
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 LaRue, Susan M.	POSITION TITLE Professor		
eRA COMMONS USER NAME SLARUE			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Maryland, College Park, MD University of Georgia, Athens, GA	DVM	1977	Zoology Veterinary Science
Colorado State University, Fort Collins, CO	MS	1986	Clinical Sciences
Colorado State University, Fort Collins, CO	PhD	1992	Radiation Biology

A. Positions and Honors.

Positions and Employment

1977-1982	Veterinarian/Partner, Small Animal Veterinary Practice, North Myrtle Beach, South Carolina
1982-1983	Small Animal Intern, Veterinary Teaching Hospital, University of Georgia, Athens
1983-1986	Small Animal Surgery Resident, Veterinary Teaching Hospital, Colorado State University
1986-1989	Post-doctoral fellow, Department of Radiology and Radiation Biology, Colorado State University
1989-1992	Radiation Oncologist/Research Associate, Comparative Oncology, Colorado State University Veterinary Teaching Hospital
1992-2006	Associate Professor of Radiation Oncology, Department of Radiological Health Sciences, Colorado State University.
2006-present	Professor of Radiation Oncology, Department of Radiological Health Sciences, Colorado State University.

Board Certification:

1989	American College of Veterinary Surgeons
1994	American College of Veterinary Radiology (Radiation Oncology)

Honors

1977	Merck award for excellence in Small Animal Medicine
1986	Resident's Forum, Outstanding Clinical Presentation of Research, American College of Veterinary Surgeons Annual Meeting
1987-1990	Post-doctoral Fellowship, Research Training in Predictive Assays for Tumor Therapy
1986	Conference on the Interaction of Radiation and Chemotherapy Meeting, Williamsburg, VA
1987	Travel award to attend 8th International Congress of Radiation Research, Edinburgh, Scotland
1991	Travel award to attend 9th International Congress of Radiation Research, Toronto, Canada
1995	Travel award to attend 10th International Congress of Radiation Research, Wurzburg, Germany

B. Selected Peer-Reviewed Publications

1. Withrow SJ, Thrall DE, Straw RC, Powers BE, Wrigley RH, **LaRue SM**, Page RL, Richardson DC, Bissonette KW, Betts WC, DEYoung DJ, Richter SL, Jameson VJ, George SL, Dodge R, Gillette EL and Double EB. Intra-Arterial Cisplatin With or Without Radiation in Limb Sparing for Canine Osteosarcoma. *Cancer* 1993;71:2484-2490.
 2. **LaRue SM**, Fox MH, Withrow SJ, Powers BE, Straw RC, Côté IM, and Gillette EL. The Impact of Heterogeneity in the Predictive Value of Kinetic Parameters in Canine Osteosarcoma. *Cancer Research* 1994;54:3916-3921.
-

