

**DR. DONAL O'TOOLE**  
**University of Wyoming**  
*E-mail: DOT@UWYO.edu;*  
*Office phone: 307 766 9976*  
*Birth: 8 October 1953*  
*Citizenship: Irish and American*  
*Children: Patrick (b. 4 August 1988)*

EDUCATION:

- MVB, Trinity College, Dublin, Ireland, 1977
- PhD, Veterinary Pathology, Colorado State University, 1982: Dissertation: *The morphogenesis of retinal dysplasia in the English springer spaniel*, 524 pp.

AFFILIATIONS:

- Diplomat of European College of Veterinary Pathologists, 1996 – to date
- Fellow of Royal College of Pathologists, 1997 – to date
- Member of Wyoming Veterinary Medical Association, 1998 – to date
- Member of American Veterinary Medical Association, 2005 – to date
- Member of Royal College of Veterinary Surgeons, 1977 – to date (member #1503105).
- Member of Royal College of Pathologists, 1986 - 1996 (member #0753892)
- Member of European Society of Veterinary Pathology, 2000 – to date.
- Member of American Association of Veterinary Laboratory Diagnosticians, 1990 – to date.

SERVICE:

60% of time in diagnostic service to animal owners and veterinarians in Wyoming.

PROFESSIONAL EXPERIENCE:

2007 – present: Professor, Department of Veterinary Sciences, University of Wyoming, Laramie, Wyoming  
2002 – 2007: Department head, Department of Veterinary Sciences, College of Agriculture, University of Wyoming. Director, Wyoming State Veterinary Laboratory, Laramie, Wyoming  
1998 – 2002: Professor, Department of Veterinary Sciences, University of Wyoming, Laramie, Wyoming.  
1994-1998: Associate Professor, Department of Veterinary Sciences, University of Wyoming, Laramie, Wyoming. Tenure.  
1990-1994: Assistant Professor, Department of Veterinary Sciences, University of Wyoming, Laramie, Wyoming. Start March, 1990.  
1988-1990: Clinical veterinarian, small animal practice, Gordon House Veterinary Centre, Camberley, Surrey, United Kingdom. Start May, 1988.  
1983-1988: Research Officer, Department of Pathology, Central Veterinary Laboratory, Ministry of Agriculture, Fisheries and Food, New Haw, Weybridge, Surrey, United Kingdom. Start January, 1983.  
1978-1982: Pathology resident and post-doctoral trainee, Department of Pathology, Colorado State University, Fort Collins, Colorado. Start July, 1978.  
1977-1978 Clinical veterinarian, food and companion animal practice, Parkview Veterinary Group, Railway Road, Strabane, Co. Tyrone, Northern Ireland. Start August 1977.

## TEACHING:

Primary responsibility:

### 1. **Diseases of Food Animals (PATB 4110/5110)**

Credits: 3; upper division course (3<sup>rd</sup> and 4<sup>th</sup> year students). It is offered as a graduate level course with additional requirements.

Origin: Originally developed by another faculty member, but completely revamped.

Intended audience: Pre-veterinary and animal science production majors. C or better is required in this class for graduation in these majors at University of Wyoming

Percentage of class taught: 50% . I developed the class web site, write class notes, and write/correct exams (4 exams/class; cumulative material approach)

When: Spring 2004, 2005, 2006, 2007, 2008, 2009, 2010 (spring: 50 students; fall: 49 students), 2011 (51 students; fall); 2012 (43 students; fall); 2013 (49 students; fall); 2014 (55 students; fall).

Co-instructors: Dr. Jonathan Fox.

Text: Merck Veterinary Manual.

Enrollment: 30 – 50 students

Format: PowerPoint. 50 minute lectures, 3 times a week.

Note: Equine component of course, originally named *Diseases of Food Animals and Horses* (until 2012), was pulled out to slow the pace, and used to create PATB 4111 (below)

### 2. **Health and Diseases of Horses (PATB 4111/5111 – cross-listed with ANSC 4111/5111)**

Credits: 3; upper division course (3<sup>rd</sup> and 4<sup>th</sup> year students). It is offered as a graduate level course with additional requirements.

Origin: Developed *de novo* with Dr. Amy McLean. Revamped course after Dr. McLean left UW. Currently co-taught with George Howard.

Intended audience: Pre-veterinary and animal science production majors.

Percentage of class taught: 66%

When: Spring 2012 (27 students); Spring 2013 (16 students); Spring 2014 (29 students); Spring 2015 (not offered); Spring 2016 (10 students)

Text: *The Comprehensive Guide to Equine Veterinary Medicine*; Au: Barb Crabbe; Sterling, 2007.

Format: PowerPoint. 50 minute lectures, 3 times a week

### 3. **Comparative Pathobiology (PATB 4130/5130)**

Credits: 3-credit, upper division. It is offered as a graduate level course with additional requirements.

Origin: I developed the course with Dr. Montgomery. It is being revamped (fall 2014) as a Communications 3 course.

Percentage of class taught: 35% plus prepare/grade all tests

When: Fall 2008 – Spring 2016

Co-instructors: Drs. Montgomery and Fox; currently, Dr. Laegreid and Fox

Format: PowerPoint. 50 minute lectures, 3 times a week

Audience: Pre-veterinary and pre-medical, molecular biology and microbiology students.

Texts: McGavin and Zachary, *Pathological Basis of Veterinary Disease*, 5<sup>th</sup> edition; selected articles esp. Vet Pathol and N Engl J Med.

Enrollment: 15 students (2008); 15 students (2009); 23 students (2011); 25 students (2012)

### 4. **Comparative Pathology of Disease in Animals. PATB 5120.**

Credits: 3, graduate-level course.

Origin: Developed course

Intended audience: Pre-veterinary, pre-medical/dental and microbiology students

Percentage of class taught: 100%

Texts: Journal articles

Enrollment: 10 - 12 students.

Format: PowerPoint and topics-based; 80 minutes lectures, 2 times a week

When: Fall 1999, 2001, 2002

Lecturing in other classes

5. **Diseases of Wildlife (PATB 4120/5120)**

Guest lecturer: Overview of malignant catarrhal fever (previous years). 80 minute lecture

Intended audience: Wildlife management majors; zoology majors; pre-veterinary graduate students

6. **Medical Virology (PATB 4710)**

Guest lecturer: Overview of prions (previous years) and pestiviruses (current). 80 minute lecture

Intended audience: medical microbiology, pre-med and pre-veterinary students

7. **Animal Production (ANSC 1010)**

Co- lecturer: Animal health and disease. 3, 50-minute lectures plus three laboratory sections (necropsies with show-and-tell).

Intended audience: Animal science production majors; pre-veterinary students

8. **Epidemiology (Diseases in Population)(PATB 4001)**

Guest lecturer: Interaction between diagnostic pathologists and epidemiologists in disease investigation.

Intended audience: pre-vets, pre-meds, medical microbiologists, masters of the universe.

PUBLICATIONS:

1. O'Toole D, Young S, Severin GA, Neumann S, (1983). Retinal dysplasia of English springer spaniel dogs. Light microscopy of the postnatal lesions. *Vet Pathol* 20:298-311.
2. O'Toole D, Murphy JA, (1983). Spindle B melanoma in the choroid of a dog. *J Small Animal Pract* 24:561-567.
3. O'Toole D, Miller GK, Hazel S, (1984). Bilateral retinal microangiopathy in a dog with diabetes mellitus hypoadrenocorticism. *Vet Pathol* 21:120-121.
4. O'Toole D, Roberts S, (1984). Generalized progressive retinal atrophy in two Akita dogs. *Vet Pathol* 21:457-462.
5. O'Toole D, Duffell SJ, Upcott DH, Frewin D, (1986). Experimental microcyst *Sarcocystis* infection in lambs: pathology. *Vet Rec* 119:525-531.
6. O'Toole D, (1987). Experimental ovine sarcocystosis: sequential ultrastructural pathology in skeletal muscle. *J Comp Pathol* 97:51-60.
7. Bradley R, O'Toole DT, Wells DE, Anderson PH, Hartley P, Berrett S, Morris JE, Inch CG, Hayward EA, (1987). Clinical biochemistry and pathology of mature beef cattle following ante-mortem intravenous administration of a commercial papain preparation. *Meat Sci* 19:39-51.
8. Wells GAH, Hawkins SAC, O'Toole DT, Done SH, Duffell SJ, Bradley R, Hebert N, (1987). Spastic syndrome in a Holstein bull: a histologic study. *Vet Pathol* 24:563-566.
9. O'Toole D, Jeffrey M, (1987). Congenital sporozoan encephalomyelitis in a calf. *Vet Rec* 121:563-566.
10. Wijeratne WVS, O'Toole D, Wood L, Harkness JW, (1988). A genetic, pathological and virological study of congenital hypotrichosis and incisor anodontia in cattle. *Vet Rec* 122:149-152.
11. Jeffrey M, O'Toole D, Smith T, Bridges AW, (1988). Immunocytochemistry of ovine sporozoan encephalitis and encephalomyelitis. *J Comp Pathol* 98:213-224.
12. O'Toole D, Wells GAH, Green RB, Hawkins SAG, (1989). Radial and tibial nerve pathology of two lactating ewes with "kangaroo gait". *J Comp Pathol* 100:245-258.
13. O'Toole D, Brown I, Bridges A, Cartwright SF, (1989). Pathogenicity of experimental infection with pneumotropic porcine coronavirus. *Res Vet Sci* 47:23-29.
14. Dubey, J.P., Higgins, R.J., Smith, J.H., O'Toole, D. (1990). *Neospora caninum* encephalitis in a British dog. *Vet Rec* 126:193-194.
15. Ellis, J.A., Lairmore, M.D., O'Toole, D.T., Campos, M. (1991). Differential induction of tumor necrosis factor-alpha in ovine pulmonary alveolar macrophages following infection with *Corynebacterium pseudotuberculosis*, *Pasteurella haemolytica*, or lentivirus. *Infection Immunity* 59(9):3254-3260.
16. Coen, M.L., Ellis, J.A., O'Toole, D.T. Wilson, W.C. (1991) Cytokine modulation of bluetongue virus/endothelial cell interaction *in vitro*. *Vet Pathol* 20(6):524-532.

17. O'Toole, D., Roberts, S., Nunamaker, C. (1992). Sudden acute retinal degeneration ("silent retina syndrome") in two dogs. *Vet Rec* 130(8):157-161.
18. O'Toole, D., Haven, T., Driscoll, M., Nunamaker, C. (1992). An outbreak of Pacheco's disease in an aviary of psittacines. *J Vet Diagn Invest* 4(2):203-205.
19. O'Toole, D., Mills, K., Ellis, J.A., Welch, V., Fillerup, M. (1993). Poliomyelomalacia-ganglionitis in a horse with paralytic rabies. *J Vet Diagn Invest* 5(1):94-97.
20. O'Toole, D., Williams, E.S., Welch, V., Nunamaker, C.N. (1993). Vesiculobullous filarial dermatitis in free-ranging American badgers (*Taxidea taxus*). *Vet Pathol* 30(4):343-351.
21. O'Toole, D., Welch, V., Williams, E. S. (1994). Immunohistochemistry of parasitic subepidermal vesiculobullous disease in American badgers (*Taxidea taxus*). *J Vet Diagn Invest* 6(1):72-76.
22. Ellis, J.A., O'Toole, D.T., Haven, T.R., Davis, W.C. (1992). Predominance of BoCD8+ lymphocytes in vascular lesions in a case of malignant catarrhal fever. *Vet Pathol* 29(6):545-547.
23. O'Toole, D., Mills, K., Ellis, R., Farr, R., Davis, M. (1993). Clostridial enteritis in red lorries (*Eos bornea*). *J Vet Diagn Invest* 5(1):111-113.
24. O'Toole, D., Jeffrey, M., Challoner, D., Maybey, R., Welch, V. (1993). Ovine myeloencephalitis-leukomyelomalacia associated with a *Sarcocystis*-like protozoan. *J Vet Diagn Invest* 5(2):212-225.
25. O'Toole, D., Welch, V., Redland, K., Williams, E.S. (1993). Ubiquitinated inclusions in brains from Salers calves with B-mannosidosis. *Vet Pathol* 30(4):381-385.
26. O'Toole, D., Welch, V., Redland, K. (1993). Ubiquitin immunocytochemistry of spinal cord in hereditary porcine neuronal system degeneration. *J Vet Diagn Invest* 5(4):642-646.
27. Raisbeck, M.F., Dahl, G.R., Sanchez, D.A., Belden, E.L., O'Toole, D. (1993). Naturally occurring selenosis in Wyoming. *J Vet Diagn Invest* 5(1):84-87.
28. Raisbeck, M.F., O'Toole, D.T., Belden, E.L., Sanchez, D.A., Siemion, R.A. (1993). Selenium or sulfur? A comparison of toxic effects in mammals on Western Rangelands. *In: Planning, rehabilitation and treatment of disturbed lands. 6th Billings Symposium, Vol 1, pp 139-151. Reclamation Research Unit Publ. No. 9301, Billings, MT.*
29. O'Toole, D., Jeffrey, M., Jones, T., Morgan, G., Green, R. (1993). Pathology of renal dysplasia and bladder aplasia-hypoplasia in a flock of sheep. *J Vet Diagn Invest* 5(4):591-602.
30. O'Toole, D., Ingram, J., Welch, V., Bardsley, K., Haven, T., Nunamaker, C., Wells, G. (1994) An inherited lower motor neuron disease of pigs: clinical signs in two litters and pathology of an affected pig. *J Vet Diagn Invest* 6(1):62-71.
31. O'Toole, D., Wells, G.A.H., Ingram, J., Cooley, W.A., Hawkins, S.A.C. (1994). Ultrastructural pathology of an inherited lower motor neuron disease of pigs. *J Vet Diagn Invest* 6(2):230-237.
32. O'Toole, D., Li, H., Roberts, S., Rovnak, J., Demartini, J., Cavender, J., Williams, W., Crawford, T. (1995): Chronic generalized obliterative arteriopathy in cattle: a sequel to sheep-associated malignant catarrhal fever. *J Vet Diagn Invest* 7(1):108-121.
33. O'Toole, D., Castle, L.E., Raisbeck, M.F. (1995): Comparison of histochemical autometallography (Danscher stain) to chemical analysis for detection of selenium in tissue. *J Vet Diagn Invest.* 7(2):281-284.
34. O'Toole, D., McAllister, M.M., Griggs, K. (1995): Iatrogenic compressive lumbar myelopathy and radiculopathy in adult cattle following injection into loin muscle of an adjuvanted bacterin: histopathology and ultrastructure. *J Vet Diagn Invest.* 7(2):234-244.
35. McAllister, M.M., O'Toole, D., Griggs, K. (1995): Myositis, lameness and paraparesis in a herd of beef cows associated with use of an oil-adjuvant bacterin. *J Am Vet Med Assoc* 207(7):936-938.
36. O'Toole, D., Raisbeck, M.F. (1995): Pathology of experimentally-induced chronic selenosis ("alkali disease") in yearling cattle. *J Vet Diagn Invest.* 7(3):364-373.
37. O'Toole, D., Raisbeck, M.F., Case, J.C., Whitson, T.D. (1996): Selenium-induced blind staggers and related myths. A commentary on extent of historical livestock losses attributed to selenosis on Western U.S. rangelands. *Vet Pathol.* 33(1):104-116.
38. Russell, H., O'Toole, D., Bardsley, K., Davis, W.C., Ellis, J.A (1996): Comparative effects of bluetongue virus

