

## BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.  
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NAME Pool, Roy Ransom Jr.	POSITION TITLE Clinical Professor, Veterinary Pathobiology, College of Veterinary Medicine, Texas A&M University		
eRA COMMONS USER NAME (credential, e.g., agency login)			

  

EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	MM/YY	FIELD OF STUDY
Duke University, Durham, NC	B.S.	1957	Zoology
U.S. Army Signal Corps, Fort Gordon, GA	Certificate	1959	Cryptography
NC State University, Raleigh, NC	Certificate	1960	Pre-vet Agriculture
Oklahoma State University, Stillwater, OK	B.S.	1962	
Oklahoma State University, Stillwater, OK	D.V.M	1964	D.V.M Veterinary Medicine
University of California, Davis, CA	PhD	1967	Comparative Pathology

### A. Personal Statement

**I am currently the only experienced veterinary orthopedic pathologist remaining in academic practice in the United States.** In the last 40 years I have gained a national and international reputation based upon my diagnostic skills and research involving the pathogenesis of spontaneous musculoskeletal diseases and dental diseases of pets and athletic horses, skeletal neoplasia and chronic effects of irradiation on the skeleton. Diagnostics and my research cover a spectrum of diseases of bones, joints and attachments, i.e. tendons and ligaments, of domestic animals. I have remained in academia, except for a short few years when I worked as the orthopedic pathologist for a national commercial diagnostic pathology firm. At a personal financial sacrifice I returned to academia because I enjoy teaching veterinary students and sharing my understanding of musculoskeletal diseases with anatomic pathology, oncology, orthopedic surgery and radiology residents.

### B. Positions and Honors

#### a. Positions and Employment

1964 – 1967 NIH Post-doctoral Fellow in Comparative Pathology, UC Davis

1967 – 1969 Post-doctoral studies in electron microscopy and Assistant Professor, College of Veterinary Medicine, Oklahoma State University

1969 – 1973 Assistant Professor of Pathology, Department of Pathology, School of Veterinary Medicine, UC Davis

1969 – 1973 Assistant Research Scientist, Radiobiology Laboratory, UC Davis

1973 – 1976 Associate Professor of Pathology, Department of Pathology. School of Veterinary Medicine, UC Davis

1973 – 1976 Associate Research Scientist, Radiobiology Laboratory, UC Davis

1976 – 1994 Professor of Pathology, Department of Pathology, School of Veterinary Medicine, UC Davis

1976 – 1986 Senior Research Scientist, Head of Bone Pathology Research, Laboratory for Energy-Health Related Research, UC Davis

1994 – present Emeritus Professor of Pathology, School of Veterinary Medicine, UC Davis

1994 – 1996 Adjunct Professor of Pathology, NC State University College of Veterinary Medicine, Raleigh, NC

- 1994 – 1998 Orthopedic Pathology Consultant, IDEXX Veterinary Services (formerly Consolidated Veterinary Diagnostics), West Sacramento, CA while also consulting with VMTH Pathology Service, UC Davis
- 1999 – 2000 Senior Lecture and Senior Hospital Pathologist, Department of Biomedical Sciences, Cornell University, College of Veterinary Medicine,
- 2000 – 2002 Professor of Pathology, Diagnostic and Laboratory Services. College of Veterinary Medicine, Mississippi State University,
- 2002 – present Clinical Professor of Veterinary Pathology, Department of Veterinary Pathobiology. College of Veterinary Medicine, Texas A&M University

**b. Other Experience and Professional Memberships**

American Veterinary Medical Association - member since 1964  
American College of Veterinary Pathologists – honorary member since 2010  
International Academy of Pathology- member since 1972  
NC Veterinary Medical Association- active member  
NC Veterinary Medical License- active license  
Texas State Veterinary License- active license  
Veterinary Cancer Society- charter member  
C.L.Davis DVM Foundation- member and lecture participant  
Sigma Xi

