

BIOGRAPHICAL SKETCH

Steven W. Dow, DVM, Ph.D.	Professor of Immunology		
eRA COMMONS USER NAME: STEDOW1			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Virginia	B.A.	1978	Biology
University of Georgia	D.V.M.	1982	Veterinary Medicine
Colorado State University	M.S.	1987	Clinical Sciences
Colorado State University	Ph.D.	1992	Comparative Pathology

A. Professional Experience

2010-present: Director, Center for Immune and Regenerative Medicine, Colorado State University

2009-present: Associate Dept Head for Graduate Studies, Dept of Clinical Sciences, Colorado State University

2007-present Professor, Dept of Clinical Sciences and Dept of Microbiology, Immunology, and Pathology, Colorado State University, Ft. Collins

2001-2006 Associate Professor, Dept of Microbiology, Immunology, and Pathology and Dept of Clinical Sciences, Colorado State University, Ft. Collins, CO

1995-2001 Instructor, National Jewish Medical and Research Center, Denver, CO and the University of Colorado Health Sciences Center, Denver, CO

1993-1995 Post-Doctoral Fellow, National Jewish Medical and Research Center, Denver, CO

1987-1992 Graduate Student, Department of Pathology, Colorado State University, Ft. Collins, CO

1984-1987 Residency in Small Animal Medicine, Dept Clinical Sciences, Colorado State University

Honors, Positions, and Other Professional Activities

Phi Beta Kappa, University of Virginia, 1978

Summa cum laude graduate, University of Georgia (DVM), 1982

Pfizer Animal Health Award for Research Excellence, Colorado State University, 2004

Ad hoc study section member, Operation Bioshield, National Institutes of Health, Nov. 2004

Ad hoc study section member, Microbiology Infectious Disease RC, National Institutes of Health, Feb. 2005

Ad hoc study section member, Innate Host Defense IRG, National Institutes of Health, Oct. 2005

Fogarty International and Cooperative Projects Study Section, ad hoc member, Oct 2007

Study section member, Topics in Bacterial Pathogenesis, NIH, 2006-2010.

Study section member, NIAID MID Study section; 2010-2014.

Member, American Assoc Immunologists, American Society for Microbiology, American Assoc Cancer Res

B. Publications (selected from 138 total, in chronological order)

1. Irwin, SM, Izzo AA, Dow SW, Skeiky YA, Reed SG, Alderson MR, and Orme IM. (2005). Tracking antigen-specific CD8 T lymphocytes in the lungs of mice vaccinated with the Mtb72F polyprotein. *Infect Immun.*73:5809-16
2. Bosio C, Goodyear A, and Dow S. (2005) Early interaction of *Yersinia pestis* with APCs in the lungs. *J Immunol* 175:6750-6756.
3. Bosio C and Dow S. (2005) Aberrant activation of pulmonary dendritic cells by *Francisella tularensis*. *J Immunol* 175:6792-6801.
4. Zaks K, Jordan M, Guth A, Sellins K, Kedl R, Izzo A, Bosio C, and Dow S. (2006) Efficient immunization and cross-priming by vaccine adjuvants containing TLR3 and TLR9 agonists complexed to cationic liposomes. *J Immunol* 176:7335-7345.
5. Avery P, Lehman T, Hoover E, and Dow S. (2007) Sustained generation of dendritic cells from multiple tissues of cats using long-term stromal cell cultures. *Vet Immunol Immunother* 117:222-235.
6. Webb C, McCord K, and Dow S. (2008) Neutrophil function defects in dogs with sepsis. *J Vet Intern Med* 21:982-989.