- infection of ovine and bovine endothelial cells. *Vet Pathol* 33 (3): 319 – 331.
39. Raisbeck, M.F., O'Toole, D., Schaumber, D., Belden, E.L., Robinson, L.J.: Toxicological effects of a high selenium hay diet in captive pronghorn antelope (*Antilocapra americana*). *J Wildl Dis* 32(1):9-16.
  40. Li, H., Shen, D.T., O'Toole, D., Knowles D.P., Gorham JR, Crawford, T.B. Investigation of sheep-associated malignant catarrhal fever virus infection in ruminants by polymerase chain reaction and competitive inhibition ELISA. *J Clin Microbiol.* 33(8):2048-2053.
  41. Li, H., Shen, O'Toole, D., Davis, W.C., Knowles, D.P., Gorham, J.R., Crawford, T.B (1996): Malignant catarrhal fever virus: characterization of a U.S. isolate and development of diagnostic assays. *Annal NY Acad Sci. Vector-Borne Pathogens, International Trade and Tropical Animal Diseases*, eds. E. Camus, J.A. House, Uilenberg, G. vol. 791, 198 - 210.
  42. Li, H., Shen, D.T., Jessup, D.A., Knowles, D.P., Gorham, J.R., Thorne, T., O'Toole, D., Crawford, T.B.: 1996, Prevalence of antibody to malignant catarrhal fever virus in domestic and wild ruminants by competitive inhibition ELISA. *J Wildl Dis* 32(3): 437-443
  43. O' Toole, D., Li, H., Miller, D., Williams, W.R., Crawford, T.B.: 1997, Chronic and recovered cases of sheep-associated malignant fever (MCF) in cattle. *Vet Rec* 140: 519 - 524.
  44. O'Toole, D. Raisbeck, M.F, 1997: Experimentally-induced selenosis in adult mallard ducks: clinical signs, lesions and toxicology. *Vet Pathol* 34 (4): 330 - 340.
  45. Hamar, D.W., Bedwell, C.L., Johnson, J.L., Schultheiss, P.C., Raisbeck, M., Grotelueschen D. M., Williams, E.S.W., O' Toole, D., Paumer, R. J., Vickers, M.G., Graham, T.J., 1997: Iatrogenic copper toxicosis induced by administering copper oxide boluses to neonatal calves. *J Vet Diagn Invest* 9 (4): 441 - 443
  46. Crawford, T.B., Li, H., O'Toole, D.: Diagnosis of malignant catarrhal fever by PCR using formalin-fixed embedded-tissues. *J Vet Diagn Invest* 11: 111 – 116, 1999.
  47. Li, H., Snowden, G., O'Toole, D., Crawford, T.B. 1998, Transmission of ovine herpesvirus-2 in lambs. *J Clin Microbiol.* 36 (1): 223 - 226.
  48. Wakshlag JJ; Lahunta A de; Robinson-T; Cooper-BJ; Brenner-O; O'-Toole-TD; Olson-J; Beckman-KB; Glass-E; Reynolds AJ; de Lahunta A. 1999. Subacute necrotizing encephalopathy in an Alaskan Husky. *J Small Anim Pract* 40 (12): 585-589.
  49. Li, H., Snowden, G., O'Toole, D., Crawford, T.B. 2000: Transmission of ovine herpesvirus-2 among adult sheep. *J Clin Micro. Veterinary Microbiology* 71(1-2):27-35.
  50. D. O'Toole, E. J. Kelly, M. M. McAllister, A. W. Layton, R. W. Norrdin, W. C. Russell, K. Saeb-Parsy, A. P. Walker, 2001: Hepatic failure and hemochromatosis of Salers and Salers-cross cattle. *Vet Pathol* 38 (4): 372 – 389.
  51. D. O'Toole, H. Li, C. Sourk, D. H. Montgomery, T.B. Crawford: 2002, Malignant catarrhal fever in a bison (*Bison bison*) feedlot 1994 – 2000. *J Vet Diagn Invest* 14 (3): 183 – 193.
  52. Burns, R., Williams, E.S., O'Toole, D., Dubey, J.P.: Toxoplasmosis in a captive colony of black-footed ferrets (*Mustela nigripes*)(1992 – 1998): clinical signs, serology and pathology. *J Wildl Dis.* 2003 Oct;39(4):787-97.
  53. D. O'Toole, A.A. Pérez de León, C. Hearne, L. McHolland, L. Yun and W. Tabachnick: 2002, Papular dermatitis induced in guinea pigs by the biting midge *Culicoides sonorensis* (Diptera: Ceratopogonidae). *J Vet Diagn Invest* 15: 65 – 69.
  54. D. O'Toole. JD Fox: 2003, Chronic hyperplastic and neoplastic lesions (“Marjolin’s ulcer”) at hot-brand sites in adult beef cattle. *J Vet Diagn Invest* 15: 61 - 64.
  55. S. Simon, H. Li, D. O'Toole, T. B. Crawford, and L. Oaks: 2003, CD8+ Lymphocytes are predominant infected cells in brain vascular lesions of cattle and bison with sheep-associated malignant catarrhal fever. *J Gen Virol.* 2003 Aug;84(Pt 8):2009-13
  56. Pruden SJ, McAllister MM, Schultheiss PC, O'Toole D, Christensen DE: 2004, Abomasal emptying defect of sheep may be an acquired form of dysautonomia. *Vet Pathol.* 41(2):164-9.
  57. O'Toole D, Steadman L, Raisbeck M, Torpy R. 2005, Myositis, lameness and recumbency following use of water-in-oil adjuvanted vaccines in near-term beef cattle *J Vet Diagn Invest* 17: 21-29
  58. Norrdin RW, Hoopes KJ, O'Toole D, 2004: Bone lesions of Salers with hemochromatosis. *Vet Pathol* 41:612-

59. Cornish TE, van Olphen AL, Cavender JL, Edwards JM, Jaeger PT, Vieyra LL, Woodard LF, Miller DR, O'Toole D: 2006, Comparison of ear notch immunohistochemistry, ear notch antigen-capture ELISA, and buffy coat virus isolation for detection of calves persistently infected with bovine viral diarrhoea virus. *J Vet Diagn Invest.* 17(2):110-117.
60. O'Toole D, S. Tharp, B. V. Thomsen, E. Tan, J. B. Payeur: 2005, Fatal mycobacteriosis with hepatosplenomegaly in a young dog due to *Mycobacterium avium*. *J Vet Diagn Invest* 17(2): 200 - 204
61. H. Li, D. O'Toole, O. Kim, J. L. Oaks, and T.B. Crawford: 2005, Malignant catarrhal fever-like disease in sheep following intranasal inoculation with ovine herpesvirus-2. *J Vet Diagn Invest.* 17(2):171-175.
62. O'Toole D, Montgomery DL, Steadman L, O'Rourke B, Russell W, Dennis J: 2005, Status spongiosis of white matter in newborn Gelbvieh-cross calves. *J Vet Diagn Invest* 17(6):546-53.
63. Perez De Leon AA, O'Toole D, Tabachnick WJ: 2006, Infection of guinea pigs with vesicular stomatitis New Jersey virus Transmitted by *Culicoides sonorensis* (Diptera: Ceratopogonidae). *J Med Entomol* 43(3):568-73.
64. O'Toole D, Steadman L, Raisbeck M, Torpy R. 2005, Myositis, lameness and recumbency following use of water-in-oil adjuvanted vaccines in near-term beef cattle *J Vet Diagn Invest* 17: 21-29
65. Taus NS, Oaks JL, Gailbreath K, Traul DL, O'Toole D, Li H: 2006, Experimental aerosol infection of cattle (*Bos taurus*) with ovine herpesvirus 2 using nasal secretions from infected sheep. *Vet Microbiol.* 116(1-3):29-36.
66. Pérez De León AA, O'Toole D, Tabachnick WJ: 2006, Infection of guinea pigs with vesicular stomatitis New Jersey virus transmitted by *Culicoides sonorensis* (Diptera: Ceratopogonidae). *J Med Entomol* 43(3):568-73
67. Cunha CW, Traul DL, Taus NS, Oaks JL, O'Toole D, Davitt CM, Li H: 2007, Detection of ovine herpesvirus 2 major capsid gene transcripts as an indicator of virus replication in shedding sheep and clinically affected animals. *Virus Res.* 2008 Mar;132(1-2):69-75
68. O'Toole D, Taus NS, Montgomery DL, Oaks JL, Crawford TB, Li H: 2007, Intra-nasal inoculation of American bison (*Bison bison*) with ovine herpesvirus-2 (OvHV-2) reliably reproduces malignant catarrhal fever. *Vet Pathol* 44(5):655-662
69. Traul DL, Taus NS, Lindsay Oaks J, O'Toole D, Rurangirwa FR, Baszler TV, Li H: 2007, Validation of nonnested and real-time PCR for diagnosis of sheep-associated malignant catarrhal fever in clinical samples. *J Vet Diagn Invest* 19(4):405-408
70. Traul DL, Li H, Dasgupta N, O'Toole D, Eldridge JA, Besser TE, Davies CJ: 2007, Resistance to malignant catarrhal fever in American bison (*Bison bison*) is associated with MHC class IIa polymorphisms. *Anim Genet.* 38(2):141-146.
71. Li H, Karney G, O'Toole D, Crawford TB: 2008, Long distance spread of malignant catarrhal fever virus from feedlot lambs to ranch bison. *Can Vet J.* 2008 Feb;49(2):183-185
72. O'Toole D, Williams ES, Woods LW, Mills K et al: 2008, Tularemia in range sheep. An overlooked syndrome? *J Vet Diagn Invest.* 20(4):508-513.
73. Edmunds DR, Williams ES, O'Toole D, Mills KW, Boerger-Fields AM, Jaeger PT, Bildfell RJ, Dearing P, Cornish TE: 2008, Ocular plague (*Yersinia pestis*) in mule deer (*Odocoileus hemionus*) from Wyoming and Oregon. *J Wildl Dis.* 44(4):983-7
74. Cunha, C.W., Traul, D.L., Taus, N.S., Oaks, J.L., O'Toole, D., Davitt, C.M., Li, H.: 2008, Detection of ovine herpesvirus 2 major capsid gene transcripts as an indicator of virus replication in shedding sheep and clinically affected animals. *Virus Research* 132: 69 - 75
75. O'Toole D, Allen T, Hunter R, Corbeil L: 2009, Acute myocarditis and histophilosis in feedlot cattle. *Vet Pathol* 46(5):1015-1017.
76. Gailbreath KL, O'Toole D, Taus NL, Knowles DP, Oaks JL, Li H: 2010. Experimental infection of American bison (*Bison bison*) with low doses of ovine herpesvirus 2 from sheep nasal secretions. *Vet Microbiol.* 143(2-4):389-93.
77. Meyers SN, Beever JE, Godtel RA, Marron BM, McDanel TG, O'Connell JR, Smith TP, Sonstegard TS, Steffen DJ, O'Toole D, Swist SL: 2010: A deletion mutation in bovine SLC4A2 is associated with osteopetrosis in Red Angus cattle. *BMC Genomics.* 11(1):337.

78. Nelson DD, Davis WC, Brown W, Li H, O'Toole D, Oaks JL, 2010: CD8+/perforin+/WC1-gamma-delta T, CD4+ alpha-beta T, and B lymphocytes infiltrate vasculitis lesions of American bison (*Bison bison*) with experimentally-induced sheep-associated malignant catarrhal fever. *Vet Immunol Immunopathol.* 136(3-4):284-291.
79. O'Toole D: 2010, Monitoring and investigating natural disease by veterinary pathologists in diagnostic laboratories. *Vet Pathol* 47(1): 40 – 44. [Invited].
80. M. Kiupel, J. Webster, R. Miller, K. L. Bailey, S. Best, J. DeLay, C. J. Detrisac, D. Gamble, P. E. Ginn, M. H. Goldschmidt, M. J. Hendrick, E. W. Howerth, E. B. Janovitz, S. D. Lenz, T. P. Lipscomb, E. Miller, W. Misdorp, S. Moroff, I. Neyens, D. O'Toole, J. Ramos-Vara, T. Scase, Y. Schulman, K. Smith, P. Snyder, E. Southorn, N. L. Stedman, B. A. Steficek, P. C. Stromberg, V. E. Valli, S. E. Weisbrode, J. Yager, J. Heller: 2010, A proposed two-tiered histologic grading system for canine cutaneous mast cell tumors to more accurately predict biological behavior. *Vet Pathol* 48(1): 147-155.
81. Kamstock DA, Ehrhart EJ, Getzy DM, Bacon NJ, Rassnick KM, Moroff SD, Liu SM, Straw RC, McKnight CA, Amorim RL, Bienzle D, Cassali GD, Cullen JM, Dennis MM, Esplin DG, Foster RA, Goldschmidt MH, Gruber AD, Hellmén E, Howerth EW, Labelle P, Lenz SD, Lipscomb TP, Locke E, McGill LD, Miller MA, Mouser PJ, O'Toole D, Pool RR, Powers BE, Ramos-Vara JA, Roccabianca P, Ross AD, Sailasuta A, Sarli G, Scase TJ, Schulman FY, Shoieb AM, Singh K, Sledge D, Smedley RC, Smith KC, Spangler WL, Steficek B, Stromberg PC, Valli VE, Yager J, Kiupel M: Recommended guidelines for submission, trimming, margin evaluation, and reporting of tumor biopsy specimens in veterinary surgical pathology. *Vet Pathol.* 2011 Jan;48(1):19-31.
82. B. Zekarias, D. O'Toole, J. Lehmann, L.B. Corbeil: 2011, *Histophilus somni* IbpA Fic cytotoxin is conserved in disease strains and most carrier strains from cattle, sheep and bison. *Vet Microbiol* 149(1-2):177-85.
83. Li H, Cunha CW, Gailbreath KL, O'Toole D, Vanderplassen A, Dewals B, Knowles DP, Taus NS: 2011, Characterization of ovine herpesvirus 2-induced malignant catarrhal fever in rabbits. *Vet Microbiol* 150 (I3-4), 270-277
84. Yao C, O'Toole D, Driscoll M, McFarland W, Fox J, Cornish T, Jolley W: 2011, *Filaroides osleri* (*Oslerus osleri*): Two case reports and a review of canid infections in North America. *Vet Parasitol* 179(1-3):123-129
85. O'Toole D, Swist S, Steadman L, Johnson GC: 2012. Neuropathology and craniofacial lesions in Red Angus osteopetrosis. *Vet Pathol* 49(5):746-754
86. O'Toole D, Miller MM; Cavender J; Cornish T: BoHV-1 abortion following vaccination of pregnant cattle with modified live vaccine. *Pathology in Practice.* J Am Vet Med Assoc 241(2):189-191
87. Li H, Brooking A, Cunha CW, Highland MA, O'Toole D, Knowles DP, Taus NS: 2011, Experimental induction of malignant catarrhal fever in pigs with ovine herpesvirus 2 by intranasal nebulization. *Vet Microbiol* 2159(3-4):307-319
88. Cunha CW, O'Toole D, Schneider DA, White SN, Taus NS, Knowles DP, Hong Li: 2011, Ovine herpesvirus 2 infection in American bison: virus and host dynamics in the development of sheep-associated malignant catarrhal fever. *Vet Microbiol* 2159(3-4):307-319.
89. Malherbe C, Marquard J, Cammack K, O'Toole D: 2012. Right ventricular hypertrophy with heart failure in Holstein heifers at 1,600 m. *J Vet Diagn Invest.* 24(5):867-877.
90. Li H, Cunha CW, O'Toole D, Nicola A, Knowles DP, Taus NS: 2013, Development of an *in vivo* system to measure antibody blocking of ovine herpesvirus 2 entry. *J Virol Methods* 188(1-2):104-7.
91. Schumaker BA, Miller MM, Grosdidier P, Cavender J, Farr RM, O'Toole D: 2012. An outbreak of canine distemper originating in a large scale dog breeding operation *J Vet Diagn Invest.* 24(6):1094-1098.
92. Cunha CW, O'Toole D, Taus NS, Knowles DP: 2013, Are rabbits a suitable model to study sheep-associated malignant catarrhal fever in susceptible hosts? *Vet Microbiol* 163(3-4):358-63.
93. Fluegel AM, Boerger-Fields AM, Henderson OL, Loiacono CM, Cornish TE, O'Toole D, Mills KW: 2013, Abortion and stillbirth in cattle due to *Brucella abortus* strain RB51 in western Wyoming. *J Vet Diagn Invest.* 25(5) 630–635
94. Miller MM, O'Toole D, Cavender JL, Cornish TE, Dawson TG, Smylie JM, Fox JH, Hill KL, Montgomery DL Vasquez M, Schumaker BA: 2013, Vaccine associated mucosal disease case study: demonstrating the importance

of subsequent herd PI testing. *Bov Practitioner* 47(2):84-93.