**c. Honors**

- 1961 Phi Kappa Phi
- 1963 Phi Zeta
- 1972 Sigma Xi
- 1972 & 1982 Visiting Professor, Veterinary-Pathologisches Institute, der Justus Liebig-Universitat, Giessen, Germany
- 1980 – 1994 National Council on Radiation Protection and Measurements, Task Group 12. Office of Health and Environmental Research, Task Group on Biological Effects of Radiation, member.
- 1986 Norden Distinguished Teaching Award
- 1987 American representative for Committee for Equine Research, Swedish University of Agricultural Sciences, Uppsala, Sweden sponsored by the Swedish Racing Board
- 1988 Invited Panelist, The Elbow Meeting of the International Elbow Arthrosis Foundation representing the USA National Registry for Elbow Dysplasia in Dogs, UC Davis
- 1988 – 1994 Task Group on Biological Effects, Health Effects Research Division, Office of Health and Environmental Research, Department of Energy, member.
- 1989 Only invited American representative for International Workshop on Navicular Disease in Horses. Keynote speaker and panelist to review the pathology and pathogenesis of navicular disease. Hockmoor, Germany
- 1991 Panelist and invited speaker on the pathology and pathogenesis of athletic injuries in athletic horses Bain Fallon Lectures, sponsored by the Australian Equine Veterinary Association, Melbourne, Australia
- 1991 Panelist and invited speaker on equine orthopedic disease, 30<sup>th</sup> Annual Congress of the British Equine Veterinary Association. University of Cambridge, United Kingdom
- 1991 International Pegasus Equine Research Award, University of Georgia
- 1991-present Consultant and Member of Review Panel: Equine Practice
- 1992 Visiting Professor, Norwegian College of Veterinary Medicine, Oslo, Norway consulting and participating in the pathogenesis of equine osteochondrosis

- 1992 Keynote Address: Equine Osteochondrosis International Seminar, Girton College, University of Cambridge, United Kingdom
- 1993 D.L.T. Smith Lectureship Award, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Canada
- 1994 Co-author: World Health Organization's "Histological Classification of Bone and Joint Tumors of Domestic Animals, Second Volume Series" based on Dr. Pool's classification system in Chapter 5 Tumors of Bone and Cartilage in Tumors. In Tumors in Domestic Animals, 3<sup>rd</sup> ed., JE Moulton, editor.
- 1995 Invited Primary Address: Joint Disease in the Athletic Horse: "Review of Pathologic Findings and Pathogenesis". American Association of Equine Practitioners 41<sup>st</sup> Annual Convention, Lexington, KY
- 1997 Invited Lecture: "Pathologic Changes in Tendinitis of Athletic Horses". 1<sup>st</sup> Dubai International Equine Symposium, Dubai, United Arab Emirates
- 1997 Sir Fredrick Smith Memorial Lectureship Award. British Equine Veterinary Association Annual Meeting, Royal Society of Medicine, London, United Kingdom
- 2005 Main Speaker: Symposium on Musculoskeletal Pathology, Institute of Animal Pathology, Vesuisse Faculty Bern, Switzerland 20 lecture hours)
- 2006 Main Speaker: Pathology Workshop: Bone and Joint Pathology of Animals, 24 hrs of lectures, Universities of Padua and Perugia, Italy
- 2007 Invited main speaker (8 lecture hours): Symposium on Diagnostic Orthopedic Pathology, AAVLD Annual Meeting, Reno, NV
- 2008 Invited one of two major speakers (8 lecture hours): Symposium for the 9th Annual Seminar of the ACVP Diseases of the Skeletal System at the ACVP Annual Meeting in San Antonio, Texas
- 2009 Cautioned by Dr. Gerald Bratton, Acting Department Head of VTPB who formerly advised me to no longer accept and participate in national and internal meetings since he, Dr. Bratton, for whatever personal reasons, viewed my absences from the diagnostic pathology surgical service as a dereliction of my diagnostic duties as professor in the clinical tract. I was warned to remain on duty here at TAMU where I am to attend to my diagnostic duties.
- 2010 Honorary Member of the American College of Pathologists- letter of invitation, August 3, 2010

**Selected Peer-reviewed Publications (Selected from 160- peer reviewed publications)**

- 127. 2002 Trostel, T., McLaughlin, R.M. and R.R. Pool. Canine lameness caused by developmental orthopedic disease: Osteochondrosis. *Compend. Contin. Educ. Pract. Vet.* 24(11):836-854.
- 128. 2002 Pool, R.R., and K.G. Thompson. Tumors of joints. In Tumors in Domestic Animals, 4th ed. D.J. Meuten, ed., Iowa State Press, Ames, Iowa, pp. 199-244.
- 129. 2002 Thompson, K.G. and R.R. Pool. Tumors of bone. In Tumors in Domestic Animals, 4th ed. D.J. Meuten, ed., Iowa State Press, Ames, Iowa, pp. 245-318.
- 130. 2002 Mero, J.L. and R.R. Pool. Twenty cases of degenerative suspensory ligament desmitis in Peruvian paso horses. *AAEP Proceedings* 48:329-335.
- 131. 2002 Mozos, E., Novales, M., Ginel, P.J., Perez, J. and R.R. Pool. A newly recognized pattern of canine osteochondromatosis. *Veterinary Radiology & Ultrasound* 43:132-137.
- 132. 2002 Terry, K., Rashmir-Raven, A.M. and R.R. Pool. An unusual case of upper respiratory obstruction in a horse. *Veterinary Radiology & Ultrasound* 43:43-45.