3. **LaRue SM** and Gillette EL. Recent Advances in Radiation Oncology (In) *Radiology in Practice*, Veterinary Leary Systems, Trenton, New Jersey, 1994;219-225.
4. Ciekot PA, Powers BE, Withrow SJ, Straw RC, Ogilvie GK, **LaRue SM**. Histologically low-grade, yet biologically high-grade, fibrosarcomas of the mandible and maxilla in dogs: 25 cases (1982-1991). *J Am Vet Med Assoc*. 1994;
5. **LaRue SM**. Radiation Therapy for Treatment of Pituitary Tumors. (In) *Current Veterinary Therapy XII*, RW Kirk, editor. WB Saunders, Philadelphia.
6. **LaRue SM**, Gillette SM, Poulson JM. Radiation Therapy of Thoracic and Abdominal Tumors. *Seminars in Veterinary Medicine and Surgery (Small Animal)*. 1995; 10:190-196.
7. **LaRue SM**, Vujaskovic Z. Combining Radiation Therapy With Other Treatment Modalities. *Seminars in Veterinary Medicine and Surgery (Small Animal)*. 1995; 10:197-204.
8. Lana SE, Dernell WS, **LaRue SM**, Lafferty MJ, Douple EB, Brekke JH and Withrow SJ. Slow Release Cisplatin Combined with radiation for the Treatment of Canine Nasal Tumors. *Vet Rad & Ultrasound* 38:474-478, 1997.
9. Gillette SM; Gillette EL; **LaRue SM** ; Borak TB; Thames HD. Effects of volume irradiated on the function of the canine ureter. *Radiation Res*. 150 (4) p436-41, 1998
10. Christian A, McNiel E, Robinson J, Drabek R, **LaRue S**, Waldren C. and Bedford J.A versatile Image Analysis Approach for Simultaneous Chromosome Identification and Localization of FISH Probes. *Genetics and Cell Genetics*, 82, p172-179, 1998.
11. **LaRue SM**, Fox MH, Ogilvie GK, Page RL, Getzy DM, Thrall DE, Johnson JL, Dewhirst MW and Gillette EL Tumor Cell Kinetics as Predictors of Response in Canine Lymphoma treated with Chemotherapy Alone or Combined with Whole Body Hyperthermia. *Int. J. Hyperthermia*, 15(6):475-486, 1999.
12. Thrall DE, **LaRue SM**, Powers BE, Page RL, Johnson J, George SL, Kornegay JN, McEntee MC, Levesque DC, Smith M, Case BC, Dewhirst MW, Gillette EL. Use of whole body hyperthermia as a method to heat inaccessible tumors uniformly: a phase III trial in canine brain masses. *Int J Hyperthermia* 15(5):383-98, 1999.
13. Thrall DE, Rosner GL, Azuma C, **LaRue SM**, Case BC, Samulski T, Dewhirst MW. Using units of CEM 43 degrees C T90, local hyperthermia thermal dose can be delivered as prescribed. *Int J Hyperthermia* 16(5):415-28, 2000.
14. Anderson CR. McNiel EA. Gillette EL. Powers BE. **LaRue SM**. Late complications of pelvic irradiation in 16 dogs. [Journal Article] *Veterinary Radiology & Ultrasound*. 43(2):187-92, 2002 Mar-Apr.
15. Poulson JM, Vujaskovic Z, Gaskin AA, **LaRue SM**, Meyers RE, Prescott DM, Samulski TV, Thrall DE, Dewhirst MW, 2004, Effect of calcitonin gene related peptide vs sodium nitroprusside to increase temperature in spontaneous canine tumors during local hyperthermia, *International Journal of Hyperthermia*, 20(5), pp. 477-89
16. Huang Z, Chen Q, Trncic N, **LaRue SM**, Brun PH, Wilson BC, Shapiro H, Hetzel FW, 2004, Effects of Pd-bacteriopheophorbide (TOOKAD)-mediated photodynamic therapy on canine prostate pretreated with ionizing radiation, *Radiation Research*, 161(16), pp. 723-31
17. Lana SE. Dernell WS. Lafferty MH. Withrow SJ. **LaRue SM**. Use of radiation and a slow-release cisplatin formulation for treatment of canine nasal tumors. [Journal Article] *Veterinary Radiology & Ultrasound*. 45(6):577-81, 2004 Nov-Dec.
18. Huang Z. Chen Q. Luck D. Beckers J. Wilson BC. Trncic N. **LaRue SM**. Blanc D. Hetzel FW. Studies of a vascular-acting photosensitizer, Pd-bacteriopheophorbide (Tookad), in normal canine prostate and spontaneous canine prostate cancer. *Lasers in Surgery & Medicine*. 36(5):390-7, 2005 Jun.
19. Thrall DE. **LaRue SM**. Yu D. Samulski T. Sanders L. Case B. Rosner G. Azuma C. Poulson J. Pruitt AF. Stanley W. Hauck ML. Williams L. Hess P. Dewhirst MW. Thermal dose is related to duration of local control in canine sarcomas treated with thermoradiotherapy. *Clinical Cancer Research*. 11(14):5206-14, 2005 Jul 15.
20. Mayer MN. **LaRue SM**. Radiation therapy in the treatment of canine lymphoma. *Canadian Veterinary Journal*. 46(9):842-4, 2005 Sep.
21. Siddiqui F. Li CY. Zhang X. **LaRue SM**. Dewhirst MW. Ullrich RL. Avery PR. Characterization of a recombinant adenovirus vector encoding heat-inducible feline interleukin-12 for use in hyperthermia-induced gene-therapy. *International Journal of Hyperthermia*. 22(2):117-34, 2006 Mar.
22. Thrall DE. **LaRue SM**. Pruitt AF. Case B. Dewhirst MW. Changes in tumour oxygenation during fractionated hyperthermia and radiation therapy in spontaneous canine sarcomas. *International Journal of Hyperthermia*. 22(5):365-73, 2006 Aug.
23. Siddiqui F, Ehrhart EJ, Charles B, Chubb L, Li CY, Zhang X, **LaRue SM**, Avery PR, Dewhirst MW, Ullrich RL. Anti-angiogenic effects of interleukin-12 delivered by a novel hyperthermia induced gene construct. *Int J Hyperthermia*. 2006 Nov;22(7):587-606.

