pfizer Animal Health, New York, NY.

CONTINUING EDUCATION

Veterinary Cancer Society Annual Conference, Virtual, October 2020 American College of Veterinary Internal Medicine Forum, Virtual, June 2020 Holden Comprehensive Cancer Center, Sarcoma Symposium, Iowa City IA, February 2020 Veterinary Cancer Society Annual Conference, Houston TX, October 2019 World Small Animal Veterinary Association Pre-Congress Session, Comparative and Translational Cancer Drug Development (Comparative Oncology) Today and Tomorrow: Status and Gap Analysis, Toronto Canada, July 2019 American College of Veterinary Internal Medicine Forum, Phoenix AZ, June 2019 European Society of Veterinary Oncology Congress, Frankfurt Germany, May 2019 Veterinary Cancer Society Annual Conference, Louisville KY, October 2018 European College of Veterinary Internal Medicine Congress, Rotterdam Netherlands, September 2018 American College of Veterinary Internal Medicine Forum, Seattle WA, June 2018 Holden Comprehensive Cancer Center, Sarcoma Symposium, Iowa City IA, February 2018 Veterinary Cancer Society Annual Conference, Portland OR, October 2017 American College of Veterinary Internal Medicine Forum, National Harbor MD, June 2017 American Academy of Veterinary Pharmacology and Therapeutics, Potomac MD, May 2017 Veterinary Cancer Society Annual Conference, Orlando FL, October 2016 American College of Veterinary Internal Medicine Forum, Denver CO, June 2016 World Veterinary Cancer Congress, Foz do Iguacu Brazil, May 2016 Veterinary Eastern Cooperative Oncology Group (VECOG) Conference, New York NY, April 2016 Veterinary Cancer Society Annual Conference, Vienna VA, October 2015 American College of Veterinary Internal Medicine Forum, Indianapolis IN, June 2015 American College of Veterinary Internal Medicine Forum, Nashville TN, June 2014 Veterinary Eastern Comparative Oncology Group Conference, New York NY, April 2014 Veterinary Cancer Society Annual Conference, Minneapolis MN, October 2013 Science of Veterinary Oncology (ACVIM), Las Vegas NV, March 2013 Veterinary Cancer Society Annual Conference, Las Vegas NV, October 2012 American College of Veterinary Internal Medicine Forum, New Orleans LA, May 2012 Veterinary Cancer Society Annual Conference, Albuquerque NM, November 2011 Veterinary Cancer Society Annual Conference, San Diego CA, October 2010 American College of Veterinary Internal Medicine Forum, Anaheim CA, June 2010 Veterinary Cancer Society Mid-year Conference, Las Vegas NV, March 2010 Veterinary Cancer Society Annual Conference, Austin TX, October 2009 American College of Veterinary Internal Medicine Forum, Montreal QC, June 2009 Pfizer Animal Health Oncology Training Day, Chicago IL, November 2008 Veterinary Cancer Society Annual Conference, Seattle WA, October 2008 American College of Veterinary Internal Medicine Forum, San Antonio TX, June 2008 Veterinary Cancer Society Annual Conference, Ft. Lauderdale FL, November 2007 University of Wisconsin SVM Oncology Service (40 hours), Madison WI, August 2007 American College of Veterinary Internal Medicine Forum, Seattle WA, June 2007

CONTINUING EDUCATION (CONTINUED)

American College of Veterinary Internal Medicine Forum, Louisville KY, June 2006 Advanced Renal Therapies Conference, Animal Medical Center, New York NY, March 2006 Conflict Resolution and Confrontation Management Seminar, Mississippi State University, January 2006 Western Veterinary Conference, Las Vegas NV, February 2005 American College of Veterinary Internal Medicine Forum, Minneapolis MN, June 2004 Veterinary Cancer Society Annual Conference, Madison WI, September 2003 American College of Veterinary Internal Medicine Forum, Charlotte NC, June 2003 Society for Comparative Endocrinology Conference, Asheville NC, June 2003 American College of Veterinary Internal Medicine Forum, Dallas TX, May 2002 Veterinary Cancer Society Annual Conference, Baton Rouge LA, October 2001 American College of Veterinary Internal Medicine Forum, Denver CO, May 2001 Veterinary Cancer Society Annual Conference, Monterey CA, October 2000 American Veterinary Medical Association Annual Conference, Salt Lake City UT, July 2000

HONORS/AWARDS

Professional/Industry

Lead Dog Award for Marketing Leadership Excellence – Pfizer Animal Health, February 2010

Faculty

Service Team of the Year Award (Oncology) – Iowa State University College of Veterinary Medicine, September 2019

Award for Early Achievement in Extension or Professional Practice – Iowa State University College of Veterinary Medicine, September 2019

Faculty Member of the Year – Iowa State University College of Veterinary Medicine, August 2017 *Pet Trust Faculty Award* – Kansas State University College of Veterinary Medicine, May 2004 *Pet Trust Faculty Award* – Kansas State University College of Veterinary Medicine, May 2003 "*Manhattan's Most Admired" Recipient* – *Manhattan Mercury*, Manhattan, KS, December 2002

House Officer

Resident Teaching Award – University of Missouri College of Veterinary Medicine, May 2002 Resident Teaching Award – University of Missouri College of Veterinary Medicine, May 2001 Resident Teaching Award – University of Missouri College of Veterinary Medicine, May 2000 Redhage Resident Award – University of Missouri College of Veterinary Medicine, May 2000 Intern Teaching Award – Colorado State University College of Veterinary Medicine, May 1998

Student

Pet Trust Student Award – Kansas State University College of Veterinary Medicine, May 1997
American Animal Hospital Association Award – Kansas State University College of Veterinary Medicine, May 1997
O.M. Franklin Award – Kansas State University College of Veterinary Medicine, May 1997
Dr. William F. & Helen R. Irwin Award – Kansas State University College of Veterinary Medicine, May 1997
Marie Mohr Memorial Award – Kansas State University College of Veterinary Medicine, May 1997
Senior Achievement Awards, small animal and equine medicine – Kansas State University College of Veterinary Medicine, May 1997
Phi Zeta Veterinary Medicine Honor Society Inductee – May 1996
Miller Pathology Award – Kansas State University College of Veterinary Medicine, April 1996
Chancellor's Scholar – University of Nebraska, April 1993

SCHOLARSHIPS

American Kennel Club, 1995 & 1996 Nebraska Veterinary Medical Association, 1995 & 1996 Kansas State University Salsbury Award, 1996 Kansas State University Chesire Award, 1996 Kansas State University Lewis Memorial, 1994 – 1996 Kansas State University Christian Memorial, 1995 Kansas State University McLeod Memorial, 1994 Kansas State University Burt Award, 1994 University of Nebraska McKelvie Award, 1991 – 1993 University of Nebraska Regents' Award, 1989 – 1993

REFERENCES

Available upon request.