95. Nelson DD, Taus NS, Schneider DA, Cunha CW, Davis WC, Brown WC, Li H, O'Toole D, Oaks JL. Fibroblasts express OvHV-2 capsid protein in vasculitis lesions of American bison (*Bison bison*) with experimental sheep-associated malignant catarrhal fever. *Vet Microbiol.* 166(3-4):486-492.
96. Taus NS, O'Toole D, Hearndona DR, Cunha CW, Warg JV, Seale BS, Knowles DP, Li H: 2014, Malignant catarrhal fever in American bison (*Bison bison*) experimentally infected with alcelaphine herpesvirus 2. *Vet Micro.* *Vet Microbiol.* 172(1-2):318-322.
97. O'Toole D, Li H: 2014, The pathology of malignant catarrhal fever, with an emphasis on ovine herpesvirus 2. *Vet Pathol.* 51(2):437-52.
98. Cunha CC, Taus NS, O'Toole D, Nicola AV, Aguilar HC, Knowles DP, Li H: 2015, Anti-ovine herpesvirus 2 glycoprotein antibodies block virus infection and prevent malignant catarrhal fever in rabbits. *Vet Microbiol.* 175(2-4):349-55.
99. O'Toole, D, Chase CL, Miller MM, Van Campen H: 2014, Kennedy, the early Sixties, and visitation by the Angel of Death. *Vet Pathol.* Vol. 51(6) 1051-1062
100. Fulton RW, d'Offay JM,, Eberle R, Moeller RB, Van Campen H, O'Toole D, Chase CC, Miller MM, Sprowls R Nydam DV: 2015, Bovine herpesvirus-1: evaluation of genetic diversity of subtypes derived from field strains isolates from various clinical syndromes and relationship to vaccine strains. *Vaccine.* 33(4):549-558
101. Hull NC, O'Toole D, Fox J, Miller MM, Shoults H, Deck R, Jones W, Johnson GC, Shaw DP, Schumaker BA: 2015, Canine dysautonomia in a litter of Havanese puppies. *J Vet Diagn Invest.* 27(5):627-331
102. Saeed BN, Mills K, O'Toole D, Laegried W: An improved primer set for genotyping *Clostridium perfringens*. *J Vet Diagn Invest* July 2015.
103. O'Toole D, Hunter R, Allen T, Mills K, Zekarias B, Lehmann J, Corbeil LC. Pathogenesis of endothelial cell infection by *Histophilus somni*. *Vet Pathol.* Submitted and accepted, pending minor revisions Aug 2016

#### BOOK REVIEWS:

1. O'Toole, D: 2004, Book review: *J Wildl Dis.* *Cattle Plague, A History.* By C.A. Spinage. Kluwer/Plenum Publishers. *J Wildlife Dis* 40(3): 612 – 613.
2. O'Toole, D: 2012, Book review: *J Vet Diagn Invest.* *Kirkbride's Diagnosis of Abortion and Neonatal Loss in Animals.* Ed. B. L. Njaa. ISBN-10: 0-470-95852-9; ISBN-13: 978-0-470-95852-0 (pbk). 2012. Wiley-Blackwell. 241 pp. Website: [www.wiley.com/go/njaa](http://www.wiley.com/go/njaa) (images). 12 April 2012.
3. O'Toole, D: 2015, Book review: *J Vet Diagn Invest.* *Arresting Contagion: Science, policy and conflicts over animal disease control.* Alan L. Olmstead, Paul W. Rhode. Harvard University Press, Cambridge, Massachusetts; London, England, 2015. Hardback, ISBN 978-0-674-72877-6
4. O'Toole, D: 2016: Book review: *J Vet Diagn Invest.* *Clostridial Diseases of Animals.* Eds. FA Uzal, JG Songer, JF Prescott, MR Popoff. ISBN: 978-1-118-72840-6; 2016. Wiley Blackwell. 336 pp. \$149.99 (hardback); \$119.99 (E-book)

#### TEXT BOOK PROPOSAL REVIEWS

1. *Small Animal Necropsy*, by Jodie Gerdin, Proposal Wiley, Ames, IA; returned review to Erica Judisch, Executive Editor, Veterinary Medicine, 17 Sept 2014.

#### BOOK CHAPTERS (INVITED)

1. O'Toole, D. and Raisbeck, M.F. (1997) Magic numbers, elusive lesions. Comparative aspects of selenosis in waterfowl and mammals. *In: Environmental Chemistry of Selenium*, eds. Frankenberger, W.T., Engberg, R.A. Books in Soils, Plants and the Environment, v. 64. Marcel Dekker, Inc. Chapter 19, pp. 355 - 395. 1998. ISBN 0-8247-0136-4.
2. Raisbeck, M.F., O'Toole, D. and Belden, E.L. (1997). Selenium toxicosis. *In: Current Veterinary Therapy Food Animal Practice* 4, ed. Howard, J.L. W.B. Saunders Company, Philadelphia, PA. Submitted 6 Jan 1997. Publication anticipated mid-1997.
3. Crawford, T.B., O'Toole, D., Li, H. (1997). Malignant catarrhal fever. *In: Current Veterinary Therapy Food*



Animal Practice 4, ed. Howard, J.L. W.B. Saunders Company, Philadelphia, PA..

4. Raisbeck, M.F. and O'Toole, D. (1997). Morphologic studies of selenosis in herbivores. *In: Toxic Plants and Other Natural Toxicants*, Eds. T. Garland and A.C. Barr, Chapter 76, pp. 380 – 388, Commonwealth Agriculture Bureau, C/O Oxford University Press, North Carolina, USA June 1998, ISBN 0 85199 263 3
5. Raisbeck, M.F., O'Toole, D., Belden, E.L., Waggoner, J.W. (1997). Chronic selenosis in ruminants. *In: Toxic Plants and Other Natural Toxicants*, Eds. T. Garland and A.C. Barr, Chapter 77, pp. 389 – 396, Commonwealth Agriculture Bureau, C/O Oxford University Press, North Carolina, USA, June 1998, ISBN 0 85199 263 3
6. O'Toole D, Li H: 2008. Malignant catarrhal fever. pp. 325 - 334 and pp. 464 - 465. *In: Foreign Animal Diseases*, 7th edition, 2008 United States Animal Health Association.
7. O'Toole D, Li H: 2013. Malignant catarrhal fever; subchapter in: Viral hemorrhagic fevers of animals *In: Global Virology - Identifying and Investigating Viral Diseases*. Editors: JT Sinnott (USF Tampa General Hospital) and F. Chiappelli (UCLA). Springer-Verlag
8. O'Toole D, Sondergroth, K: 2016,. Background, disease manifestations and laboratory diagnosis of *H. somni*. *In: Histophilus somni. Current Topics in Microbiology and Immunology*. Springer.
9. O'Toole D: 2015, Brisket disease. 5-Minute Veterinary Consult.

#### MISCELLANEOUS NON-PEER REVIEWED

1. O'Toole, D. The Library Council: Sounding Board and Advocate for the UW Libraries. *The Library Associate*, Spring, 1999.
2. O'Toole, D. 1998 – 9. Annual Report, UW Library Council. 20 April 1999. 24 pp.
3. O'Toole, D., Li, H., Crawford, T.B. Crawford.: 2000, *The University of Wyoming and Washington State University and the United States Department of Agriculture your questions about Malignant Catarrhal Fever in bison*. Smoke Signals – Official Publication of the Canadian Bison Association. XI (2): 18 – 25. Invited; 4 figs. Text and additional images subsequently put out as part of an information flyer by Dr. Murray Woodbury, Chair of specialized livestock R+D program Western College of Veterinary Medicine, University of Saskatchewan, September 2000; also on Dr. Woodbury's web page for producers.
4. Woodard, L., O'Toole, D., Williams, ESW, Van Campen, H: 2000, "Flopper" syndrome linked to genetic disease. *Bovine Veterinarian*, Sept 2000, pp. 50 – 51.
5. O'Toole, D., Li, H., Montgomery, D.L., Sourk, C., Crawford, T.B.: 2000, A prospective and retrospective study on ovine herpesvirus-2 malignant catarrhal fever. *Bison World* 25 (4): 20 – 21.
6. O'Toole, D. *North American Bison Journal* 2001: Q and A piece on MCF.
7. Interview: Article on MCF in bison and other species. *Agademics*. Press Release.
8. Interview: Clint Peck: 2001, Skinning BVD – New skin test accurately diagnoses BVD in young calves. *Beef*. June 2001, p. 28.
9. O'Toole, D., Woodard, D.: 2002, When animal vaccines are defective – legal loopholes and “vaccine wrecks” *Reflections*, UW College of Agriculture magazine June 2002: 30 – 33.
10. O'Toole, D., 2002, Isolating the cause of a fatal viral disease in ranched bison. *Reflections*, UW College of Agriculture magazine June 2002: 4.
11. Interview: 2003, Studies show bison do not transmit deadly disease. *Reflections*, UW College of Agriculture magazine June 2003: 46 – 47.
12. O'Toole, D., Raisbeck, M., Woodard, L., 2003, Drought affects livestock disease on the High Plains. *UW College of Agriculture Drought Supplement*, pp. 6 – 7.
13. O'Toole, D. Purves, K: Spread them out: the issue of brucellosis and feedgrounds. *Reflections*, UW College of Agriculture magazine, June 2005: 11 – 15.
14. O'Toole, D: 2008, Department of Veterinary Sciences hosts scientific exchange highlighting cattle disease concerns along Front Range. *Agademics*, College of Agriculture publication; Sept issue, pp. 7-8.
15. D O'Toole; M Raisbeck 2010. Winter stress in Wyoming cattle, and associated diseases. *Wyoming Livestock Roundup* - Jan 2010.
16. D O'Toole: 2015, Suspected adverse reactions to food animal vaccines in the United States: experience at one

diagnostic laboratory. ACVP proceedings, [page numbers]

#### ABSTRACTS AND PRESENTATIONS:

1. O'Toole, D. and Young, S.: Dysplastic retinopathy in postnatal English springer spaniels. Annual Meeting of Conference of Research Workers in Animal Disease, Chicago, Illinois. November, 1980.
2. O'Toole, D. and Young, S.: Dysplastic retinopathy in antenatal English springer spaniels. Combined program of the America Society of Veterinary Ophthalmology and the International Society of Veterinary Ophthalmology, Las Vegas. April, 1982.
3. O'Toole, D. and Young, S.: The development of retinal dysplasia in the English springer spaniel. Annual Meeting of Association of Veterinary Teachers and Research Workers, Scarborough, Yorkshire, England. March 1983.
4. O'Toole, D., Jeffrey, M., Green, R.B.: Lethal renal hypoplasia/bladder aplasia in new born lambs. Animal Pathology Discussion Group, Autumn Meeting, Harlow, Essex. October, 1984.
5. O'Toole, D.: Congenital retinopathy in a new born calf infected at 80 days in utero with bovine viral diarrhea virus. British Association for Ocular Pathology, Institute of Ophthalmology, University of London. March, 1985.
6. O'Toole, D., Duffell, S.J., Upcott, D.H., Frewin, D.C.: Pathogenesis of *Sarcocystis ovicanis* infection in sheep between 14 and 81 days post-infection. Annual Meeting of Association of Veterinary Teachers and Research Workers, Scarborough, Yorkshire, England. April, 1985.
7. O'Toole, D., Jeffrey, M., Green, R.B., Morgan, G., Jones, T.O.: Ovine renal hypoplasia - pathology of lethally and sublethally affected lambs. Annual Meeting of Association of Veterinary Teachers and Research Workers, Scarborough, Yorkshire, England. April, 1985.
8. O'Toole, D.T., Wells, G.A.H., Green, R.B., Hawkins, S.A.C.: The control of artifacts in food animal peripheral nerve I um sections and teased fiber preparations. Animal pathology Discussion Group, Autumn Meeting, Bristol. September, 1985.
9. O'Toole, D.T., Jeffrey, M., Bridges, A.: Detection of *Sarcocystis* spp. antigens in paraffin wax sections: a diagnostic tool. Animal Pathology Discussion Group, Spring Meeting, Smith Kline & French Research Limited, Welwyn. April, 1986.
10. Wells, G.A.H., O'Toole, D.T., Wijeratne, W.V.S.: Hereditary neuropathy of the domesticated pig. 10th International Congress of Neuropathology, Stockholm, Sweden. September 7-12, 1986.
11. Wells, G.A.H., O'Toole, D.T., Wijeratne, W.V.S.: An inherited neuronal system degeneration of the pig. 72nd Meeting, British Neuropathological Society, London. January 15-16, 1987. Abstract: Neuropathology & Applied Neurobiology 13:233 (1987).
12. Wijeratne, W.V.S., O'Toole, D.T., Wood, L., Harkness, J.W.: A genetic, pathological and virological study of congenital hypotrichosis in cattle. Annual Meeting of Association of Veterinary Teachers and Research Workers, Scarborough, Yorkshire, England. April, 1987.
13. Wells, G.A.H., Wijeratne, W.V.S., O'Toole, D.T., Lung, L.J.: Hereditary porcine neuronal system degeneration: a new disorder of the domesticated pig. Annual Meeting of Association of Veterinary Teachers and Research Workers, Scarborough, Yorkshire, England. April, 1987.
14. O'Toole, D.T., Wells, G.A.H.: Hereditary porcine neuronal system degeneration: ultrastructural pathology of neurons. Annual Meeting of Association of Veterinary Teachers and Research Workers, Scarborough, Yorkshire, England. April, 1987.
15. Jeffrey, M., O'Toole, D.T., Bridges, A.W., Smith, T.: Immunohistochemical diagnosis of ruminant protozoal encephalomyelitis. Annual Meeting of Association of Veterinary Teachers and Research Workers, Scarborough, Yorkshire, England. April, 1987.
16. Higgins, R.J., O'Toole, D.T., Wells, G.A.H.: Clinical histopathological and ultrastructural observations on a new enteropathy of weaned pigs. Annual Meeting of Association of Veterinary Teachers and Research Workers, Scarborough, Yorkshire, England. April, 1987.
17. Woodard, L.F., Mills, K.W., Haven, T.R., Cavender, J.L., O'Toole, D. Agents associated with bovine abortions, stillbirths and weak calves in Wyoming. 12th Annual Western Food Animal Disease Research Conference,

- Laramie, Wyoming. April, 1991.
18. O'Toole, D., Wells, G.A.H. Hereditary porcine neuronal system degeneration: a novel neuropathy of the pig. 12th Annual Western Food Animal Disease Research Conference, Laramie, Wyoming. April, 1991.
  19. Haven, T.R., Bolin, S.R., O'Toole, D., Cavender, J., Nunamaker, C., Mills, K.W. Isolation and characterization of an apparently novel virus. 12th Annual Western Food Animal Disease Research Conference, Laramie, Wyoming. April, 1991.
  20. O'Toole, D., Brown, I., Bridges, I., Cartwright, S.F. Pathogenicity of experimental infection with "pneumotropic" porcine coronavirus. 12th Annual Western Food Animal Disease Research Conference, Laramie, Wyoming. April, 1991.
  21. O'Toole, D., Haven, T., Driscoll, M., Nunamaker, C. Pacheco's disease in premises closed to introduced psittaciformes for four years. 40th Annual Wildlife Disease Association Conference, Fort Collins, Colorado. August, 1991.
  22. Russell, H.I., Ellis, J.A., O'Toole, D.T., Kaltenbach, J.E. Pathogenesis of bluetongue virus infection in primary ovine and bovine endothelial cells: preliminary studies. 13th Annual Western Animal Disease Research Conference, Davis, California. April, 1992.
  23. O'Toole, D., Williams, E., Welch, V., Nunamaker, C., Lynn, C. Filarial dermatitis in free-ranging badgers. 41st Annual Wildlife Disease Association Conference, El Paso, Texas. August, 1992. P. 40, Proceedings.
  24. O'Toole, D., Mills, K., Farr, R., Ellis, R., Davis, M. Clostridial enteritis in Red lorries. American Association of Veterinary Laboratory Diagnosticians, Inc. 35th Annual Conference, Louisville, Kentucky. October, 1992. P. 65, Proceedings.
  25. O'Toole, D. An inherited motor neuron disease in the pig. American Association of Veterinary Laboratory Diagnosticians, Inc. 35th Annual Conference, Louisville, Kentucky. October, 1992. P. 55, Proceedings.
  26. Raisbeck, M.F., O'Toole, D., Belden, E.L., Sanchez, D.A., Siemion, R.A. Selenium or sulfur? A comparison of toxic effects in mammals on Western rangelands. 6th Billings Symposium on Disturbed Land Rehabilitation. Billings, Montana. March, 1993. Proceedings XX.
  27. O'Toole, D., Raisbeck, M. Pathology of experimentally-induced chronic selenosis in adult steers following ingestion of sodium selenite and selenomethionine. American Association of Veterinary Laboratory Diagnosticians, Inc. 36th Annual Conference, Las Vegas, Nevada. October, 1993. P. 68, Proceedings.
  28. Burns, R., Williams, E.S.W., O'Toole, D., Dubey, J.P. Toxoplasmosis in black-footed ferrets (*Mustela nigripes*) in the Louisville Zoo. American Association of Zoo Veterinarians Annual Meeting, St. Louis, MO. October, 1993.
  29. O'Toole, D., Raisbeck, M. Danscher staining in tissues from rats exposed to oral selenium. Caveat tinctor. American Association of Veterinary Laboratory Diagnosticians, Inc. 36th Annual Conference, Las Vegas, NV. October, 1993.
  30. Ellis, J., Russell, H., O'Toole, D. Bluetongue virus infection of bovine and ovine endothelial cells: an *in vitro* model. American College of Veterinary Pathologists, 44th Annual Meeting, San Antonio, TX. December, 1993. Vet Pathol 30(5):475 [Abstr #190].
  31. O'Toole, D., McAllister M.: 1994, Unilateral and bilateral posterior paresis in beef cows secondary to granulomatous pachymeningitis-compressive lumbar myelopathy: an epizootic following vaccination with a commercial bacterin. Western Food Animal Disease Research Conference, 15th Annual Meeting, Lincoln, Nebraska. March, 1994. P. 42, Proceedings.
  32. O'Toole, D., Williams, W.: 1994, Chronic generalized obliterative arteriopathy in cattle: a sequel to sheep-associated malignant catarrhal fever. Western Food Animal Disease Research Conference, 15th Annual Meeting, Lincoln, Nebraska. March, 1994. P. 16, Proceedings.
  33. Li, H., Shen, D.T., O'Toole, D., Knowles, D.P., Gorham, J.R., Crawford, T.B.: 1994, Detection of animals infected with the sheep-associated malignant catarrhal fever virus by PCR and competitive-inhibition ELISA. International Herpesvirus Conference, Vancouver, British Columbia.
  34. Li, H., Shen, D.T., O'Toole, D., Knowles, D.P., Gorham, J.R., Crawford, T.B.: 1995, Study of sheep-associated malignant catarrhal fever virus infection in the United States. Third Biennial Meeting, Society for Tropical