133. 2002 Saski, M. Pool, R.R. and B.A. Summers. Vasculitis resembling isolated angitis of the central nervous system in a dog. *Veterinary Pathology* 40(1): 95-97.
134. 2003 Trostel, T., McLaughlin, R.M. and R.R. Pool. Canine lameness caused by developmental orthopedic diseases: Fragmented medial coronoid process and ununited anconeal process. *Compend. Cont. Ed.* 25(2): 112-121.
135. 2003 Trostel, T., McLaughlin, R.M. and R.R. Pool. Canine lameness caused by developmental orthopedic diseases: Canine panosteitis, Legg-Calve-Perthes disease and hypertrophic osteodystrophy. *Compend. Cont. Ed.* 25(4): 289-293.
136. 2003 Trostel, T., McLaughlin, R.M., Lamberth, L.G., Cooper, R.C., Elder, S.H., Pool, R.R., Gao, O., Cromiack, J.A., and C.R. Boyle. Effects of Pico-Tesla electromagnetic field therapy on wound healing in rats. *American Journal Vet. Res.* 64(7):845-854.
137. 2003 Trostel, T., McLaughlin, R.M. and R.R. Pool. Canine elbow dysplasia: incidence, diagnosis, treatment and prognosis. *Comp. Cont. Ed.* 25(10):763-781.
138. 2004 Nixon, A.J., Schachter, B.L. and R.R. Pool. Exostoses of the caudal perimeter of the radial physis as a cause of carpal synovial sheath tenosynovitis and lameness in horses: 10 cases (1999-2003). *J. American Vet. Med. Assoc.* 224:264-270.
139. 2004 Mackin, A.I., Cantwell, H.D., Trostel, T. and R.R. Pool. What is your diagnosis? {Chronic hyperplastic gastropathy}. *J. American Vet. Med. Assoc.* 224:665-666.
140. 2005 Hoenerhoff, M.J., Kiupel, M., Rosenstein, D. and R.R. Pool. Multipotential osteosarcoma with various mesenchymal differentiations in a young dog. *Veterinary Pathology* 41:264-268.
141. 2005 Dorea, H.C. McLaughlin, R.M. Cantwell, H.D., Read, R.W. Ambrust, L., Pool, R.R., Roush, J.K. and C. Boyle. Evaluation of healing in femoral defects filled with cancellous allograft or bioglass. *Veterinary Comparative Orthopedic Traumatology* 3:157-168.
142. 2006 Levine, G.J. Levine, J.M., Walker, M.A., Pool, R.R. and G.T. Fosgate. Evaluation of the association between discospondylitis deformans and clinical signs of intervertebral disease in dogs. 172 cases (1999-2000). *J. American Vet. Med. Assoc.* 288:96-100.
143. 2006 Speltz, M.C., Olson, E., Hunt, L.M., Pool, R.R., Wilson, J.H. and C.S. Carlson. Equine vertebral disk disease. *J. Equine Veterinary Science.* 26(9):1-6.
144. 2007 Vinyak, A. and R.R. Pool. Treatment of thoracolumbar spinal cord compression by *Histoplasma capsulatum* in a cat. *J. American Vet. Med. Assoc.* 230(7): 1018-1023.
145. 2007 Cole, R., Chesen, B., Pool, R.R. and J. Watkins. Imaging diagnosis- Equine mast cell tumor. *Veterinary Radiology & Ultrasound* 48:32-34.