24. Siddiqui F, Li CY, **Larue SM**, Poulson JM, Avery PR, Pruitt AF, Zhang X, Ullrich RL, Thrall DE, Dewhirst MW, Hauck ML. A phase I trial of hyperthermia-induced interleukin-12 gene therapy in spontaneously arising feline soft tissue sarcomas. *Mol Cancer Ther.* 2007 Jan;6(1):380-9.
25. Shellman YG, Howe WR, Miller LA, Goldstein NB, Pacheco TR, Mahajan RL, **Larue SM**, Norris DA. Hyperthermia Induces Endoplasmic Reticulum-Mediated Apoptosis in Melanoma and Non-Melanoma Skin Cancer Cells. *J Invest Dermatol.* 2007 Nov 8 [Epub ahead of print]

C. Research Support:

Ongoing Research Support

R13 CA009236-30 Ullrich (PI) 05/01/03 – 04/30/08

NIH

Radiological Sciences Basic to Cancer Research

This is a pre- and post-doctoral training grant.

Role: Preceptor

PO 2000869199 LaRue (PI) 11/01/05 – 10/31/08

Varian Medical Systems

Cancer & Normal Tissue Response to Radiation & Immunology, ""

This multiple project grant evaluates the interaction between radiation and the immune system.

Role: Co-Principal Investigator (with Ullrich) of overall project.

Role: PI Project 1 "Alterations in Normal Tissue & Tumor Response Following Stereotatic Irradiation"

Waltham 2007 LaRue (PI) 07/01/07 – 06/30/08

Waltham

Can Peripheral Blood be used as a Prognostic Marker for Canine Lymphoma?

This project evaluates correspondence in chromosomal aberrations between tumor, bone marrow and peripheral blood in canine lymphoma.

Role: Principal Investigator

Completed Research Support

CA42745 Proj 2 LaRue (PI, CSU) 09/20-00 – 06/30/05

National Institute of Health - National Cancer Institute (CA

Hyperthermia & Perfusion Effects in Cancer therapy: Project 2 PI Hyperthermia & Perfusion Effects in Cancer Therapy

This longstanding program of projects grant based at Duke University (PI Mark Dewhirst) studies thermometry, efficacy and tumor physiology in-vitro, and in vivo.

Role: PI and project leader at CSU.

CA42745 Core 2 LaRue (PI) 09/20-00 – 06/30/05

Hyperthermia & Perfusion Effects in Cancer Therapy

This longstanding program of projects grant based at Duke University (PI Mark Dewhirst) studies thermometry, efficacy and tumor physiology in-vitro, and in vivo.

Role: PI at core leader at CSU

Winn Fdn LaRue(PI) 01/01/04 – 03/31-05

Robert H. Winn (Winn Feline) Foundation

Treatment of Feline Soft Tissue Sarcomas Using Heat-Inducible Interleukin-12 Gene Therapy

This was a toxicity study to evaluate heat-inducible gene therapy.

Role: PI