- Veterinary Medicine, San Jose, Costa Rica, May 8-12, 1995.
35. Raisbeck, M.F., O'Toole, D.T., Belden, E.L., Schamber, R.A., Waggoner, J.W.: 1995, Selenosis in northwestern Great Plains: dogma vs. data. Poster, presented at "Selenium in the environment: essential nutrient, potential toxicant." Sacramento, CA. May, 1995. Page 51, Proceedings.
  36. Raisbeck, M.F., O'Toole, D., Sanchez, D.A., Siemion, R.A. Waggoner, J.W.: 1995, Reevaluation of selenium toxicity in grazing mammals. 12th National Meeting, American Society for Surface Mining and Reclamation, Gillette, Wyoming. June 1994. Proceedings, vol. 1, pp. 372-383.
  37. O'Toole, D., Tynan-Cuisinier G., Raisbeck, M.F.: 1995, Selenium poisoning in waterfowl due to agricultural drainwater contamination: the obscenity analogy. 8th annual meeting, American Water Resources Association/Wyoming Section. Nov 1-2, 1995. P.16, Proceedings. Laramie, WY.
  38. Li, H., Shen, D.T., Gorham J.R., Thorne, T., O'Toole, D., Crawford, T.B.: 1995, Antibody prevalence to malignant catarrhal fever virus in domestic and wild ruminant by competitive inhibition ELISA. Joint annual meeting, American Association of Wildlife Veterinarians, American Association of Zoo Veterinarians, and The Wildlife Disease Association. August, 1995.
  39. Hamar, D., Raisbeck, M., Williams, E., O'Toole, D., Graham, T., Paumer, R., Sears, G., Bedwell, C., Schultheiss, P.: 1995, Copper toxicosis in newborn calves resulting from CopastureJ (Copper oxide) boluses. American Association of Veterinary Laboratory Diagnosticians, 38th Annual Meeting, October 1995, Reno, NV.
  40. Crawford, T.B., Li, H., Shen, D., O'Toole, D.: 1995, Diagnosis of sheep-associated malignant catarrhal fever by PCR on paraffin-embedded tissues. American Association of Veterinary Laboratory Diagnosticians, 38th Annual Meeting, October 1995, Reno, NV.
  41. O'Toole, D. Li, H., Crawford, T.B.: 1995, Sheep-associated malignant catarrhal fever in cattle with extended survival times: recognition by histopathology and PCR. American College of Veterinary Pathologists, 46th Annual Meeting, Atlanta, GA, November 1995. Vet Pathol 32(5):596, Abstract #203.
  42. Li, H., Shen, D.T., O'Toole, D., Knowles, D.P., Gorham, H.R., Crawford, T.B.: 1995, Diagnoses and epidemiologic studies of sheep-associated malignant catarrhal fever virus (OHV-2) infection in ruminants. World Veterinary Congress, Japan, Fall, 1995.
  43. O'Toole, D., Raisbeck, M. 1996, Integumentary lesions of experimentally-induced chronic selenosis in waterfowl: a distinctive pterylopathy-onychopathy. 40th Annual Congress, Association of Veterinary Teachers and Research Workers, April 1996, Scarborough, Yorkshire, U.K. P. 26, Proceedings.
  44. O'Toole, D., Li, H., Crawford, H.: 1996, Sheep-associated malignant catarrhal fever in cattle with extended survival time: recognition of a new aspect of the MCF syndrome. 40th Annual Congress, Association of Veterinary Teachers and Research Workers, April 1996, Scarborough, Yorkshire, U.K. P. 12, Proceedings.
  45. Li, H., O'Toole, D., Snowden, G., Shen, D.T., Knowles, D.P., Crawford, T.B.: 1996, Establishment of ovine herpesvirus-2-free sheep by separation from the flock at weaning. 40th Annual Congress, Association of Veterinary Teachers and Research Workers, April 1996, Scarborough, Yorkshire, U.K. P. 12, Proceedings.
  46. Crawford, T.B., Li, H., Shen, D.T., O'Toole, D.: 1996, Sheep-associated malignant catarrhal fever: diagnosis from archival tissue using PCR. 40th Annual Congress, Association of Veterinary Teachers and Research Workers, April 1996, Scarborough, Yorkshire, U.K. P. 12, Proceedings.
  47. Li, H., O'Toole, D., Snowden, G., Shen, D.T., Knowles, D.P., Crawford, T.B.: 1996, Infection ovine herpesvirus 2 (OHV-2) does not occur in lambs prior to weaning. 15th Annual Meeting, American Society of Virology, July 13-17, The University of Western Ontario.
  48. O' Toole, D, Raisbeck, M. F.: 1996, Experimental chronic selenosis in adult waterfowl: 1. Clinical signs and lesions. 39th Annual meeting, American Association of Veterinary Laboratory Diagnosticians and US Animal Health Association. Little Rock, AR., Oct 12 - 18, 1996.
  49. Raisbeck, M. F., O' Toole, D, Sanchez, D.: 1996, Experimental chronic selenosis in adult waterfowl: Toxicology. 39th Annual meeting, American Association of Veterinary Laboratory Diagnosticians and US Animal Health Association. Little Rock, AR., Oct 12 - 18, 1996.
  50. Raisbeck, M.F., O'Toole, D., Belden, E.L.: 1997, Experimental chronic selenosis in ruminants. 5<sup>th</sup> International Symposium on Poisonous Plants, San Angelo, TX. May 19 - 23, 1997. Proceedings, P. 106.

51. Raisbeck, M.F., O'Toole, D.: 1997, Elusive lesions: the pathology of chronic selenosis in livestock. 5<sup>th</sup> International Symposium on Poisonous Plants, San Angelo, TX. May 19 - 23, 1997. Proceedings, P. 107.
52. Li, H., O'Toole, D., Davis, W. C., Crawford, T. B.: 1997, Gamma-delta T cells are the predominant host cells for ovine herpesvirus 2 and its replication is tightly restricted. Edinburgh, U.K. August, 1997.
53. Li, H., Snowden, G., O'Toole, D. and T. B. Crawford: 1997, Patterns of OHV-2 infection in young sheep. Edinburgh, U.K. August, 1997.
54. Li, H., O'Toole, D., Davis, W.C., Crawford, T.B.: 1997, Identification of major lymphocyte subpopulation(s) infected with ovine herpesvirus 2 in domestic sheep and cattle. 22<sup>nd</sup> International Herpesvirus Workshop/11<sup>th</sup> Bovine Herpesvirus Workshop, San Diego, CA. August 2 - 7, 1997.
55. Li, H., Snowden, G., O'Toole, D., Crawford, T.B.: 1997, Study of sheep-associated malignant catarrhal fever virus (part II): viral transmission among domestic sheep. 22<sup>nd</sup> International Herpesvirus Workshop and 11<sup>th</sup> Bovine Herpesvirus Workshop, San Diego, CA. August 2 - 7, 1997.
56. Pérez de León, A. A., O'Toole, D., Schmidtman, E. T., Titus, R., and Tabachnick, W. T. Insect blood feeding and the transmission of orbiviruses and vesiculoviruses. 101<sup>st</sup> annual USAHA meeting, Louisville, KY. 18 – 24 October 13, 1997.
57. O'Toole, D., Kelly, E.J., McAllister, M.M., Russell, W.C., Walker, A.P.: Hepatic failure secondary to hemochromatosis in cattle: clinical, morphological and genetic aspects in the Salers breed. 41<sup>st</sup> annual AAVLD meeting, Minneapolis, MN. 1998. P. 61, Proceedings.
58. Crawford, T.B., Li, H., Snowden, G., O'Toole, D.: Transmission of ovine herpesvirus-2 in adult sheep. American Society for Virology, 18<sup>th</sup> annual meeting, University of Massachusetts, July 10 – 14, 1999
59. Ann P Walker, Kasra Saeb-Parsy, Emma J Kelly, Milt M McAllister, William C Russell, John K House, Daniel F Wallace, James S Dooley, Donal O' Toole. The HFE gene as the basis for bovine haemochromatosis: how cattle regulate iron? Bioiron '99, combined meeting of 7<sup>th</sup> International Association for the Study of Disorders of Iron Metabolism, 14<sup>th</sup> International Conference on Proteins of Iron Metabolism, and the 5<sup>th</sup> International Symposium on Iron Transport, Storage and Metabolism. Sorrento Palace, Naples, May 23 – 28, 1999.
60. W.R. Jolley, D. O'Toole, A. McGuire, R.A. Wills, C. Jones: 1999, Experimentally-induced patent enteric infections of *N. caninum* in dogs do not result in enteric or extraintestinal lesions. AAVLD meeting, San Diego CA, Oct 1999. AAVLD proceedings, 42<sup>nd</sup> annual meeting, p. 56.
61. O'Toole, D. 1999: Malignant catarrhal fever as a significant source of mortality in feedlot bison: observations on incidence, spread and avoidance. Oral report, Committee on Infectious Diseases of Cattle, Bison and Llama, USAHA, October 1999. Proceedings, 103<sup>rd</sup> Annual meeting, p. 266.
62. JF Ridpath, R Randall, D O'Toole, VS Cortese, JD Neill: 1999, Characterization of a type 2 bovine viral diarrhea virus found as a contaminant in a MLV vaccine. Conference of Research Workers on Animal Disease. Chicago, IL. Nov 1999.
63. D. O'Toole, H. Li, B. Dye, T.B. Crawford: 2000, Endemic infection of feedlot bison with OHV-2. 19<sup>th</sup> Annual Meeting, American Society of Virology, July 8 – 12, 2000. Fort Collins, CO. Abstract W47-10, p. 136 Proceedings. I gave an extended version of the same presentation after an invitation by a group of MCF researchers at the CSU Pathology Department, July 12 2000.
64. D. O'Toole, H. Li, Sourk, C., B. Dye, T.B. Crawford: 2000, OHV-2-induced acute malignant catarrhal fever as the leading cause of fatal losses in feedlot bison. AAVLD annual meeting, Birmingham AL Oct 20 – 23, 2000.
65. Higgins, RJ, O'Toole, D, Clark, E, West, K, Wells, GAH, Blackburn, P, Cundall, CJ Circoviral postweaning multisystemic wasting syndrome (PMWS). Retrospective confirmation of two outbreaks in English herds from 1986. Proceedings, p. 9. AAVLD annual meeting, Birmingham AL Oct 20 – 23, 2000.
66. D O'Toole, A. A. Perez de Leon, L. Mei, and L. McHolland: 2000, Delayed-onset papular dermatitis at *Culicoides* feeding sites as confounding factor in experimental studies of arthropod-borne disease. AAVLD annual meeting, Birmingham AL Oct 20 – 23, 2000.
67. O'Toole, D.: 2000, A prospective study of OHV-2-associated malignant catarrhal fever in a large bison feedlot. USAHA national meeting, Birmingham, AL. Oct 20 – 23, 2000 (invited).
68. J. Berezowski, D. M. Middleton, B. O'Connor, G. Appleyard, K. West, Haigh, M. Woodbury, T. Crawford, H. Li, D. O'Toole: 2001 Epidemiology of a large outbreak of malignant catarrhal fever in bison (*Bison bison*) following

- brief exposure to sheep at an auction sale. AAVLD national meeting, Hershey, PA. Nov 2001. Abstract proceedings p. 5.
69. D. O'Toole, D. Bevier, B. Hunsaker K. Mills: 2001, Epidemic dermatophytosis (club lamb disease) in a flock of sheep. AAVLD national meeting, Hershey, PA. Nov 2001. Abstract proceedings p. 54.
  70. D. O'Toole, R Norrdin: 2001, Clinical course and histopathology of osseous changes in Salers hemochromatosis. AAVLD national meeting, Hershey, PA. Nov 2001. Abstract proceedings p. 9.
  71. D O'Toole, L Steadman: 2002, Immune nodules, preemption, and adverse reactions. A diagnostician's approach to vaccine wrecks. P. 12, Proceedings, AAVLD national meeting, St. Louis, MO. Nov 2002 .
  72. D. O'Toole, K.C.Meehan, H. Mazzaccaro, J. Settlemire, K. Mills, J. Cavender, M. F. Raisbeck: 2002, Emaciation-reproductive failure due to renal amyloidosis-glomerulosclerosis in adult commercial rabbits. P. 16, Proceedings, AAVLD national meeting, St. Louis, MO. Nov 2002.
  73. R. Burns, E. S. Williams, D. O'Toole, J. P. Dubey: 2002, Acute and chronic toxoplasmosis in quarantined captive black-footed ferrets (*Mustela nigripes*) at the Louisville zoo (1992 – 1998). P. 119, Proceedings, AAVLD national meeting, St. Louis, MO. Nov 2002.
  74. T. Cornish, D. O'Toole, A. van Olphen, L. Woodard, D. Miller, and J. Cavender: 2002, A comparison of ear notch immunohistochemistry, ear notch antigen capture ELISA test, and virus isolation for the detection of calves persistently infected with bovine viral diarrhea virus. AAVLD national meeting, St. Louis, MO. Nov 2002.
  75. D. O'Toole, J. Dennis, L. Steadman, Bottiglieri T, W.C. Russell: 2002, Maple syrup urine disease (hereditary neuraxial edema) lacking recognized branched chain  $\alpha$ -keto acid gene mutations in a Gelbvieh x Red Angus herd. P. 57, Proceedings. AAVLD national meeting, St. Louis, MO. Nov 2002.
  76. R Norrdin, K Hoopes, D O'Toole: 2002, Bone lesions in the hemochromatosis of Salers cattle. ACVP national meeting, New Orleans, LA. Dec 2002.
  77. College of Agriculture Department Head's panel presentation, MegaAg conference (joint meeting of WSGA, WWGA, and WWGA), Parkway Plaza, Casper, December 5 2002.
  78. D. O'Toole, J. Dennis, L. Steadman, T. Bottigliere: 2003, Congenital status spongiosus of Gelbvieh-cross calves is distinct from maple syrup urine disease. 21<sup>st</sup> annual meeting, European Society of Veterinary Pathology. Dublin, Ireland, Sept 2003. Proceedings, p. 37.
  79. D. O'Toole, H. Li, J. Berezowski, T. B. Crawford. 2003. Overview of malignant catarrhal fever due to ovine herpesvirus-2 in commercial bison in western USA and Canada. 21<sup>st</sup> annual meeting, European Society of Veterinary Pathology. Dublin, Ireland, Sept 2003. Proceedings, p. 37.
  80. D. O'Toole. 2003. Malignant catarrhal fever in wildlife and domestic species. Invited presentation. Diseases at the Interface of Domestic Livestock and Wildlife Species. Meeting sponsored by National Animal Disease Center, USDA-ARS. July 17 – 18, 2003. Ames, IA.
  81. D. O'Toole, 2003: Bat rabies. Western Conference of Veterinary Diagnostic Pathologist, Lethbridge, AL, CA. Oct 2003.
  82. M. F. Raisbeck, M. Smylie, R. A. Siemion, E. S. Williams [presented by D. O'Toole]: 2003, Atypical sodium intoxication in range cows. 46<sup>th</sup> annual meeting, AAVLD, San Diego, CA. Oct 11 – 13, 2003. Proceedings, p. 43.
  83. J. Monfre, H. Li, D. O'Toole, T.B. Crawford. 2003. Bison with chronic OvHV-2 infection: clinical outcome, lesions and capacity to infect susceptible sheep. 46<sup>th</sup> annual meeting, AAVLD, San Diego, CA. Oct 11 – 13, 2003. Proceedings, p. 145.
  84. M. F. Raisbeck, G. L. Mason, W. McFarland, D. O'Toole, R. S. Siemion, K. Kimberling, A. Knight, D. W. Hamar, R. J. Callan, W. Carmichael: 2003, Unusual microcystin poisoning in cattle. AAVLD, San Diego, CA. Oct 11 – 13, 2003. Proceedings, p. 215.
  85. D. O'Toole, H. Li, T. B. Crawford: 2003, Successful experimental transmission of MCF to bison using high titer OvHV-2 nasal secretions from sheep. Cattle, bison and llama committee, USAHA, San Diego, CA. 11 – 13, 2003.
  86. D. O'Toole, C. Quist, T. Berry: 2003, Canine carprofen toxicosis. Saturday Histopathology conference, AAVLD, San Diego, CA. Oct 11 – 13.

