

BIOGRAPHICAL SKETCH

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NAME George E. Lees, DVM, MS		POSITION TITLE Professor of Veterinary Internal Medicine	
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Colorado State University, Ft. Collins, CO	B.S.	1970	Veterinary Science
Colorado State University, Ft. Collins, CO	D.V.M.	1972	Veterinary Medicine
University of Minnesota, St. Paul, MN	M.S.	1979	Veterinary Medicine

A. Positions and Honors**Professional Experience**

1972-1975 Captain, US Army Veterinary Corps
 1975-1976 Small Animal Intern, School of Veterinary Medicine, University of California, Davis, CA
 1976-1979 Medicine Resident, Small Animal Clinical Sciences, University of Minnesota, St. Paul, MN
 1979-1980 Assistant Professor, Small Animal Clinical Sciences, Univ. of Minnesota, St. Paul, MN
 1980-1986 Associate Professor, Small Animal Medicine & Surgery, Texas A&M Univ., Coll. Sta., TX
 1986-present Professor, Small Animal Medicine & Surgery, Texas A&M University, College Station, TX
 2005-present Director, Texas Veterinary Renal Pathology Service, Texas A&M Univ., Coll. Sta., TX

Board Certification

1979 American College of Veterinary Internal Medicine (Small Animal Internal Medicine)

Honors and Appointments

1985-2006 Editorial Review Board, *Journal of the American Animal Hospital Association*
 1988-1990 Board of Scientific Reviewers, *American Journal of Veterinary Research*
 1988-1991 Vice-President, President-Elect, President, and Chairman of the Board, ACVIM
 1999 Texas Veterinary Medical Association Research Award
 2004 Chair, 2004 ACVIM Forum Consensus Statement Panel (Small Animal)
 2006 Pfizer Animal Health Research Award, Texas A&M University
 2008 ECVIM/Hill's Excellence in Veterinary Nephrology and Urology Award
 2009 TAMU AFS Distinguished Achievement Award for Research

B. Selected peer-reviewed publications (in chronological order, since 1997).

Helman RG, Homco LD, Frey MS: Glomerular ultrastructural findings similar to hereditary nephritis in 4 English cocker spaniels. *J Vet Int Med* 11:80-85, 1997.
 Lees GE, Helman RG, Homco LD, Millichamp NJ, Hunter JF, Frey MS: Early diagnosis of familial nephropathy in English cocker spaniels. *J Amer Anim Hosp Assoc* 34:189-195, 1998.
 Lees GE, Helman RG, Kashtan CE, Michael AF, Homco LD, Millichamp NJ, Ninomiya Y, Sado Y, Naito I, Kim Y: A model of autosomal recessive Alport syndrome in English cocker spaniel dogs. *Kidney Int* 54:706-719, 1998
 Lees GE, Helman RG, Kashtan CE, Michael AF, Homco LD, Millichamp NJ, Camacho ZT, Templeton JW, Ninomiya Y, Sado Y, Naito I, Kim Y: New form of X-linked dominant hereditary nephritis in dogs. *Am J Vet Res* 60:373-383, 1999.
 Lees GE, Kashtan CE, Michael AF, Helman RG, Ninomiya Y, Sado Y, Naito I, Kim Y: Expression of the $\alpha 6$ chain of type IV collagen in glomerular basement membranes of healthy adult dogs. *Am J Vet Res* 61:38-41, 2000.

