

Joseph C. Glennon, VMD, DACVS
1641 Main Street
Pattersonville, NY 12137
518 887-2260
jcg@veterinaryspecialties.com

Education:

- 1980-1984: University of Pennsylvania
School of Veterinary Medicine
Philadelphia, Pennsylvania
Veterinary Medical Doctor (VMD)
- 1984-1985: The Animal Medical Center
New York, New York
Certificate of Internship (Medicine and Surgery)
- 1985-1988: Cornell University
College of Veterinary Medicine
Ithaca, NY
Certificate of Residency (Surgery)
- 1994: Diplomate, American College of Veterinary Surgeons
Board Certified Veterinary Surgeon

Honors and Awards:

- 1984 Dean's List
Graduated Cum Laude
Upjohn Award for Clinical Proficiency
- 1988: Norden Award for Outstanding Resident

Professional Associations:

- American Veterinary Medical Association (AVMA)
- American College of Veterinary Surgeons (ACVS)
- Veterinary Orthopedic Society (VOS)
- North American Spine Society (NASS)
- American Canine Sports Medicine Society

New York State Veterinary Medical Society (NYSVMS)

Capital District Veterinary Medical Association (CDVMS)

Clinical Services:

- 1990- Present: Director and Staff Surgeon, Veterinary Specialties Referral Center
Pattersonville, NY.
- 2000-Present: Co-Investigator and consultant, Albany Medical College and Rensselaer
Polytechnic Institute, Albany, NY.
- 2009-Present: Adjunct Associate Professor of Surgery, Albany Medical College, Albany,
NY.

Publications:

1. Baum T, Vander Vliet, Glennon JC. Captopril, alone and in combination with hydrochlorothiazide, on responses to upright tilt in conscious dogs. Arch Int Pharmacodyn Ther. 1981 Jul;252(1):139-46.
2. Baum T, Vander Vliet G, Glennon JC, Novak PJ. Antihypertensive and orthostatic responses to drugs in conscious dogs. J Pharmacol Methods. 1981 Aug;6 (1): 21-32.
3. Gould WJ, Yaegar AE, Glennon JC. Surgical correction of an intestinal obstruction in a turtle. J Am Vet Med Assoc. 1992 Mar 1; 200(5): 705-6.
4. Matthiesen DT, Clark GN, Orsher RJ, Pardo AO, Glennon JC. En Bloc resection of primary rib tumors in 40 dogs. Vet Surg. 1992 May-Jun;21(3):201-4.
5. Glennon JC, Flanders JA. Decreased incidence of postoperative urinary incontinence with a modified Penrose drain technique for treatment of prostatic abscesses in dogs. Cornell Vet. 1993 July; 83 (3): 189-198.
6. Glennon JC, Flanders JA, Beck KA, Trotter EJ, Erb HN. The effect of long-term bone plate application for fixation of radial fractures in dogs. Vet Surg. 1994 Jan-Feb; 23 (1);40-7.
7. Ledet EH, Carl AL, Glennon JC, Jeshuran W, De Deyne P, Belden C, Shaffrey C. Small Intestinal Submucosa for Anular Repair: Long Term Response in an In Vivo Sheep Model. The Spine Journal 2007; 7(5S):57S.
8. Ledet EH, Carl AL, Glennon JC, Jeshuran W, De Deyne P, Belden C. Small Intestinal Submucosa for Anular Repair: Long Term Response In An In Vivo Sheep Model. Spine, 2009; 34(14):1457-63.