87. H. Li, D. O'Toole, O. Kim, J. L. Oaks, and T.B. Crawford: 2004, Malignant catarrhal fever-like disease in sheep following intranasal inoculation with ovine herpesvirus-2. AAVLD, Greensboro, NC, October 2004
88. D. O'Toole, N. S. Taus, W. C. Davis, T. B. Crawford, and H. Li: 2004, Successful experimental induction of acute malignant catarrhal fever in bison using aerosols of ovine nasal mucus containing ovine herpesvirus-2 (OvHV-2). AAVLD, Greensboro, NC, October 2004.
89. D. O'Toole, S. Tharp, B. V. Thomsen, E. Tan, J. B. Payeur: 2004, Fatal mycobacteriosis with hepatosplenomegaly in a young dog due to *Mycobacterium avium*. AAVLD, Greensboro, NC, October 2004.
90. D. Montgomery, K. Mills, D. O'Toole, H. Edwards, W. Cook, S. Olsen, B. Bricker, D. Ewalt, A. Jensen, P. Yaeger, J. Logan, B. Combs: 2004, Postmortem evaluation of 31 Brucella-reactor cattle from Wyoming and evidence of apparent transmission from elk. AAVLD, Greensboro, NC, October 2004.
91. O'Toole, D: Leukoencephalopathy of Gelbvieh-cross calves. 2004 Western Conference of Veterinary Diagnostic Pathologists, Saskatoon, Canada. Oct 2004.
92. O'Toole, D: Canine hepatic encephalopathy. 2004 Western Conference of Veterinary Diagnostic Pathologists, Saskatoon, Canada. Oct 2004.
93. O'Toole, D: *M avium* pachymeningitis in a dog. 2004 Western Conference of Veterinary Diagnostic Pathologists, Saskatoon, Canada. Oct 2004.
94. O'Toole D, Montgomery D, Li H: 2005. The bison in Don Montgomery's living room - why diagnosticians need trophies. St. Hyacinthe, Quebec - 4th Annual meeting, Canadian Animal Health Laboratory Network, CAHLN/RCTLSA June 6.
95. O'Toole, D., NS Taus, JL Oaks, H Li. 2005. Defining the minimum intranasal infectious dose of OvHV-2 that is required to induce infection and malignant catarrhal fever in bison. Hershey Lodge and Convention Center, Hershey, PA. 48th Annual conference of AAVLD.
96. D Edmunds, T Cornish, D O'Toole, R Bildfell, P Dearing, D Bruning, K. Mills, A. Boerger-Fields, ES Williams. 2005. Plagued by blindness. *Yersinia pestis* infection in mule deer (*Odocoileus hemionus*) manifested as bilateral endophthalmitis. Hershey Lodge and Convention Center, Hershey PA. Proceedings of AAVLD, 48th Annual meeting. P. 113, proceedings.
97. H Li, NS Taus, C Jones, B Murphy, D O'Toole, J Evermann, TB Crawford. 2005. Malignant catarrhal fever: a serious disease for American bison. Hershey Lodge and Convention Center; Hershey PA; Nov 5 - 10, 2005' 48th Annual meeting, AAVLD.
98. O'Toole D: 2005. Obliterative arteriopathy as a facet of MCF. Western Conference of Veterinary Diagnostic Pathologists, Saskatoon, SK Oct 2005.
99. O'Toole D. 2005. Plexiform arteriopathy in dogs. Western Conference of Veterinary Diagnostic Pathologists, Saskatoon, SK Oct 2005.
100. D. O'Toole, D. Montgomery, L. Steadman, R. Norrdin, J. Cavender, A. Bratanich, M. Raisbeck. 2006. Long bone fractures in neonatal calves persistently infected with non-cytopathic bovine viral diarrhoea virus. Minneapolis MN. 49th Annual meeting, AAVLD.
101. D. O'Toole, K. Gailbreath, L. Oaks, N. S. Taus, W. C. Davis, M. Ghoddusi, H. Li. 2006. Pre-clinical and early clinical lesions of malignant catarrhal fever in bison following experimental inoculation with ovine nasal mucus containing ovine herpesvirus-2 (OvHV-2). Minneapolis, MN. 49th annual meeting, AAVLD.
102. J.L. Oaks, S. Pritchard, N.S. Taus, D.L. Traul, D. O'Toole, and H. Li. 2006. Ovine herpesvirus 2 mRNA expression in cattle and bison with malignant catarrhal fever. Minneapolis, MN. 49th meeting, AAVLD.
103. D. L. Traul, N. S. Taus, J. L. Oaks, D. O'Toole, F. R. Rurangirwa, H. Li. 2006. Validation of non-nested and Real-Time PCR for Diagnosis of Sheep-Associated Malignant Catarrhal Fever in Clinical Samples. Minneapolis MN. 49th annual meeting AAVLD.
104. D O'Toole. 2006. MCF in bison. Western Conference of Veterinary Diagnostic Pathologists. Moscow ID; Oct 2006.
105. C. J. Davies, D. L. Traul, D. D. New, N. S. Taus, D. O'Toole, H. Li. 2006. Characterization of *Bison bison* major histocompatibility complex class I haplotypes. CRWAD, Chicago IL.

106. O'Toole D, Goodell GM, Smith S, Koeller C, Malherbe C, Schultheiss P, Gailbreath KL, Haldorson GJ: 2008 Right-sided heart failure in young Holstein cattle: an emerging problem on the Colorado Front Range. AAVLD national meeting, Greensboro, NC
107. Swist S, Nietfield J, Steffen D, Smith T, Johnson G, Cavender J, Keenan L, O'Toole D: 2008, Osteopetrosis in red Angus cattle. AAVLD national meeting, Greensboro, NC.
108. Henningson J, Steffen D, Swist S, O'Toole D: 2008, Osteopetrosis in a Red Holstein calf – challenges of phenocopies. ACVP/ASVCP national meeting, San Antonio, TX. Vet Pathol 45: 744, abstract #49.
109. O'Toole, D: 2008, Abortion as a consequence of manheimiosis in a cohort of heifers. Western Conference of Veterinary Diagnostic Pathologists, Saskatoon, SK. Oct 2008.
110. O'Toole, D.: 2008, Tularemia abortion in sheep. Western Conference of Veterinary Diagnostic Pathologists, Saskatoon, SK. Oct 2008.
111. O'Toole, D, Jewell JE, Hille MM, Montgomery DL, Williams ES; Kreeger TJ, Miller MW 2009. Susceptibility of domestic cattle to chronic wasting disease by oral inoculation and natural exposure: final phase of a 10-year study. 3<sup>rd</sup> International CWD conference, Park City, Utah. August 2009
112. K.L. Gailbreath, C.W. Cunha, N.S. Taus, J.L. Oaks, D. O'Toole, D.P. Knowles, H. Li: 2009, Initial replication in the lung and systemic dissemination of OvHV-2 in American bison after intranasal nebulization. ACVP annual meeting, Monterey, CA. Dec 2009. Vet Pathol 46 (5): 1055, abstract #134
113. Nelson DD, Davis WC, Brown, W, Li H, O'Toole D, Oaks JL: 2009, CD8+/perforin+/WC1-  $\gamma\delta$  T, CD4+/perforin-  $\alpha\beta$  T, and B lymphocytes infiltrate vasculitis lesions of American bison (*Bison bison*) with experimentally-induced sheep-associated malignant catarrhal fever. AAVLD annual meeting, San Diego, CA. Oct 2009. Also presented at ACVP annual meeting, Monterey, CA. Dec 2009. Vet Pathol 46 (5): 1055, abstract #135
114. O'Toole, D: Systemic vasculitis in food animals due to *Histophilus somni* and OvHV-2 (invited). ACVP Annual meeting, Monterey, CA. Dec 2009
115. O'Toole D, Van Campen H, Cavender J, Miller M, Cornish T, Heidel J, Jin Y, Baker R, Isom M, Asay, Schick: 2011, Bovine herpesvirus-1 abortion following vaccination in well-vaccinated cattle. Western States Livestock Health Association, annual meeting, Helena MT. 15-16 March, 2011
116. Yedinak A, Cavender C, O'Toole D, Miller M: 2011, Abortions in a university cow herd following vaccination with a modified live bovine herpesvirus-1 vaccine at 7-8 months gestation. AAVLD annual meeting, Buffalo NY. Oct 2011.
117. O'Toole D: 2011, Respiratory diseases in dogs and cats. A quick review. SE Wyoming veterinary medical association. Feb 2011. ~20 attendees.
118. O'Toole D: 2012, MCF in bison – where we are now. International Bison Conference, Quebec City, Quebec. August 2012. [Invited]
119. Hull N, Drumhiller K, O'Toole D, Schumaker, B: Canine dysautonomia in Wyoming: 24 cases (2004-2012). AAVLD annual meeting, Greensboro NC. Oct 2012.
120. Yedinak A, Cavender J, O'Toole D, Miller M: Deep sequencing of bovine herpesvirus 1 (BHV-1) provides candidate regions for strain-differentiating assay. AAVLD annual meeting, Greensboro NC. Oct 2012.
121. Schumaker BA, Miller MM, Cavender JL, Cornish TE, Montgomery DL, O'Toole D: Outbreak of canine distemper in pet store puppies linked to a high volume breeder. AAVLD annual meeting, Greensboro NC. Oct 2012.
122. O'Toole, D: 2013, MCF in cattle, bison and sheep. Heartland Chapter of Association of Veterinary Microbiologists - 19th annual chapter meeting. Hilton Hotel, Laramie, WY. 12<sup>th</sup> July, 2013
123. Taus NS, Li H, Seal BS, Warg J, O'Toole D: 2013, Malignant catarrhal fever in American bison following challenge with alcelaphine herpesvirus-2. AAVLD annual meeting, San Diego CA. Oct 2012.
124. O'Toole D: 2013, Cerebellar herniation (Chiari-like malformation) in a small-breed dog. AAVLD annual meeting, San Diego CA. Oct 2012. Saturday histopathology conference.
125. O'Toole D, R. Hunter R, Allen T, Mills K, Zekarias B, Lehmann J, Corbeil LB: 2013, *Histophilus somni* infection of bovine brain and myocardial endothelial cells. CRWAD annual meeting; submitted Aug 2013



126. O'Toole D, Taus NS, Li H: 2013, Malignant catarrhal fever in American bison following challenge with alcelaphine herpesvirus-2. 13th Annual Rocky Mountain Virology Meeting, Sept 27- 29, 2013 Pingree Park, CO.
127. Cristina W. Cunha, Jana K. Marquard, Naomi S. Taus, Donal O'Toole, Hector Aguilar-Carrero, Donald P. Knowles, Anthony V. Nicola, Hong Li Antibodies specific for ovine herpesvirus-2 glycoproteins block virus entry and prevent malignant catarrhal fever. ASM 2014
128. O'Toole: 2015, Suspected adverse reactions to food animal vaccines in the United States: experience at one diagnostic laboratory [invited]. ACVP national meeting, Minneapolis-St. Paul, 10 pp.
129. Chase C, Braun L, Clement T, Daly R, Burcham G, O'Toole D: 2016, IBRV reproductive loss- vaccine or field virus using single nucleotide polymorphisms (SNPS) to identify vaccine-induced reproductive disease. XXIX World Buiatrics Congress (WBC). Dublin, Ireland, 3-8 July 2016.

#### LETTERS TO JOURNALS:

1. O'Toole D, Van Campen H, Woodard L. 1994, Bluetongue virus: contamination of vaccine. J Am Vet Med Assoc 205:407 – 408. Comment on J Am Vet Med Assoc 204:1762-5 Abortion and death in pregnant bitches associated with a canine vaccine contaminated with bluetongue virus, Wilbur LA et al.
2. O'Toole, D.: 1995, Future of the State Veterinary Service. Vet Rec 136:251 - 252.
3. O'Toole, D: 1998, Debate regarding news story on cognitive dysfunction in dogs and cats. J Am Vet Med Assoc 213:199-201. Comment on: J Am Vet Med Assoc 213:199-201. Cognitive dysfunction in dogs, cats an Alzheimer's-like disease.
4. O'Toole, D, and Steadman, L.: 2002, Severe injection site lesions associated with *Extend III* adjuvant (Grand Laboratories) in cattle. J Am Vet Med Assoc. Feb 2002; (not accepted).
5. O'Toole, D: 2008, Dental dog chews. J Am Vet Med Assoc. 10 August 2008; (not accepted).
6. O'Toole D, Van Campen, H: 2010, Abortifacient vaccines and bovine herpesvirus-1. J Am Vet Med Assoc. 237: 259-260.
7. O'Toole D, Corbett, R: 2013, Bovine herpesvirus 1 abortion and vaccination. J Vet Diagn Invest. July 2013.
8. O'Toole D: 2016, J Vet Diagn Invest. 2016, Seeing death versus beholding visions. 28(3):196 - 197.

#### NEWSLETTERS:

1. September 2002 – January 2007. Quarterly WSVL newsletter. 6 pp. Wrote most, and edited contributions from other faculty members and staff. <http://wyovet.uwyo.edu/Newsletters.asp>
2. >January 2007 – to date: Contribute pieces of interest to WSVL clients in most issues (4 issues/year)

#### ANNUAL REPORT:

2002 Annual Report of the Wyoming State Veterinary Laboratory, 24 pp. + 2 page appendix.

#### MISCELLANEOUS PRESENTATIONS:

1. O'Toole, D. The coronaviruses. 1 hr. invited lecture in professional veterinary curriculum (basic immunology and virology course). Class notes. Western College of Veterinary Medicine, Saskatoon, Saskatchewan. September, 1993.
2. O'Toole, D. Motor neuron diseases. Invited 1 hour lecture to pathology trainees in neuropathology course PA 765. Class notes. Dept. Pathol, Colorado State University, April, 1993.
3. O'Toole, D. B-mannosidosis in Salers. Congenital sarcocystosis. Case presentations at Western Conference of Veterinary Diagnostic Pathologists. Saskatoon, Saskatchewan. September-October, 1993.
4. O'Toole, D. Naturally acquired sheep-associated malignant catarrhal fever in chronically-affected and recovering cattle with obliterative arteriopathy: clinical signs, lesions and serology. Invited lecture, Department of Pathology, Western College of Veterinary Medicine, Saskatoon, Saskatchewan. September, 1993 (Truncated version given in case presentation session at American Association of Veterinary Laboratory Diagnosticians Inc., Las Vegas, NV. October, 1993).

5. O'Toole, D. Malignant catarrhal fever. Invited lecture in professional veterinary curriculum (basic immunology and virology course). Class notes. Western College of Veterinary Medicine, Saskatoon, Saskatchewan. September, 1993. (invited; honorarium)
6. O'Toole, D. Overview of various topics (syndactyly in Angus calves; B-mannosidosis in Salers cattle; MCF; adverse drug reaction to a commercial bacterin). Wyoming Veterinary Medical Association, Annual Meeting, Sheridan, Wyoming. June 1994.
7. O'Toole, D. Motor neuron diseases. An approach to diagnostic laboratory neuropathology. Two invited 1 hour lectures to pathology trainees in neuropathology course PA 765. Class notes. Dept. Pathology, Colorado State University. April, 1995.
8. O'Toole, D. Adverse reactions to biological products: a view from the trenches. APHIS veterinary biologics public meeting, Ames, Iowa. August, 1995 (invited).
9. O'Toole, D. Exploring the myths of selenosis in ruminants and waterfowl-where science meets politics. Western College of Veterinary Medicine, Saskatoon, Saskatchewan. September, 1995. (invited).
10. O' Toole, D. Recovery from malignant catarrhal fever: how common, how identifiable - and how significant? Moredun Research Institute, Edinburgh, Scotland. March, 1996.
11. Edwards, H. Recycling formalin and solvents in a veterinary diagnostic laboratory: the experience at the Wyoming State Veterinary Laboratory. 39th Annual meeting, American Association of Veterinary Laboratory Diagnosticians and US Animal Health Association. Little Rock, AR., Oct 12 - 18, 1996. (presented on H. Edwards behalf)
12. O'Toole, D. Magic numbers, elusive lesions. The comparative pathology of selenosis in avian and mammalian species. Oregon State University, March 1997.
13. O'Toole, D. Transmissible spongiform encephalopathies, prions and a very rapid scientific learning curve. 2 lectures to Dr. Hana Van Campen's Medical Virology class (Molb/Patb 4510). 24 and 29 April, 1997.
14. O'Toole, D. Familial haemochromatosis. A practical model for HFE1 in HH? Royal Free Hospital, University Department of Medicine, Pond Street, London, NW3 2QG, United Kingdom. 22 August 1997. (invited; honorarium)(also presented at College of Agriculture informal science club meeting, 29 Oct 1997)
15. O'Toole, D. Bovine protoporphyria; selenium-toxicosis hepatopathy; hemochromatosis. Oral presentations at Western Conference of Veterinary Diagnostic Pathologists, Abbotsford, Vancouver, BC, 2 – 3 October 1997.
16. O'Toole, D. 1. Abortion necropsy protocol and demonstration necropsy. 2. Surgical pathology review. 3. Hemochromatosis in Salers. Oral presentations at Wyoming Veterinary Medical Association meeting, Casper, WY December 12, 1997.
17. O'Toole, D. Hemochromatosis in the Salers breed. Invited presentation to American Salers Association executive, Stapleton Plaza Hotel, Denver, CO., Feb 21, 1998.
18. O'Toole, D. Malignant catarrhal fever. Invited presentation and panel discussion with Dr. James DeMartini and Dr. Tim Crawford (via teleconference hook-up) at annual meeting, Colorado Bison Association, Denver Buffalo Company Restaurant, Denver CO, April 5, 1998.
19. O'Toole, D. Clinical case conference. Multiple cases, Wyoming Veterinary Medical Association, Cheyenne, WY. June 16 and 17, 1998.
20. O'Toole, D. Selenium excesses and their impacts on large animals and birds. A veterinarian's perspective. National Irrigation Water Quality Program (NIWQP), phase 4 meeting. Invited oral presentation. Concord, California. September 15 – 17, 1998.
21. O'Toole, D. Mycoplasmal arthritis-pneumonia in beef cattle. Oral presentation, Western Conference of Veterinary Diagnostic Pathologists, Saskatoon, SK, 2 – 3 October 1998.
22. O'Toole, D. Through a glass darkly. The Virus, Serum and Toxin Act (1913) in action. South Dakota State University as part of interview for directorship of South Dakota state veterinary laboratory. November 11 – 13, 1998; lecture also given at joint Vet Sci/An Sci. UW noon seminar series, 18 September 1998.
23. O'Toole, D. Investigating field disease with a diagnostic laboratory, with selected examples. Invited lecture to combined 2<sup>nd</sup> and 5<sup>th</sup> year veterinary school classes, 17<sup>th</sup> February 1999. Veterinary College of Ireland, University College Dublin.