146. 2007 Miller, M.A., Pool, R.R. and B.R. Coolman. Synovial hemangiosarcoma in the stifle joint of a dog. *Veterinary Pathology* 44:240-243.
147. 2008 Leach, S., Heatley, J.J., Pool, R.R. and K. Spaulding. Bilateral testicular germ cell, sex cord-stromal cell tumor in a Pekin Duck (*Anas platyrhynchos*). *Journal of Avian Medicine* 22:315-319.
148. 2008 Johnson, A.K., Love, C.C., Casillo, A.L. and R.R. Pool. Malignant mesothelioma tunica vaginalis testis in a stallion. *J. Equine Veterinary Education* 20(9):480-484.
149. 2009 Lauer, S.K., Nieves, M.A., Peck, J., Pool, R.R., Hosgood, G., Lazar, T. and E. Swanson. Descriptive histomorphometric ingrowth analysis of the Zurich cementless canine total hip acetabular component. *Veterinary Surgery* 38:59-69.
150. 2009 Dattena, M., Pilichi, S., et. al., and R.R. Pool. Sheep embryonic stem-like cells transplanted in full-thickness cartilage defects. *J. of Tissue Engineering and Regenerative Medicine*. 3(3):175-187.
151. 2009 Horstman, C.L., McLaughlin, R.M., Elder, S.H., Pool, R.R. and Boyle, C.R. Changes to articular cartilage following remote application of radiofrequency energy and with or without Cosequin therapy. *Vet. Comp. Ortho. Traumatol.* 22(2):103-112.
152. 2009 Molly C. Speltz, R.R. Pool and D. Hayden. Pathology in Practice. Ossifying fibroma on the mandible. *JAVMA* 235:1283-1285.
153. 2009 Schenkmann, D., A. Armien, Pool, R.R., Williams, J., Schultz, R. and J. Galante. Ligament desmitis (DSLD). *J Equine Veterinary Science* 29:748-752.
154. 2010 Dyson, S., R. Pool, T. Blunden and R. Murray. The distal sesamoidean impar ligament: Comparison between its appearance on magnetic resonance imaging and histology of the axial third of the ligament. *Equine Vet. Journal* 42:332-339.
155. 2010 Anthenill, L.A., I.A. Gardner, R.R. Pool, T.C. Garcia and S.M. Stover. Comparison of macrostructural and microstructural bone features in Thoroughbred racehorses with and without midbody fracture of the proximal sesamoid bone. *Am J Vet Res* 71:755-765.
156. 2010 Tiwari, N., Chabra, S., Mehdi, S., Sweet, P., Pool, R., Andrews, B. and G. Peavy. Imaging of normal and pathologic joint synovium using nonlinear optical microscopy as a potential diagnostic tool. *J Biomedical Optics* 15(15): 1-10.
157. 2011 Griffin, J.F., Coleman, M.C., Quist, E. Spaulding, K.A., Dabarienaer, R.M., Giri, D.K. and R.R. Pool. Septic arthritis, navicular bursitis and osseous cyst-like lesions in a foal. *Equine Veterinary Education* 10:1-5.
158. (2011) Lakritz, J., Barr, B.C., George, L.W., Wisner, E.R., Glenn, J.S., East, N.E., and R.R. Pool. Cervical and thoracic vertebral malformation ("Weak Neck") in Columbia Lambs. *J.Vet. Internal Medicine* 9(6):393-398 {2008- misplaced in order}.

159. 2011 Murphy, B. aGaspar, D. and R.R. Pool, Nonossifying fibroma in the mandible of a goat. Veterinary Pathology 48(6): 1161-1164.
160. 2011 Sparks, H.D., Nixon, A.J., Boening, K.J. and R.R. Pool, Arthroscopic treatment of meniscal cysts in the horse. Equine Vet. Journal 43(6): 669-675.
161. 2012 Lohr, C.V., Hedge, Z.N. and R.R. Pool, Infiltrative myxoma of the stifle joint and thigh in a domestic rabbit (*Oryctolagus cuniculus*). J Comparative Pathology IX:1-5.
162. 2012 Blair, W.H., Levine, J.M., Kerwin, S.C., Spaulding, K.A., Young, B.D. and R.R. Pool, Imaging diagnosis-synovial myxoma of lumbar vertebrae articular process. Vet. Radiol. Ultrasound 52(3):309-312.

**C. Clinical Professor appointment in Clinical Track with time commitment for teaching and diagnostics and diagnostic support for research conducted by tenure track faculty**

**D. Research Support**

**a. Ongoing Research Support**

**Clinical Professor appointment in Clinical Track with time commitment for teaching and diagnostics and diagnostic support for research conducted by tenure track faculty**

**I am participating as a consulting pathologist in the following research effort:**

**Title: Evaluation of the expression of Her2/neu (erbB2) in various histological types of canine osteosarcoma as a prognostic factor and a therapeutic target.**

**Principal Investigator: Heather M. Wilson DVM, DACVIM Oncology, Small Animal Clinical Sciences, CVM. Total costs: \$11,161.80**

**Consulting pathologist in an ongoing study being conducted at Washington State College of Veterinary Medicine, Pullman, Washington,**

**Title: Lysophosphatidic acid infused hydrogel as a bone graft: PCL Hydrogel vs PLGA Hydrogel in a canine ulnar gap model**

**Principal Investigators: Kelly Might and Steve Martinez**

**Consulting pathologist in a study of bone marrow-derived mesenchymal stem cell enhanced healing of experimental defects in the flexor tendons of athletic horses.**

**Title: Regenerating equine tendon using autologous, bone marrow-derived mesenchymal stem cells.**

**Principle Investigator: Michael Schramme, Prof. de Chirurgie Equine, Campus Veterinaire de Lyon, France; Formerly Equine Surgeon, NC College of Veterinary Medicine**

**Funded by: United States Equestrian Federation.**

**b. Completed Research Support:**

**Consulting Pathologist: GLP Review April 2010**

**Gradalis Study RE-PLT-106 2010**

**Principal Investigator: Dr. Fred Clubb**

**Cardiovascular Pathology Dept VTPB**

**TAMU, Bldg 1020**