7. Dow S. Liposome-nucleic acid immunotherapeutics. (2008) *Expert Opinion in Drug Delivery* 5:11-24.
8. Elmslie R, Glawe P, and Dow S. (2008) Metronomic chemotherapy with cytoxan and piroxicam effectively delays tumor recurrence in dogs with incompletely resected soft tissue sarcoma, *J Vet Intern Med*, 22:1373-1379.
9. Gowen, B, Fairman J, Dow S, Troyer R, Wong J, Melby K, Jung G, and Morrey J. (2009) Prophylaxis with cationic liposome-DNA complexes protects hamsters from phleboviral disease: importance of liposomal delivery and CpG motifs. *Antiviral Res* 81:37-46.
10. Guth A, Bosio C, Janssen W, Crouch E, Henson P, and Dow S. (2009) Lung environment determines unique phenotype of alveolar macrophages. *J. Physiol Lung Cell Mol Biol*; 296:L936-946.
11. Goodyear A, Troyer R, Jones A, and Dow S. (2009) Protection from *Burkholderia* infection by inhalational immunotherapy. *Infection and Immunity* 77:1759-1765.
12. Troyer R, Propst K, Fairman, J, Bosio K, and Dow S. (2009) Mucosal immunotherapy for protection from pneumonic *Francisella* infection. *Vaccine* 27:4424-4433.
13. Sottnik J, Guth A, Thamm D, and Dow S. (2010) Chronic bacterial osteomyelitis suppression of tumor growth requires innate immune responses. *Cancer Immunol Immunother* 59:367.
14. U'Ren L, Guth A, and Dow S. (2010) Type I interferons inhibit the generation of tumor macrophages. *Cancer Immunol Immunoth* 59:587.
15. Duffy A, Olgilvie G, and Dow S. (2010) Hematologic response to treatment with canine G-CSF in dogs with parvovirus enteritis. *Vet Pharmacol and Therapeutics* 33:352..
16. Duffy A, Olea-Popelka F, Dow S. (2010) MCP-1 concentrations in various disease states in dogs. *Vet Clin Path* 39:302.
17. Estes M, Schweizer H, Dow S, and Alfredo A. (2010) Present and Future Therapeutic Strategies for Meloidosis and Glanders. *Expert Review Anti-Infective Therapy* 8:325.
19. Biller B, Guth A, Burton J, and Dow S. (2010) Decreased ratio CD8 T cells to regulatory T cells associated with decreased survival in dogs with osteosarcoma. *J Vet Intern Med*: 24, 1118.
20. Propst K, Mima A, Choi K, Dow S, Schweizer H. (2010) A *Burkholderia pseudomallei* purM mutant is avirulent in immune competent and immune deficient animals: A candidate strain for exclusion from the Select Agent List. *Infection and Immunity* 78:3136.
21. Jones A, Bosio K, Goodyear A, Schriefer M, Dow S. (2010). Protection against pneumonic plague following oral immunization with a non-replicating vaccine. *Vaccine* 16:5924-5928.
22. Sottnik J, Guth A, Mitchell L, and Dow S. (2010). Minimally invasive assessment of tumor angiogenesis using fine needle aspiration and flow cytometry. *Angiogenesis* 13:251.
23. Goodyear A, Troyer R, Jones A, and Dow S. (2010) Critical role for MCP-1 in resistance to pneumonic *Burkholderia mallei* infection. *J Immunol* 184:1445.
24. Propst K, Troyer R, Kellihan L, and Dow S. (2010) Immunotherapy markedly increases the effectiveness of ceftazidime therapy for *Burkholderia pseudomallei* infection. *Antimicrob Agents Chemother* 54:1785-1792.
25. Takeda T, Dow S, Miyahara N, Kodama T, Koya T, Taube C, Joetham A, Park J, Dakhama A, Kedl R, and Gelfand E. (2009) Vaccine-induced CD8⁺ T cell suppression of airway hyperresponsiveness and inflammation. *J Immunol*, 183:181-190.
26. Sottnik J, Rao S, Withrow S, Morley P, and Dow S. (2011). Association of blood monocyte count and disease-free interval in dogs with osteosarcoma. *J Vet Intern Med*: 24, 1439.
27. Quimby J, Webb T, Gibbons J, and Dow S. (2011). Intra-renal mesenchymal stem cell transfer for treatment of chronic renal disease in cats. *J Fel Med Surg*.
28. Perry J, Thamm D, Avery A, and Dow S. (2011). MCP-1 concentration and monocyte counts as independent predictors of survival in dogs with lymphoma. *Vet Comp Oncol* 9:55-64.
29. Henderson A, Propst K, Kedl R, **Dow S**. (2011) Mucosal immunization with liposome-nucleic acid adjuvants generates effective humoral and cellular immunity. *Vaccine*. 18;29(32):5304-12
30. Pulford B, Reim N, Bell A, Veatch J, Forster G, Bender H, Meyerett C, Hafeman S, Michel B, Johnson T, Wyckoff AC, Miele G, Julius C, Kranich J, Schenkel A, **Dow S**, Zabel MD. (2010) Liposome-siRNA-peptide complexes cross the blood-brain barrier and significantly decrease PrP on neuronal cells and PrP in infected cell cultures. *PLoS One* 14;5(6).