24. O'Toole, D. Three 1.5 hour lectures in *Diseases of Food Animals and Horses* PATB 4110, January 28 (colic and enteropathies in horses), April 9 (principals of toxicology; chemical toxicoses) and April 13, 1999 (plant and zootoxicoses in Rocky Mountain west). Fourth session with Dr. LW on practical problem solving, 15 April 1999.
25. O'Toole, D. Equine health and nutrition. 1.5 hour lecture in *Equine Nutrition and Physiology* An Sci 3150, Dr. Karen Hansen. Class notes/PowerPoint format. October 22 1998.
26. O'Toole, D. Three invited oral presentations on MCF: 1. High-fatality MCF outbreak in a small-scale bison herd (with Janet Maass); 2. Atypical MCF. 3. Control measures for MCF. *MCF and Bison*, sponsored by National Bison Association, Renaissance Hotel, Denver, CO. Invited. 20 April 1999.
27. O'Toole, D. Oral presentations with Wyoming veterinary practitioners at the Tri-State Jackson Hole Veterinary Rendezvous (UT, ID and WY veterinary medical associations) on rabies, white muscle disease, canine tonsillar squamous cell carcinoma, and canine sensory neuropathy. Organizer and promoter for WSVL morning session in JHVR conference, 8:00 – 12:00, June 22 1999. Snow King Resort, Jackson, WY. 22<sup>nd</sup> June 1999.
28. O'Toole, D. Malignant Catarrhal Fever as a Significant Source of Disease Loss in Feedlot Bison: Observations on Incidence, Spread and Avoidance. Invited presentation, US Animal Health Association's Committee on Infectious Diseases of Cattle, Bison and Llamas. San Diego, CA, Oct 1999. <http://www.usaha.org/reports/reports99/r99idcbl.html>.
29. O'Toole, D. Case presentations on 1. Congenital sweet clover toxicosis in calves and 2. Canine sensory neuropathy. Saturday night histopathology conference, 16<sup>th</sup> Oct 1999, AAVLD 42<sup>nd</sup> annual meeting, 1999. San Diego, CA.
30. O'Toole, D. Presentations at Western Conference of Veterinary Diagnostic Pathologists on 1. Equine rabies. 2. Equine botulism. 3. Purpura hemorrhagica. Saskatoon, SK Sept-Oct 1999.
31. O'Toole, D. MCF in bison. Invited. Annual meeting, Canadian Bison Association, Regina, SK. November 1999. Two 1.5 hour presentations.
32. O'Toole, D. MCF in bison. National Bison Association Conference, Denver CO. Jan 19, 2000. Invited. Co-presented with Dr. Pat Schultheiss, CSU; two-hour session. Invited.
33. O'Toole, D. MCF in bison. Two, one-hour presentations to bison producers in Saskatchewan (Western Development Museum, North Battleford February 29, 2000; Exhibition Centre, Prince Albert, March 1, 2000) as part of Bison Production Seminar - Ranching for the Future. Meetings sponsored jointly by Saskatchewan Agriculture and Food, Agricultural Institute of Management in Saskatchewan, Inc., Canadian Bison Association, and Saskatchewan Bison Association.
34. O'Toole, D. Oral case presentations with Wyoming practitioners (name in parentheses) at annual meeting of Wyoming Veterinary Medical Association, Thermopolis, WY. Equine spinal lymphoma (Dr. H Van Campen), Sudden death in horses, Non-diabetic canine hyperglycemia (Dr. M. Hayes), Equine granulomatous encephalitis (Dr. Glen Gamble), Canine pancreatic atrophy in GSD (Dr. Steve Kerr). June 20, 2000.
35. O'Toole, D. MCF: where we've been, where we're going. Oral presentation to Colorado Bison Association board (15 September 2000) and CBA general membership (16 September 2000). Invited. Fort Collins, CO.
36. O'Toole, D. Dehydration-induced laminar cerebrocortical necrosis in range cattle with access to water. Saturday night histopathology conference, AAVLD meeting, Birmingham AL, Oct 2000.
37. O'Toole, D. Research on MCF in bison: 2001 update. Colorado Bison Association, March 2001. Colorado Springs, CO.
38. O'Toole, D. Anthrax in animals and people. WSVL noontime seminar, 9 May 2001.
39. O'Toole, D. Malignant catarrhal fever – the most important cause of acute fatalities in commercial bison. Invited presentation. Colorado Veterinary Medical Association Convention, Steamboat Springs, CO Sept 8 – 12, 2001. Proceedings, pp. 131 – 136.
40. O'Toole, D. Fatalities in cattle grazing natural gas site on Western Slope of Colorado. WSVL seminar, 6 May 2001.
41. O'Toole, D. Oral case presentations with practitioners (name in parentheses) at Jackson Hole Rendezvous, WY. Canine epitheliotropic lymphoma (Dr. J Johnson), Canine herpesvirus infection in breeding kennel (Dr. J. Undem), Canine endocrine dermatopathy (Dr. Steve Chase), and Unresolved losses in cattle at a natural gas field

- in Colorado (with Dr. Raisbeck). I prepared the talks, which were presented on my behalf by Dr. Cornish, due to a time conflict. June 19, 2001.
42. O'Toole, D. Brand-scar carcinoma in cattle; halogeton-induced oxalosis in sheep; locoism in cattle. Oral presentations at Western Conference of Veterinary Diagnostic Pathologists, Saskatoon, Saskatchewan, Canada, September 2001.
  43. O'Toole, D. Oral presentation on foot and mouth disease and case presentations with practitioners (in parentheses) at Winter Meeting of Wyoming Veterinary Medical Association: canine digital neoplasia; canine dysautonomia (Dr. Steve Kerr); fatal and nonfatal grass inflorescence inhalation in dogs (Dr. Steve Chase). Casper, WY. 7 December 2001.
  44. O'Toole, D.: Enteric diseases of horses. 1 hour lecture; PPT format. Diseases of Food Animals and Horses, PATB 4110, Dr. L. Woodard's course. February 7, 2002.
  45. O'Toole, D.: Malignant catarrhal fever. 1 hour lecture; PPT format. Diseases of Wildlife, PATB 4120, Dr. ES Williams course. March 14, 2002.
  46. O'Toole, D.: Oral presentations at Wyoming Veterinary Medical Association annual meeting on adverse reaction to two commercial vaccines; familial status spongiosis in a crossbred herd; *Neospora*-induced encephalitis in a Wyoming horse. Laramie, WY. 17 – 19 June 2002.
  47. O'Toole, D.: Update on anthrax. One-hour oral presentation at Wyoming Veterinary Medical Association annual meeting; handout. Laramie, WY. 17 – 19 June 2002.
  48. O'Toole, D: Oral presentations at Western Conference of Veterinary Diagnostic Pathologists at Saskatoon, Saskatchewan on water deprivation polioencephalomalacia, equine and avian selenosis, fixed drug reaction, nitrate toxicosis, sweet clover toxicosis, vaccine-induced endotoxemia and oil adjuvant granulomas.
  49. O'Toole, D: Diseases associated with drought. UW Dept An Sci Field Day. 21 September 2002. Co-presented with Steve Paisley and other specialists. Laramie WY.
  50. O'Toole, D: Agro-terrorism and Wyoming. Thinking the Unthinkable. Wyoming Public Health Association annual meeting. 24 September 2002. Gillette WY. Same presentation given 25 September to combined classes at the Sheridan Community College.
  51. O'Toole, D: Chronic hyperplastic and neoplastic cutaneous lesions ("Marjolin's ulcer") in hot-branded cattle. Saturday Afternoon Histopathology Conference, AAVLD national meeting, St. Louis, MO. Oct 2002.
  52. O'Toole D, Dubey JP, Blaha, S: *Neospora*-induced encephalitis in an adult horse from an area of the United States that is naturally devoid of opossums. Saturday Afternoon Histopathology Conference, AAVLD national meeting, St. Louis, MO. Oct 2002.
  53. O'Toole, D. Attempted transmission of ovine herpesvirus-2 from bison to sheep [invited]. Symposium on MCF. Throlson Foundation-National Bison Association. Denver, Westin Westminster, 22 January 2003
  54. O'Toole, D. West Nile virus [invited]. Presentation to Dayton-Ranchester Rotary Club, Wyoming. 27 January 2003.
  55. O'Toole, D. 1.5 days of talks to diagnosticians and equine veterinarians on various topics at the Animal Health Center, Abbotsford, BC, 23 – 24 January 2003 [invited]. Topics: Random thoughts about diagnostic laboratories; transmissible spongiform encephalopathies; rabies; West Nile virus in horses and birds; equine surgical pathology; adverse reactions to veterinary biological products; malignant catarrhal fever.
  56. O'Toole. Testing for BVDV. Presentation to producers (~100 present) at meeting organized by Pfizer Animal Health and Dr. Warner McFarland, Rawlins, WY. 6 February 2003
  57. O'Toole. Testing for BVDV. Presentation to veterinarians (~15 present) at meeting organized by Intervet in Thermopolis WY. 12 February 2003
  58. O'Toole. Testing for BVDV. Presentation to producers (~90 present) at meeting organized by Pfizer and Dr. Lance Moxey in Sheridan, WY. 14 February 2003
  59. O'Toole, D. Diarrhea and colic in horses. One hour lecture to Dr. Lynn Woodard's Diseases of Food Animals and Horses class (~60 students) 20 February 2003.
  60. O'Toole, D. Testing for *Tritrichomonas foetus*. Wyoming Beef Cattle Improvement Association. Riverton, WY. 4 April 2003

61. O'Toole, D. Regulatory issues and CWD laboratory wastes. NIAA annual meeting, Cincinnati, OH. Invited. 8 April 2003. Abstr.
62. O'Toole, D. Presentations at Tri-State Veterinary meeting, Jackson Hole Veterinary Rendezvous, at WSVL-clinician clinical case conference session, on: Fatal dog attack on a child (with Dr. Jane Udem), Fatal myopathy syndrome in sheep associated with lasalocid feeding (with Dr. Bill Wilson), Acute polyradiculoneuritis ("coonhound paralysis)(with Dr. Mark Schreiber), Feline dysautonomia (Key-Gaskill syndrome)(with Dr. Mark Schreiber), and Suspect carprofen toxicosis (with Dr. Tom Berry). SnowKing Resort, Jackson, WY. 24 June 2004.
63. O'Toole, D., Class lecture on agricultural issues: state veterinarian's listing of reportable diseases.
64. Raisbeck, MF; Siemion, RS, Tharp S, O'Toole, D: Arsenic deaths in a herd. Tri-State Veterinary meeting, Jackson Hole Veterinary Rendezvous, at WSVL-clinician clinical case conference session, Snow King Resort, Jackson, WY. 24 June 2004.
65. Raisbeck, MF, O'Toole, D, Siemion RS, Mason G, McFarland, W, Kimberling, C, Knight, A, Carmichael, W: Microcystin deaths in a herd. Tri-State Veterinary meeting, Jackson Hole Veterinary Rendezvous, at WSVL-clinician clinical case conference session Snow King Resort, Jackson, WY. 24 June 2004.
66. O'Toole, D.: 2003, Animal disease emergencies in Wyoming. Where we are now? Where do we need to go? *Keeping Wyoming Safe and Secure* conference. CES. Casper, WY Oct 22 2003
67. O'Toole, D.: 2003, West Nile virus in Wyoming 2003. Presentation to producers (~90 present) at meeting organized by Pfizer and Dr. Lance Moxey in Sheridan, WY. 2003.
68. O'Toole, D.: 2003, The Wyoming Wildlife/Livestock Disease Research Partnership [invited]. Wildlife-Human Interactions: Disease, Recreation, and Development, Fragmentation and Urban Issues. Wildlife Society of Wyoming, [www.wyotws.org](http://www.wyotws.org) annual meeting, Nov 18 – 21, 2003, Lander WY.
69. O'Toole, D: 2003, Diseases causing abortion and stillbirth in cattle, sheep and horses in Wyoming. Oral presentation with demonstration of fetal necropsy technique. Winter meeting, WVMA, December 2003.
70. O'Toole, D: 2004, Successful experimental transmission of MCF from sheep to bison. 2004 National Bison Association Winter Conference, Denver CO. January 21 – 24. (Thursday Jan 22).
71. O'Toole, D.: 2004, West Nile virus, BSE, brucellosis, and other animal health concerns. Bank of Greybull 2<sup>nd</sup> annual Farm and Ranch day, "Hot issues in today's agriculture", January 28, 2004.
72. O'Toole, D: 2004, West Nile virus in Wyoming. Riverton Kiwanis Club, January 29, 2004. Front page article in Riverton Ranger, pp. 1 and 9, Jan 30 2004.
73. O'Toole, D.: The Department of Veterinary Sciences and current disease issues in Wyoming. Presentation to ~50 high school senior science teachers at WSVL on tour. June 2004.
74. O'Toole, D.: 2004, Update on Governor's brucellosis task force. Lichen toxicosis in Wyoming elk. June 25, 2004. The Virginian Hotel, Medicine Bow, Wyoming. ~30 producers present.
75. O'Toole, D.: 2004, Miscellaneous presentations to WVMA annual meeting: *M. avium* infection in a dog; Q fever in a goat herd with human infections; iatrogenic intra-abdominal gauze peritonitis (gossypiboma) in a dog; parasitic tracheobronchitis in a native Wyoming dog; pemphigus in a horse; severe calcinosis cutis in a dog; demodicosis in a dog.
76. O'Toole, D. 2005. Successful experimental transmission of MCF: a dose titration study. Washington State University/USDA ARS Animal Disease Research Unit. January 2005.
77. O'Toole, D 2005. Current activities of the Wyoming State Veterinary Laboratory. WSVL, Laramie. Legislators Day, 5 Feb 2005; 36 Wyoming legislators; show-and-tell in Virology, Toxicology, Rabies, and VSV/WNV unit.
78. O'Toole, D. 2005. An update on current diseases in Wyoming, with an emphasis on brucellosis and the Governor's coordination team report. Wolf Hotel, Saratoga, Carbon Co. 4 Feb 2005. Other presenters: Dr. Walt Cook (assistant state veterinarian), Dr. Bret Combs (USDA APHIS area-veterinarian-in-charge) and Dr. Terry Kreeger.
79. O'Toole, D: 2005. Update on WSVL and Dept Vet Sci activities to University of Wyoming Trustees. Woodard Classroom 4 March 2005. Demonstration on rabies and plague (Mills/Andrews), intoxication topics (Raisbeck), WNV, CWD and brucellosis (Cornish/Edwards (WGFD)).

