

**BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.  
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Susan E Lana, DVM, MS	POSITION TITLE Associate Professor- medical oncology Section Head Clinical Oncology		
eRA COMMONS USER NAME			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Iowa- Iowa City Iowa	BS	1986	Medical Technology
Colorado State University- Ft Collins CO	DVM	1993	Veterinary Medicine
Texas A&M University	Internship	1994	Small Animal Medicine/Surgery
Colorado State University- Ft Collins CO	Residency	1997	Medical Oncology
Colorado State University- Ft Collins CO	MS	1997	Clinical Sciences

**A. Positions and Honors****PROFESSIONAL EXPERIENCE AND EMPLOYMENT**

- 1993 – 1994 Internship, Small Animal Medicine and Surgery, College of Veterinary Medicine  
Texas A&M University, College Station, TX
- 1994 – 1997 Resident, Oncology, College of Veterinary Medicine  
Colorado State University, Fort Collins, CO
- 1997 – 1999 Medical Oncology Post Doctoral Fellow, College of Veterinary Medicine  
Colorado State University, Fort Collins, CO
- 1999 –2006 Assistant Professor –Oncology, College of Veterinary Medicine  
Colorado State University, Fort Collins, CO
- 2006-present Associate Professor with tenure- Oncology, College of Veterinary Medicine Colorado State  
University, Ft Collins, CO

**BOARD CERTIFICATION**

- 1997 Diplomate, American College of Veterinary Internal Medicine – Oncology

**HONORS/AWARDS**

- 1991 Harold Ingersoll Scholarship for Academic Achievement, Colorado State University
- 1992 Salisbury Scholarship for Academic Achievement, Colorado State University
- 1996 Veterinary Cancer Society Residents Competition- Basic Sciences Award

**B. Selected peer-reviewed publications last 4 years (in chronological order).**

- Gustufson NR, **Lana SE**, Mayer MN, LaRue SM. A preliminary assessment of whole body radiotherapy interposed within a chemotherapy protocol for canine lymphoma. *Veterinary and Comparative Oncology* 2004;2:125-131.
- Selting KA, **Lana SE**, Ogilvie GK, Olmstead A, Mykles D, Bright J, Richardson K, Walton JA, Fettman MJ. Cardiac troponin I in canine patients receiving doxorubicin: comparison with clinical heart disease. *Vet Comp Oncology* 2004;2:142-156.
- Mullins MN, **Lana SE**, Dernell WS, Ogilvie GK, Withrow SJ, Ehrhart EJ. Cyclooxygenase-2 expression in canine appendicular osteosarcomas. *J Vet Int Med* 2004 18;6: 859-865.
- Lana SE**, Dernell WS, Lafferty M, Withrow SJ, LaRue SM. The combined use of radiation and chemotherapy using a slow release cisplatin formulation for the treatment of canine nasal tumors. *Vet Radiology and Ultrasound* 2004;45(6): 577-581.
- Hillers KR, Dernell WS, Lafferty MH, Withrow SJ, **Lana SE**. The incidence and significance of lymph node metastasis in canine osteosarcoma: a retrospective study of 228 cases (1986-2003) *J Am Vet Med Assoc* 2005; 226: 1364-1367.
- Walter CU, Dernell WS, LaRue SM, **Lana SE**, Lafferty MH, LaDue TA, Withrow SJ. Curative intent radiation therapy as a treatment modality for osteosarcoma: A retrospective evaluation of 14 cases. *Veterinary and Comparative Oncology* 2005;3:1-7.