- Kashtan CE, Kim Y, Lees GE, Thorner PS, Virtanen I, Miner JH: Abnormal glomerular basement membrane laminins in murine, canine, and human Alport syndrome: aberrant laminin-4 deposition is species-independent. *J Am Soc Nephrol*, 2001;12:252-260.
- Cox ML, Quignon P, Galibert F, Lees GE, Murphy KE: Sequencing and radiation hybrid mapping of canine *uromodulin*. *DNA Sequence* 2003; 14:61-69.
- Rao VH, Lees GE, Kashtan CE, Nemori R, Singh RK, Meehan DT, Rodgers K, Berridge BR, Cosgrove D: Increased expression of MMP-2, MMP-9 (type IV collagenases/ gelatinases) and MT1-MMP in canine X-linked Alport syndrome (XLAS). *Kidney Int* 2003;63:1736-1748.
- Cox ML, Lees GE, Kashtan CE, Murphy KE: Genetic cause of X-linked Alport syndrome in a family of domestic dogs. *Mammalian Genome* 2003;14:396-403.
- Groman RP, Bahr A, Berridge BR, Lees GE: Effects of serial ultrasound-guided renal biopsies on kidneys of healthy adolescent dogs. *Vet Radiol Ultrasound*. 2004;45:62-69.
- Burkholder WJ, Lees GE, Hipple AK, Slater MR, Bauer JE, Kashtan CE, McCracken BA, Hannah SS: Diet modulates proteinuria in heterozygous female dogs with X-linked hereditary nephropathy. *J Vet Int Med* 2004;18:165-175.
- Lees GE: Early diagnosis of renal disease and renal failure. *Vet Clin North Am [Sm Anim Pract]* 2004; 34:867-885.
- Lees GE, Brown SA, Elliott J, Grauer GF, Vaden SL. Assessment and management of proteinuria in dogs and cats: 2004 ACVIM Forum Consensus Statement (Small Animal) *J Vet Intern Med* 2005;19:377-385.
- Rao VH, Lees GE, Kashtan CE, Delimont DC, Singh R, Meehan DT, Bhattacharya G, Berridge BR, Cosgrove D: Dysregulation of renal MMP-3 and MMP-7 in canine X-linked Alport syndrome. *Ped Nephrol* 2005;20:732-739.
- Vaden SL, Levine JF, Lees GE, Groman RP, Grauer GF, Forrester SD: Renal biopsy: a retrospective study of methods and complications in 283 dogs and 65 cats. *J Vet Int Med* 2005;19:794-801.
- Kunze C, Bahr A, Lees GE. Evaluation of ^{99m}Tc-diethylenetriaminepentaacetic acid renal scintigram curves in normal dogs after induction of diuresis. *Vet Radiol Ultrasound*. 2006;47:103-107.
- Greer KA, Higgins MA, Cox ML, Ryan TP, Berridge BR, Kashtan CE, Lees GE, Murphy KE: Gene expression analysis in a canine model of X-linked Alport syndrome. *Mamm Genome* 2006;17:976-990.
- Lees GE: Juvenile and familial nephropathies. In Elliott J, Grauer GF (eds): *Manual of Canine and Feline Nephrology and Urology*, ed 2. British Small Animal Veterinary Association, 2007, pp 79-86.
- Davidson AG, Bell RJ, Lees GE, Kashtan CE, Davidson GS, Murphy KE: Genetic cause of autosomal recessive hereditary nephropathy in the English cocker spaniel. *J Vet Intern Med*, 2007;21:394-401.
- Nabity MB, Boggess MM, Kashtan CE, Lees GE: Day-to-day variation of the urine protein:creatinine ratio in female dogs with stable glomerular proteinuria caused by X-linked hereditary nephropathy. *J Vet Intern Med*, 2007;21:425-430.
- Davidson AG, Bell RJ, Lees GE, Murphy KE: Isolation, culture, and characterization of canine Sertoli cells. *In Vitro Cell Dev Biol – Animal*, 2007;43:324-327.
- Allenspach K, Lomas B, Wieland B, Harris T, Pressler B, Mancho C, Lees GE, Vaden SL: Evaluation of perinuclear anti-neutrophilic cytoplasmic autoantibodies as an early marker of protein-losing enteropathy and protein-losing nephropathy in Soft Coated Wheaten Terriers. *Am J Vet Res*, 2008;69:1301-1304.
- Bell RJ, Lees GE, Murphy KE. X-Chromosome inactivation patterns in normal and X-linked hereditary nephropathy dogs. *Cytogenet Genome Res*, 2008;122(1):37-40.
- Gross O, Borza D-B, Anders H-J, Licht C, Weber M, Segerer S, Torra R, Gubler M-C, Heidet L, Harvey S, Cosgrove D, Lees G, Kashtan C, Gregory M, Savige J, Ding J, Thorner P, Abrahamson DR, Antignac C, Tryggvason K, Hudson B, Miner JH. Stem cell therapy for Alport syndrome: the hope beyond the hype. *Nephrol Dialysis Transplant* 2009;24:731-734.
- Steiner JM, Teague SR, Lees GE, Willard MD, Williams DA, Ruaux CG: Stability of canine pancreatic lipase immunoreactivity (cPLI) concentration in serum samples and effect of long-term administration of prednisone to dogs on cPLI concentrations. *Am J Vet Res*, 2009, In press.

C. Research Support

Current Support

DO7CA-311 Nabity (PI) 12/1/07-11/30/09

Morris Animal Foundation

Correlation of Urinary Biomarkers with Chronic Renal Disease Progression in Dogs

The goal of this project is to identify urine analytes that correlate with stages of structural and functional change in the kidneys of dogs with progressive renal disease (Role: Co-Investigator/Mentor).

RF 499271 Lees (PI) 7/1/08-6/30/11

IDEXX Laboratories

Maintain the Hereditary Nephropathy (HN) Dog Colony at TAMU

The goal of this project is to maintain a closed breeding colony of dogs with hereditary nephropathy (also known as Alport syndrome in people) for potential future use in prospective studies (Role: PI).

Pending Support - None