80. O'Toole D. 2005. Brucellosis and the Governor's task force recommendations. Albany County Fairgrounds. Clients of Dr. Clay Lilley; approximately 50 producers present.
81. O'Toole D. 2005. Update on activities in the Wyoming State Veterinary Laboratory and Dept Vet Sci. Wyoming Cattle Industry Convention and Trade Show, Holiday Inn, Cheyenne, Saturday 11th June 2004.
82. O'Toole, D. 2005. Brucellosis update. 4-State Backgrounding Program. Making the Most of Your Opportunities in an Up Market. Gillette, WY CAMPLEX – Fine Arts Building August 5, 2005.
83. O'Toole D. 2005. The American Association of Veterinary Laboratory Diagnosticians - a primer. Academy of Veterinary Consultants, 1 Dec 12005. Renaissance Hotel, Denver, CO.
84. O'Toole, D 2005. Avian and canine influenza. UW Casper, Fairgrounds Road, WVMA winter meeting, 2 Dec 2005.
85. O'Toole D. 2006. Challenging case presentations to pathology trainees and graduate students in Dept Vet Micro Path, Washington State University. Pullman WA.
86. O'Toole, D. 2006. Leveraging assets in veterinary diagnostic laboratories. IMBRE meeting, Moscow ID - 18 April 2006.
87. O'Toole, D. 2006. Miscellaneous presentations at 2006 WVMA summer meeting: update on canine influenza; outbreak of vitamin D poisoning in rabbits; encephalitis due to *Halicephalobus gingivalis* infection of a cow - first reported case in an ox; fatal adenoviral infection in a group of calves. Holiday Inn, Sheridan, WY. Summer meeting WVMA
88. O'Toole, D. 2006. AAVLD standards for "a good test". Minneapolis, MN. Presentation to Cattle, bison and camelid committee of USAHA.
89. O'Toole D. 2006. Update on research at the WSVL and Dept Vet Sci. Hitching Post Inn, Cheyenne, WY. Presentation to small animal veterinarians in Cheyenne.
90. O'Toole D. 2006. Laboratory response to agricultural bioterrorism. Torrington Eastern Community College; annual meeting of NE veterinary technician educators' conference.
91. O'Toole D. 2006. Under the influence - an update on H5N1 HPAI. Big Horn Federal Savings. Presentation to Cody-Big Horn Basin Audubon Society.
92. O'Toole D. 2006. Miscellaneous presentations at WVMA winter meeting. Disease update on rabies, plague/tularemia, VSV, BVD, and EHD. UW extension center, Casper, WY. WVMA Winter meeting.
93. O'Toole, D. 2007. EHV-1 with an emphasis on equine herpesvirus myeloencephalopathy. Cheyenne, WY. Cheyenne Dressage Club - 16 Jan 2007
94. O'Toole D. 2007. Testing for equine viral arteritis. Holiday Inn on the River, Casper, WY - Feb 2007. Meeting organized by assistant state veterinarian Dr. Cook.
95. O'Toole, D: 2007. 2 hour presentation to Wyoming Veterinary Medical Technician Association on: WSVL and Dept Vet Sci; canine influenza update; highly pathogenic feline calicivirus update; high profile diseases in companion and food animals in WY. Parkway Plaza; Casper; WY. 6 Oct 2007. Wyoming Veterinary Medical Technician Association (invited).
96. O'Toole, D: 2007: Miscellaneous presentations at WVMA winter meeting: histoplasmosis in animals in Wyoming; bluetongue in Wyoming and Montana, 2007; canine masticatory myositis. Casper, WY
97. O'Toole, D: 2008: Miscellaneous presentations to WVMA annual meeting: bluetongue in sheep update; hypertrophic osteoarthropathy; equine blackleg; equine viral arteritis update; forensic veterinary medicine (with Dr. Shannon Swist – co-presentation). Laramie, WY
98. O'Toole, D: 2008: Presentations on difficult-to-detect persistent infection in BVD-infected cattle, and on right-sided heart failure in dairy cattle. 16 August 2008. Laramie WY. Pfizer-UW scientific exchange.
99. O'Toole, D: 2008, Survey of laboratory diagnosticians on workforce needs. Presented to laboratory directors at AAVLD national meeting, Greenboro, NC. Oct, 2008
100. O'Toole, D: 2008: Update on diseases in Wyoming 2008. Presentation prepared for Carbon County Veterinary Clinic (Dr. Liz Skavdahl); 14 November 2008.
101. O'Toole, D and Wilson, W: 2008, EHV-1 myeloencephalitis in Riverton, and submission of CNS tissues from horses with neurological clinical signs. WVMA winter meeting, December 2008. Casper WY.

102. O'Toole D; Allen, T; Hunter R; Mills K: 2008, *H somni* and cardiac disease in cattle. WVMA winter meeting, December 2008. Casper WY.
103. D O'Toole. 2010. Update on *H. somni* disease complex and malignant catarrhal fever in cattle. Deadwood, SD. Mid-Winter Veterinary Retreat. Pfizer. Invited.
104. O'Toole, D: 2010, Two CL Davis presentations (paratuberculosis; histophilosis) to veterinary practitioners in Baja California. CL Davis Foundation, Baja California, 8 – 9 April 2010. Invited.
105. O'Toole, D: 2010, Three diseases in Wyoming cattle: right-sided heart failure in cattle at lower altitudes; histophilosis; and marble bone disease. Presentation to clients of Moxey-Schreiber veterinary clinic. Sheridan county fairgrounds. 21 April 2010. Invited.
106. O'Toole, D: 2010. 1. Canine distemper outbreak originating in a Kansas puppy mill. 2. Brisket disease in a large Holstein backgrounding facility. 3. BHV-1 abortion in well-vaccinated cattle – possible role of MLV vaccine. WVMA winter meeting. Casper, WY. 4 Dec 2010.
107. O'Toole, D: 2011. BoHV-1 abortion in well-vaccinated cattle. Western States Livestock Association annual meeting; Helena MT. 17 March 2011.
108. O'Toole, D: 2013, Diagnosis of BoHV-1 abortion. Western States Veterinary Conference, Feb 2013, Las Vegas, NV. [invited]
109. O'Toole, D: 2013, Diagnosis of abortion in cattle. Utah Beef Cattle Field Day, Provo, UT; Feb 11, 2013 [invited]
110. O'Toole, D: 2013, Diagnosis of Q fever in sheep. Field Day for sheep producers. UW Agriculture Experiment Station, Laramie, WY. March 18, 2013
111. O'Toole, D: 2013, Malignant catarrhal fever: attempts at understanding a disease complex. UW Dept. Vet Sci lunchtime seminar, 25<sup>th</sup> Sept, 2013.
112. O'Toole, D: 2013, Pathology of beef cattle. CL Davis Foundation. Dominican Republic, Aug 2013 (invited).
113. O'Toole, D: 2013, Presentations on choke in horses; aspergillosis in waterfowl; Chiari syndrome. WVMA winter meeting, Casper Dec 2014.
114. O'Toole, D: 2015, Presentations on CWD and BoHV-1 abortion (invited); N Dakota State University, May 2015
115. O'Toole, D: 2015. Three presentations: on PCV-2, *Histophilus somni*, and adverse reactions to veterinary vaccines; Joint Pathology Center, Washington, DC. September 2015
116. O'Toole, D: 2015: Presentations on black disease and tularemia to WVMA winter meeting Casper, WY. Dec 2015
117. O'Toole, D: 2016: 3 hr. continuing education presentations on MCF, histophilosis, and adverse reactions to veterinary vaccines. Invited. Update on Infectious Diseases of Significance in the Rocky Mountains and Western USA. April 2–3, 2016; 77<sup>th</sup> Annual Conference for Veterinarians. Hilton, Ft. Collins, CO.
118. O'Toole, D: 2016. Adverse reactions to BoHV-1 MLV vaccines. 1 hr. oral presentation to CSU veterinary student pathology club and bovine practitioner club. Invited. Dept Micro Pathol, CSU, 4<sup>th</sup> April 2016

#### RESEARCH GRANT PROPOSALS (>MARCH 1, 1990):

1. 1990. Role of target cell susceptibility in species-specific disease in bluetongue. U.S. Department of Agriculture (Special Research Grants Program) \$88,286. Co-principal investigator: D. O'Toole. (**Not funded**).
2. 1990. Cell-mediated immunity in ovine *Corynebacterium pseudotuberculosis* infection. III Role of cytotoxins in controlling intracellular replication of *C. pseudotuberculosis*. U.S. Department of Agriculture (Special Research Grants Program). \$80,800. Co-principal investigator: D. O'Toole. (**Not funded**).
3. 1990. Toxicologic evaluation of naturally occurring selenium compounds in cattle. Bureau of Mines (Abandoned Coal Mine Lands Research Program) \$239,418. Co-principal investigator: D. O'Toole. (**Not funded**).
4. 1991. Toxicologic evaluation of chronic selenosis in Wyoming herbivores. Bureau of Mines (Abandoned Mine Lands Research Project). \$206,639. Co-principal investigator: D. O'Toole. (**Not funded**).
5. 1991. Acute pathogenicity of a novel enveloped RNA virus (isolate 89B7060) in foals. U.W. Faculty Grant-in-aid program. \$4,959. Co-principal investigator: D. O'Toole. (**not funded**)

6. 1991. Pathogenesis of bluetongue virus in cultured ruminant endothelium. U.S. Department of Agriculture (Molecular and cellular basis of animal disease). \$82,500. Co-principal investigator: D. O'Toole. **(funded)**.
7. 1991. Hereditary porcine motor neuron disease. Muscular Dystrophy Association. \$32,400. Principal investigator: D. O'Toole. **(funded)**.
8. 1992. Toxicologic evaluation of chronic selenosis in Wyoming herbivores. Bureau of Mines (Abandoned Mine Lands Research Project). \$179,150. Co-principal investigator: D. O'Toole. **(funded)**.
9. 1993. Myocardial pathology in experimental selenosis. U.S. Department of Agriculture (Mechanisms of Animal Disease). mentally-induced chronic selenosis in cattle. \$37,635. Co-principal investigator. D. O'Toole. **(not funded)**.
10. 1994. Inherited porcine motor neuron disease: Colony expansion and morphological studies. Muscular Dystrophy Association \$22,248. Principal Investigator: D. O'Toole **(not funded)**.
11. 1995. Chronic selenosis in waterfowl: development of diagnostic histological and toxicological criteria as an aid for recognition and control. Bureau of Mines (Abandoned Mine Lands Research project). \$60,444. Principal investigator: D. O'Toole. **(funded)**.
12. 1995. Toxicokinetics and toxicity of naturally occurring selenium in cattle. Agricultural Experiment Station Competitive Grants Program. \$34,125. Co-principal investigator **(not funded)**
13. 1997. Inherited hemochromatosis in cattle: preliminary clinical, pathological and genetic characterization. Agricultural Experiment Station Competitive Grants Program. \$15,189. Principal investigator **(funded)**.
14. 1998. Genetic characterization of hemochromatosis in Salers cattle. Agricultural Experiment Station Competitive Grants Program. \$16,000. Principal investigator **(not funded)**.
15. 1999. Identification of the intermediate hosts of *Neospora caninum*. Department of Agriculture (NRICGP) \$71,495. Co-principal investigator: D. O'Toole **(not funded)**.
16. 1999. An electronic animal health and disease reporting system for the state of Wyoming. Pre-proposal to Agricultural Telecommunications Program, ADEC Distance Education Consortium. February 15, 1999. \$50,000 **(not funded)**
17. 1999. Is MCF transmissible from bison to bison? Principal investigator: D. O'Toole. National Bison Association. August 1999. \$11,000 **(partially funded)**
18. 1999. Transmission of malignant catarrhal fever in bison. PI: D. O'Toole. AES competitive grant program. \$40,000. August 27 1999 **(partially funded)**.
19. 2000. Virus isolation and transmission patterns of bison MCF gammaherpesvirus. PIs: D O'Toole and T. B. Crawford. \$180,000 for two years. NRI USDA competitive grants program. 14 January 2000. **(funded)**.
20. 2000. Experimental transmission of OHV-2 to bison at the Wyoming State Veterinary Laboratory bison holding facility. \$20,000. 1 September 2000 **(funded; \$17,500 awarded)**.
21. 2007. Jean E. Jewell (PD/PI), Donald Montgomery (co-PI), Donal O'Toole (co-PI). USDA-CSREES-NRI-000141. Long term susceptibility of cattle to CWD following oral inoculation. **(funded: \$134,687.50 awarded)**
22. 2008. NAHLN funding for WSVL FY 2008. \$50,000 **(funded)**
23. 2010. Pathogenesis of *Histophilus somni*-induced bovine pneumonia. Boehringer Ingelheim Vetmedica Inc. through Iowa State University. \$34,450 **(funded)**
24. Miller M, O'Toole D, San S, 2012: Collaborative opportunities between Wyoming State Veterinary Laboratory and Cambodian National Veterinary Research Institute (NaVRI) – College of Agriculture **(not funded)**.
25. Miller M, O'Toole D, San S, 2012: Collaborative opportunities between Wyoming State Veterinary Laboratory and Cambodian National Veterinary Research Institute (NaVRI) –International Office **(not funded)**.
26. Schumacher B, O'Toole D, Mills K, Raisbeck M, 2012, An epidemiological investigation of canine dysautonomia in Wyoming. AES and Denver welfare fund **(not funded)**.
27. Sondgeroth K, Schumaker B, O'Toole: 2015: Impact of histophilosis on bovine respiratory disease on commercial beef operations. AES Competitive Grants Program. Jan 2016 – Dec 2018; \$90,000 **(funded)**



#### EQUIPMENT/SOFTWARE GRANT PROPOSALS:

1. 1991. Glass knifemaker. U.W. Major Equipment Program. \$2,400.00. D. O'Toole. **(not funded)**.
2. 1991. Enlarging image printing system. U.W. Major Equipment Program. \$11,000.00. D. O'Toole. **(funded)**.
3. 1992. Plastic-sectioning microtome for use on porcine motor neuron disease tissues. UW Biomedical Research Support Grant. \$10,450.00. D. O'Toole **(not funded)**.
4. 1994. Enclosed tissue processor for brain tissues. U.W. Major Equipment Program. \$16,800. **(not funded)**.
5. 1995. Enclosed tissue processor for brain tissues. U.W. Major Equipment Program. \$16,000. **(not funded)**.
1. 1995. Toxic chemical waste reduction by the University of Wyoming at the Wyoming State Veterinary Laboratory: a proposal to recycle formalin, xylene and ethanol wastes. \$24,277. One-time University of Wyoming monies. D. O'Toole **(funded)**.
2. 1998. LIMS: a central computerized research case-management information system for the Department of Veterinary Sciences and the Wyoming State Veterinary Laboratory. \$25,000. U.W. Major Equipment Program. D. O'Toole and E.S Williams **(funded)**
3. 1998. LIMS: a central computerized research case-management information system for the Department of Veterinary Sciences and the Wyoming State Veterinary Laboratory. Wyoming Beef Council. \$5,000. **(not funded)**. Note: funding approved at state level but national level sought to partial ownership of system, for which reason we declined funding. In February 2000 the Wyoming Beef Council offered \$2,500 toward the project without strings; we accepted **(funded)**.
4. 1998. WYOVET: an interactive Internet site for animal health and disease information. PIs: LW Woodard, D. O'Toole, D. Hixon. \$29,200. Cooperative Extension Service **(funded)**.
5. 2001. Bison holding facility. Donations for Montana Bison Association (\$550) and Eastern Bison Association (\$500)
28. 2002. Real-time PCR equipment for the University of Wyoming's Department of Veterinary Sciences. PI: D. O'Toole. \$31,000. November 26 2002. **(funded)**.

#### PERSONNEL GRANT PROPOSALS:

1. 1992. Ms. Keri Redland. EPSCoR Undergraduate Summer Research Fellowship. \$1,500.00. D. O'Toole **(funded)**.
2. 1993. Ms. Susan Fales. EPSCoR Undergraduate Summer Research Fellowship. \$1,500.00 D. O'Toole **(funded)**.
3. 1994. Mr. Larry Castle. EPSCoR Undergraduate Summer Research Fellowship. (not funded).
4. 1995. Ms. Gerlinde Tynan-Cuisinier. EPSCoR Undergraduate Summer Research Fellowship. \$1,700. **(funded)**.
5. 2009. Mr. Travis Allen. EPSCoR Undergraduate Research Fellowship. \$1,500. **(funded)**

#### TRAVEL GRANT PROPOSAL:

1995. Attend Association of Veterinary Teachers and Research Workers 40th Annual Conference in Scarborough, Yorkshire, UK, 1-4 April 1996, and visit MCF group in Moredun Research Institute, Edinburgh, Scotland. UW International Travel Grant Program. \$1,500 (funded).

#### CONTINUING EDUCATION:

1. 2003, Pathologists Foreign Animal Disease course, November 3 – 7, 2003. USDA APHIS, Plum Island.
2. 2004, Western Regional Plague and Tularemia Meeting, Sept 21, 2004. Centers for Disease Control and Prevention, National Center for Infectious Diseases, Division of Vector-Borne Infectious Diseases, PO Box 2087, Foothills Campus, Fort Collins, Colorado 80522.
3. Preparedness and Response to Agricultural Terrorism - LSU Academy of Counter Terrorism Education. 8 hours. Hitching Post Inn - Sept 30, 2004.
3. Gatekeeper training. Training in recognizing stress among advisees. University of Wyoming. 2 hrs. 20 Feb 2014.

## VETERINARY STUDENT MENTORING AT DEPT. VET SCI EXTERNSHIP PROGRAM:

Before 2002: not recorded.

2002: **Lyle Wyninger** (final year veterinary student, Colorado State University); Dr. Wyninger now practices in NE Wyoming; **Katie C. Meehan** (final year veterinary student, Virginia-Maryland Regional College of Veterinary Medicine); **Heather Mazzaccaro** (final year veterinary student, School of Veterinary Medicine, Tufts). Dr. Mazzaccaro is a captain with US military.