7. Selting KA, Ogilvie GK, Gustafson DL, Long ME, **Lana SE**, Walton JA, Hansen RS, Laible I, Fettman MJ. Pharmacokinetics of doxorubicin in dogs with spontaneously occurring lymphoma with or without n-3 fatty acid supplementation to the diet: A double blind, randomized, placebo controlled study. *Am J Vet Res* 2006;67(1):145-151.
8. Williams LE, Rassnick KM, Powers HT, **Lana SE**, Morrison-Collister KE, Hansen K, Johnson JL. CCNU in the treatment of canine epitheliotropic lymphoma. *J Vet Intern Med* 2006;20 (1): 136-143.
9. **Lana SE**, Jackson TL, Burnett RC, Morley P, Avery AC. The utility of PCR for analysis of antigen receptor rearrangement in staging and predicting prognosis in dogs with lymphoma. *J Vet Intern Med* 2006;20(2):329-334.
10. Mullins MN, Dernell WS, Withrow SJ, Ehrhart EJ, Thamm DH, **Lana SE**. The syndrome of multiple cutaneous mast cell tumors: 54 cases (1998-2004). *J Am Vet Med Assoc* 2006;228(1):91-95.
11. Walter CU, Biller BJ, **Lana SE**, Bachand AM, Dow SW. Evaluation of the effects of chemotherapy on immune responses in dogs with cancer. *J Vet Intern Med* 2006;20(2):342-347
12. **Lana SE**, Kogan L, Crump KA, Graham GT, Robinson N. The use of complementary and alternative medicines in veterinary cancer patients. *J Am Anim Hosp Assoc* Sept 2006;42(5):361-365.
13. Modiano JF, Breen M, **Lana SE**, Ehrhart N, Fosmire SP, Thomas R, Jubala CM, Lamerato AR, Ehrhart EJ, Schaack J, Duke RC, Cutter GC, Bellgrau D. Naturally occurring translational models for development of cancer gene therapy. *Gene Ther Mol Biol* 2006;10:31-40.
14. Kow K, Bailey SM, Williams ES, Withrow SJ, **Lana SE**. Telomerase activity in canine osteosarcoma. *Veterinary and Comparative Oncology* 2006;4:184-187.
15. Gaines PJ, Powell TD, Walmsley SJ, Estredge KL, Wisnewski N, Stinchcomb DT, Withrow SJ, **Lana SE**. Serum Biomarker Discovery For Canine B-Cell Lymphoma Using SELDI-TOF Mass Spectrometry. *Am J Vet Res* 2007;68:405-410.
16. **Lana SE**, U'ren L, Plaza S, Elmslie R, Gustafson D, Dow S. Comparison of continuous low dose oral chemotherapy with conventional doxorubicin chemotherapy for adjuvant therapy of hemangiosarcoma in dogs. *J Vet Intern Med* 2007; 21(4):764-769.
17. Kraft SM, Randall E, Wilhelm M, **Lana SE**. Development of a whole body MR imaging protocol in normal dogs and canine cancer patients. *Veterinary Radiology and Ultrasound* 2007;48:212-220.
18. Hillers KR, **Lana SE**, Fuller CR, LaRue SM. Can palliative radiation therapy induce a tumor response in dogs with non-splenic hemangiosarcoma? *J Am Anim Hosp Assoc* 2007;43:187-192.
19. Camps-Palau MA, Leibman NF, Elmslie R, **Lana SE**, Plaza S, McKnight JA, Risbon R, Bergman PJ. Treatment of canine mast cell tumours with vinblastine, cyclophosphamide and prednisone: 35 cases (1997-2004). *Veterinary and Comparative Oncology*. 2007 Sep;5(3):156-67.
20. Williams M, Avery AC, **Lana SE**, Hillers KM, Bachand AM, Avery PA. Lymphoproliferative disease characterized by lymphocytosis: Immunophenotypic markers of prognosis. *J Vet Intern Med*. 2008;22:596-601
21. Rebhun RC, **Lana SE**, Charles JB, Ehrhart EJ, Thamm DH. Comparative analysis of Survivin in Naive and Relapsed Canine Lymphoma. *J Vet Intern Med*. 2008;22:989-995
22. Kow K, Thamm DH, Terry J, Bailey S, Withrow SJ, **Lana SE**. Impact of telomerase status on canine osteosarcoma patients. *J Vet Intern Med* 2008;22:xxx-xxx.
23. Petty JC, **Lana SE**, Thamm DH, Charles JB, Bachand AM, Bush JM, Ehrhart EJ. Glucose transporter 1 (GLUT-1) Expression in Canine Osteosarcoma. *Veterinary and Comparative Oncology*. 2008;:XXX-XXX.

### **C. Research Support.**

#### **CURRENT**

SBIR Modiano (PI)

9/01/06-9/01/09

NIH

Provoking Anti tumor Immune Response with FAS-ligand

The major goal of this project is to investigate the novel therapeutic delivery of FAS ligand for the anti tumor effect in osteosarcoma using a spontaneous canine model.

Role: Co-Investigator

Canine Comparative Oncology Genomics Consortium Lana (PI)

4/01/07-4/01/09

Biorepository collection site

The major goals of this project are to populate a national tumor archive with canine cancer samples of selected histologies.

Role: Principal Investigator

College Research Council Lana (PI)

07/01/07-07/31/08

Principal Investigator/Program Director (Last, First, Middle):

Colorado State University

Comparative Analysis of Survivin Expression in Naïve and Relapsed Canine Lymphoma

The goals of the project are to determine if canine B cell lymphoma expresses survivin and if over expression is associated with a poor prognosis.

Role: Principal Investigator

Clinical Oncology Trials Consortium Lana (PI)

01/01/07-12/01/09

Morris Animal Foundation

Evaluation of the mTOR inhibitor Rapamycin in dogs with osteosarcoma

The major goals of the project are to determine if a pharmacokinetically relevant and well tolerated exposure of Rapamycin is achievable in dogs. Phase 2 is underway to determine appropriate schedule of delivery in dogs with metastatic osteosarcoma

ACVIM Foundations Lana (PI)

01/01/08- 12/31/09

Gene expression profiling of canine T cell CLL; Development of prognostic markers

The major goals of the project are to use gene array to develop prognostic markers in canine T cell lymphocytosis cases.

AKC Canine Health Foundation Lana (PI)

01/01/09-12/31/10

Measurement of minimal residual disease using real time PCR in canine lymphoma

The major goals of the project are to measure markers of molecular remission using patient specific primers in canine lymphoma patients throughout the course of treatment and disease progression

College Research Council Lana (PI)

07/01/08- 06/31/09

Quantitative Proteomic Profiling of Canine Mast Cell Tumors Using Isobaric Peptide labeling (iTRAQ) and Mass Spectroscopy

The goals of this project are to use this novel technique to screen the proteome of canine mast cell tumors of benign and malignant biologic behavior looking for differences in protein expression as candidates for further study