2008: **Chad Frank** (final year veterinary student, University of Michigan); 24 March - April 13 2008. Dr. Frank is a faculty pathologist at CSU; **Lisa Bartner** (final year veterinary student, University of Michigan); 24 March - April 13 2008

2009: **Kara Theis** (junior veterinary student, University of Minnesota); 27 July – 21 August 2009

2010: **Annika Hoffman** (senior veterinary student, Western College of Health Sciences; 1 – 26 April 2010. Dr. Hoffman recently completed a residency in poultry medicine at NCSU; **Crystal Snare** (senior veterinary student, Ohio State University). August, 2010

2011: **Jason Gulas** (senior veterinary student, Western College of Health Sciences; 1 – 30 Jan 2011; **Stephanie Montgomery** (senior veterinary student, North Carolina State University; 28 Feb – 11 March 2011. Dr. Montgomery is a pathology trainee at NCSU; **Meredith May** (senior veterinary student, Western College of Health Sciences; 7 March – 1 April 2011); **Colleen Thompson** (2<sup>nd</sup> year veterinary student, CSU; all summer; mentored with other faculty); **Sheila McShane** (2<sup>nd</sup> year veterinary student, Tuskegee; 16 May – 3 June 2011)

2012: **Lorilei Clarke**, (4<sup>th</sup> year vet student; CSU; 5 – 23<sup>rd</sup> March); **Vanessa Chen** (2<sup>nd</sup> year veterinary student; UC Davis; June 2012); **Matt Hille** (3<sup>rd</sup> year veterinary student; UN Lincoln-ISU; all summer; mentored with other faculty)

2013: **Elizabeth Myers** (4<sup>th</sup> year veterinary student; CSU; 7 – 22 March, 2013); **Tessa Sustacha** (2<sup>nd</sup> year veterinary student; WSU; 8 – 31 July, 2013). **Shelley Gerstner** (2<sup>nd</sup> year veterinary student; WSU; all summer – mentored with other faculty).

**Jen LeFors** (4<sup>th</sup> year veterinary student, University of Illinois (16 Dec 2013 – 3 Jan 2014)

2014: **Alexis Mackiewicz** (4<sup>th</sup> year veterinary student, Western University); Jessica Coote (4<sup>th</sup> year veterinary students, Western University); **Lindsey Branscom** (3<sup>rd</sup> year veterinary student – CSU; all summer – mentored with other faculty)

2015: **Adam Kukswadia** (5<sup>th</sup> year veterinary student, Szent Istvan University, Budapest, Hungary; Jan 2015); **Elisa Martina Stickler** (5<sup>th</sup> year veterinary student, Szent Istvan University, Budapest, Hungary; Jan 2015); **Kate Moore** (Western University, January 2015); **Brittany Gregory** (University of Pennsylvania; Feb 2015)

2016: **Leah Stein** (nee Creech)(3<sup>rd</sup> year veterinary student, Michigan State University; March 2016); **Liz Goldsmith** (2<sup>nd</sup> year veterinary student; CSU; March 2016); Dr. **Lani Bower** (2<sup>nd</sup> year pathology trainee, U Tennessee; April 2016); **Rosalie Ierardi** (3<sup>rd</sup> year veterinary student, U of I; May-June 2016); Dr. **Melissa Yates** (assistant state veterinary, Arkansas)

## REVIEWING:

I review articles and books for Vet. Pathol., J Vet. Diagn. Invest., J. Wild. Dis., J. Wildlife Management, J. Zoo. Wildl. Med., PLOS 1, and J. Environ. Qual. I review proposals for the USDA's National Research Initiative Competitive Grants Program ; Sustaining Animal Health and Well-Being Program) and Merit Review of ARS's proposed research projects.

<1999: not recorded

1999: J Wildlife Dis (1), J Wildlife Management (1) and J Vet Diagn Invest (1).

2000: Vet Pathol (1) and J Vet Diagn Invest (2).

2001: J Vet Diagn Invest (3), J Wildlife Dis (3), UW AES grant (1).

2002: J Vet Diagn Invest (1); proposal for Seward Association for the Advancement of Marine Science/Alaska SeaLife Center (1).

2003: USDA NRI Food Safety grant review (1); book review for J Wildl Dis (C. A. Spinach: *Cattle Plague – A History*. Kluwer Academic, pp. 765, 2003).

2004: Vet Pathol: 2; J Vet Diagn Invest: 3; J Wildl Dis: 1

2005: Vet Pathol: 3; J Vet Diagn Invest: 3; Expert Reviews in Vaccine Technology: 1;

2006: Vet Pathol: 5; J Vet Diagn Invest: 5

2007: Vet Pathol: 4; J Vet Diagn Invest: 2; NZ Vet J: 1  
 2008: J Vet Diagn Invest: 3; Vet Pathol: 2  
 2011: J Vet Diagn Invest: 1  
 2012: J Vet Diagn Invest: 3; PLOS 1: 1; Vet Pathol: 2  
 2013: Ciência Rural: 1; J Vet Diagn Invest: 1  
 2014: Ciência Rural: 1 (incl. 2<sup>nd</sup> review); PLoS One: 1;  
 2015: J Wildl Dis (1); Vaccine (1); JVDI (3); Ciência Rural (1); J Anim Sci (1)  
 2016: Vet Pathol (2); J Vet Diagn Invest (2); Ciência Rural (1)

#### ORGANIZING/CHAIRING MEETINGS

- AAVLD national meeting, 2006
- 2<sup>nd</sup> Livestock-Wildlife Workshop, 10<sup>th</sup> September 2004, Casper, Wyoming. Day-long meeting.
- Pfizer-University of Wyoming scientific exchange. 16 August 2008. Laramie, Wyoming. Day-long meeting.

#### COMMITTEES:

- Technical advisory committee, Governor's Brucellosis Coordination Committee, 2004 - 2008
- Vice-President, AAVLD, 2004-5 (elected); President, 2005 – 6, immediate Past-President, 2006 – 7. Awards committee: 2008
- Executive board member, American Association of Veterinary Laboratory Diagnosticians, 2001 – 2004 (elected; Northwest Region representative)
- Chairman, Pathology subcommittee, American Association of Veterinary Laboratory Diagnosticians, 2002 – 2003 (elected).
- Chairman, University Library Council (1998 – 9)
- Chairman, University Library Council (2002 – 3)
- Member, UW faculty senate executive (*ex-officio*), 1998 – 99.
- Co-chair, Saturday night histopathology conference, Birmingham, AL AAVLD annual meeting, 2000; chair for 2001.
- College of Agriculture representative to Library Council (1996 – 2000; reappointed till 2003).
- Library Subcommittee for North Central Accreditation of University of Wyoming, 1998 – 9.
- Faculty Senator (2 terms: second 3-year term ended 1997).
- Dean's faculty advisory committee (until 1997)
- Animal Science/Veterinary Sciences *ad hoc* committee in the merits/demerits of a departmental merger
- College of Agriculture Scholarship Committee (1994, 1996 - 8; 1998 - 2000)
- College of Agriculture's information technology committee (1997)
- Coordinator for WSVL's cases supplied to Western Regional Round-Robin slide conference.
- Case contributor to AFIP Wednesday slide conference (multiple cases in past years;
- Participant/contributor, Western Conference of Veterinary Diagnostic Pathologists (>1990, 1993, 1994, 1995, 1996, 1997; 1997-8 (president); 1999).
- Participant/contributor in Sunday night histopathology slide conferences of AAVLD/AHA annual meeting (multiple presented cases include Salers hemochromatosis, chronic MCF in cattle, Alaskan Husky encephalopathy, brainstem chromatolysis/hippocampal sclerosis of cattle, canine sensory neuropathy, congenital dicoumarol toxicosis in calves, dehydration encephalopathy in cattle).
- Establishment with Dr. Lynn Woodard of *Rue Jensen Scholarship* for declared pre-veterinary students in the College of Agriculture; scholarships awarded annually to most promising student in Department of Veterinary Sciences (\$1,000 award in 2000; \$2,000 in 2002 and thereafter).
- Established and personally endowed *Noreen Ring Scholarship* for declared pre-veterinary students and other students in Veterinary Sciences program; scholarships awarded annually to promising students who also demonstrate compassion to animals (established 2005; awards of \$5,000 annually, generally \$2,500/student).

- Coordinator and participant, WSVL-clinician case conference sessions at the summer and winter meetings of the Wyoming State Veterinary Medical Association (Summer meeting, 1998 (Cheyenne); Summer Tri-State conference 1999 (Jackson); Summer meeting, 2000 (Thermopolis); Winter meeting, 2000 (Casper); Winter meeting, 2001 (Casper); Summer meeting, 2002 (Laramie).
- Initiator and former author, Veterinary Sciences department's electronic home page (1997 – 1999)
- Pre-vet student advisor
- Graduate committee, Kathy Orsted; Dan Erikson; Bobby Dye;
- Participant, AAVLD list-serv
- Co-chair, pathology session of AAVLD's national meeting (1997) in Louisville, KY. Screening of submitted abstracts.
- Member, 1998 AAVLD program committee.
- Member, 2007 – 2009 AAVLD graduate travel scholarship committee
- Member, transmission electron microscope selection/purchase committee, 2009
- UW Faculty Senate: 2011 – to date (representing Department of Veterinary Sciences); member of executive (secretary), 2015 – to date.
- Chair, AAVLD foundation, 2015 – to date.

#### SEARCH COMMITTEES:

- Search committee member, veterinary pathologist, 1992 - 3 (**Dr. Milt McAllister** hired).
- Search committee chair, veterinary pathologist, 1998-9 (**Dr. Todd Cornish** hired).
- Search committee member, Veterinary Sciences department chairman, 1998 – 99 (**Dr. Frank Galey** hired).
- Search committee member, Dean of Graduate School, 1999 (**Dr. Steve Williams** hired).
- Search committee chair, veterinary histology technician, 2000 (**Linda Mickley** hired).
- Search committee chair, veterinary histology technician, 2001 (**Leslie Vieyra** hired).
- Search committee member, necropsy manager, 2001 (**Michele Turner** hired).
- Search committee member, Dean of UW Libraries 2001 (**Dr. Maggie Farrell** hired).
- Search committee chair, second veterinary histology technician (**Deb Silverman** hired)
- Search committee member, necropsy manager , 2002 (**Brian Parrie** hired).
- Search committee chair, prion endowed professorship, 2008 (**Dr. Herman Schatzl** hired)
- Search committee member, academic professional (equine science), Dept An Sci, 2014 (**Dr. Jennifer Inwerson** hired)
- Search committee member, veterinary pathologist, 2015 (**Dr. Juan Munoz** hired)
- Search committee head, veterinary histology technician, 2016 (ongoing; August 2016)

#### CURRENT RESEARCH INTERESTS:

Malignant catarrhal fever (MCF) in bison and other susceptible species. Since the early 1990s I worked with Dr. Hong Li at the USDA-ARS unit in Pullman in WA on MCF. We publish on various aspects of the natural and experimental aspects of infection such as disease in cattle, sheep and bison, shedding patterns in sheep, and experimental reproduction of the disease. Details: <http://www.vetmed.wsu.edu/mcf/>. I investigate and report on spontaneous diseases arising from work as a veterinary diagnostician. An ancillary interest is adverse reactions to USDA-licensed vaccines, such as modified live BoHV-1.

#### OTHER:

- Supervisor of WSVL Histology unit (2 fulltime histology technicians; one student part-timer).
- Securing funds (\$25,000) for WSVL laboratory data management system. System went live 1 July 2000. It includes a nascent Web-based regional animal health information component and Web-based reporting of case

reports to WSVL clientele (WYOVET <http://wsvl.uwyo.edu/>)

- Establishing dermatopathology service for WSVL clients in conjunction with board-certified veterinary dermatologist (Dr. Diane Bevier, Purdue). Clinical and pathology report sections exchanged on Web.
- Obtaining formalin and solvent stills (\$25,000) for necropsy and histology areas.
- Supplying research and case material to the Examination Committee of the ACVP (2 requests met, 1995, 2 in 1996)
- Regular submission of cases on behalf of the WSVL to the Armed Forces Institute of Pathology's Wednesday slide conference (most recently 2008).
- Short blurbs for practitioners in the WVMA and WSVL newsletters.
- Organizer and presenter at Clinical Case Conference session at WVMA and Tri-State (WY, UT and ID) annual meetings (1998 - 2000, 2002 - 2006, 2008)
- Contract diagnostician for Heska Corporation.
- Contract pathologist for Colo-Histoprep.
- Organized 1 day scientific exchange with Pfizer-UW speakers. 16 August 2008. Speakers and attendees from UW, CSU, Clay Center University of Nebraska, Heifer Authority, Pfizer and IDEXX
- Poster on tularemia in Wyoming for WY state fair, Douglas, WY. August 2008.
- Expert witness on dog abuse case. Laramie municipal court. May 2010.

#### MISCELLANEOUS PROFESSIONAL SERVICES:

- Mentors workshop for Wyoming State Science Fair, two sessions, July 12 and 13, 2004, AnSci-Molb building.
- External letters of recommendation for tenure/promotion for other institutions: **Dr. Neil Williams** (2004); **Dr. Paige Carmichael** (2004); **Dr. Gail Johnson** (2004); **Dr. KJ Yoon** (2005); **Dr. J Ramos-Vara** (2005); **Dr. Beth Valentine** (2006); **Dr. Uriel Blas-Machado** (2008); **Dr. Susan Sanchez** (2008); **Dr. Mark Anderson** (2009); **Dr. Milt McAllister** (2011); **Dr. Kristy Pabilonia** (2012); **Dr. Ana Alcaraz** (2013); **Dr. Marcia Ilha**, **Dr. Kristy Pabilonia**, **Dr. Tom Baldwin**, **Dr. C Loehr** (2014).

#### GRADUATE STUDENTS:

- H. Russell – MS co-supervisor
- J Monfre 2003 – MS supervisor.
- J Berezowski 2003 – PhD external examiner.
- K Gailbreath 2006 - PhD external examiner
- L Kyle 2009 – PhD committee member
- A Yedinak 2010 – PhD committee member
- B. Sayeed 2014 – MS committee member

#### PRESS RELEASES:

Not listed – see WSVL diseases update web site: [http://wyovet.uwyo.edu/Disease\\_Updates.asp](http://wyovet.uwyo.edu/Disease_Updates.asp)

#### PUBLIC SPEAKING/PUBLIC RELATIONS ON BEHALF OF UNIVERSITY OF WYOMING:

Listed with University of Wyoming Speakers' Bureau on the topics: How to become a veterinarian; brucellosis in Wyoming; Wildlife disease research at the University of Wyoming; West Nile virus).

#### MEDIA INTERVIEWS (PARTIAL LIST):

Brucellosis issues. 14-minute interview on Wyoming Signatures, UW TV, broadcast January 25, 5:30 and January 28, 10: 30.

Wildlife Disease research partnership meeting. Interview with Aaron Alpern of WPR for Wyoming Today, September 8, 2004. Broadcast 9 Sept 2004 WPR

Wildlife Disease research partnership meeting. Interview with CBS Casper TV affiliate for nightly news. September

10, 2004.

Red Angus osteopetrosis – identification of causative gene. Interview with NBC Cheyenne affiliate for nightly news. 22 October 2009

Canine distemper in WY and KS. Phone interview with Associated Press Radio. 15 Dec 2010.

Canine distemper in WY and KS. Interview with Channel 9 in Denver, CO. Broadcast on evening news, 16 Jan 2011.

Dysautonomia in WY dogs. Interview with Christie Martinez. Wyoming Livestock Roundup, 10 May 2011

Self-injection with veterinary products. Interview with Terri Adams - 406-277-3114. Prairie Star, MT. 10 May 2011

Participation in re-enactment of Red Rim elk die off due to lichen toxicosis (2004) for film crew of National Geographic series along with Walt Cook and Merl Raisbeck. 7 July 2011.

University of Wyoming's diagnostic externship program. TJ Burnham, phone interview for Farm Progress. 11 Sept 2012.

Safety of MLV BoHV-1 vaccines in pregnant cattle. Heather Thomas, phone interview, Western Cowman, June 2013.

Scabies in foxes in Laramie and Wyoming. WPR interview with Chelsea Biondolillo. 2 July 2013

Safety of MLV BoHV-1 vaccines in pregnant cattle. Saige Thomas, phone interview, Wyoming Livestock Roundup. 15 July 2013.

Safety of MLV BoHV-1 vaccines in pregnant cattle. Merridee Wells, email interview. Working Ranch magazine. Feb 16, 2015.

#### **AWARDS**

*Distinguished Career Service Award* from American Association of Veterinary Laboratory Diagnosticians (AAVLD) at annual meeting Oct. 18-24, Greensboro, N.C.

Meeboer Teaching award, College of Agriculture, University of Wyoming, Dec 2014.

DO'T August 2016