9. Sanders GP, Linley S, Ramsey D, Abbott R, Puzas JE, Glennon JC, DiRisio DJ, Lawrence J, Carl AL, Ledet EH. Effects of Chronic Cyclic Loading on the Lumbar Spine: An In Vivo Pilot Study. *The Spine Journal* 2009; 9(10S):26S-7S.
10. Sanders GP, Linley S, Ramsey DS, Abbott R, Puzas JE, Glennon JC, DiRisio DJ, Belden C, Ledet EH. The Effects of Chronic Cyclic and Static Loading on the Rabbit Lumbar Spine: An In Vivo Pilot Study. *Proceedings of the 55th Annual Meeting of the Orthopaedic Research Society, Las Vegas, NV. February 22-25, 2009:256.*
11. Sanders GP, Linley S, Brule E, Vandeventer E, VanEtten B, Colloggi K, Glennon JC, DiRisio DJ, Lawrence J, Vanderzanden J, Ledet EH. Disc Height Reduction and Recovery after Cyclic Compression in an In Vivo Rabbit Model. *Proceedings of the 56th Annual Meeting of the Orthopaedic Research Society, 2010. Abstract #: 2953.*
12. Grabowsky MBM; Pallotta NA; Connelly MW; Van Etten B; MacDonald RA; Alley M; Glennon JC; Dubin AH; German JW; Uhl RL; Ledet EH. The Potential Role of Extensor Muscle Fatigue in the Onset of Intervertebral Disc Degeneration: a Novel In Vivo Model. *The Spine Journal* 2010; 10(9S):74S-5S.
13. Grabowsky MBM, Pallotta NA, Connelly MW, Van Etten B, MacDonald RA, Alley M, Glennon JC, Dubin AH, German JW, Uhl RL, Ledet EH. Extensor Muscle Fatigue and Intervertebral Disc Degeneration: An In Vivo Study. *The Albany Medical College Orthopaedic Journal*, 2010; 2:40-7.
14. Helder CW, Grabowsky MB, Wachs RA, Leimer E, Cole K, Dubin A, Glennon JC, Ledet EH. Behavior Compensation Reduces Loads in the Cervical Spine Measured With a Force-Sensing Implant. *Proceedings of the 37th Annual Northeast Bioengineering Conference. Troy, NY. April, 2011.*
15. Ledet EH, Helder CW, Grabowsky MB, Wachs RA, Leimer E, Cole K, Dubin A, Glennon JC. Factors that Affect Loading in the Spine In Vivo As Measured with a Novel Force-Sensing Implant. *Proceedings of the 2011 Annual Meeting of the Biomedical Engineering Society. Hartford, CT. October, 2011.*
16. Linley SE, Mastropolo R, Lawrence JP, Glennon JC, DiRisio DJ, Roberts TT, Ledet EH. Forced Convection Enhances Net Transport to the Intervertebral Disc In Vivo. *The Spine Journal* 2012; 12(9S):70S.
17. Linley SE, Peterson J, Mastropolo R, Lawrence JP, Lopes L, Glennon JC, Ledet EH. The Effects of Nimodipine and Nicotine on Diffusion Into the Intervertebral Disc In Vivo. *The Spine Journal* 2012; 12(9S):138S-9S.
18. Wachs RA, Graboswky MBM, Glennon JC, Ledet EH. In Vivo Loads in the Cervical Spine: A Preliminary Investigation Using a Force Sensing Implant. *The Spine Journal* 2012; 12(9S):S141.
19. Linley SE, Peterson J, Mastropolo R, Roberts TT, Frank S, Glennon JC, Lawrence JP, Ledet EH. Net Transport in the Intervertebral Disc Is Dependent on Mechanical Loading Rate. *The Spine Journal* 2013; 13(9S):S55.
20. Gullbrand SE, Peterson J, Ahlborn J, Mastropolo R, Fricker A, Roberts TT, Abousayed M, Lawrence JP, Glennon JC, Ledet EH. Dynamic Loading Induced Convective Transport

Enhances Intervertebral Disc Nutrition. Accepted to Spine, December, 2014. Manuscript # SPINE-IP1433.

Awarded 2015 ISSLS Prize for spine research.

Wachs RA, Michna V, Cropp A, Drazan JF, Healey CP, Peterson JM, Gullbrand SE, Glennon JC, Dubin A, DiRisio DJ, Ledet EH. Real Time In Vivo Forces in the Cervical Spine Correlate to Muscle Activation Patterns: A Preliminary Study. Submitted to Clinical Biomechanics, August 2015. Manuscript # CLBI-S-15-00547.

Ongoing Research Support:

Implementation of an Elementary and Robust Implantable Sensor for Musculoskeletal Personalized Medicine. 03/01/13 – 02/28/15

NIH 1 R21 AR063285-01A1.

Role: Consultant. (PI: Eric Ledet)

Major goal: Measuring in vivo forces in the cervical spine during spinal fusion and during normal dynamic activities in a large animal model.

Completed Research Support:

Evaluation of the Safety and Efficacy of the DePuy Spine Cervical Disc: An In-Vivo Sheep Model. 06/01/04 – 08/31/05

Sponsored By DePuy Spine.

Major goal: To determine the histological response and changes in biomechanics following placement of a cervical total disc replacement in a sheep.

Role: Consultant (PI: Michael Tymeson)

Discal Cryosurgery – Pilot Study in the Caprine Lumbar Spine. 07/15/03 – 03/31/04

Sponsored by DePuy Acromed, Inc.

Major goal: To determine the effects of cryoablation on the intervertebral disc and spinal cord in an in vivo animal model.

Role: Consultant (PI: Eric Ledet)

The Effectiveness of Small Intestinal Submucosa for Spinal Ligament Repair. 12/01/00 – 11/30/01

Sponsored by DePuy AcroMed.

Major goal: To determine the mechanistic cascade of events following implantation of SIS patches and resulting in ligament regeneration in a goat model.

Role: Consultant (PI: Eric Ledet)

Efficacy of Small Intestinal Submucosa for Repair of Anular Defects – Efficacy in the Sheep Lumbar Spine. 08/01/05 – 10/31/06

Sponsored By DePuy Biologics

Major goal: To study in an in vivo model, the efficacy of repairing and regenerating the annulus following discectomy.

Role: Consultant (PI: Eric Ledet)

Restoration of Intervertebral Disc Diffusion by Nimodipine Administration. 07/01/11 – 06/30/13
Orthopaedic Research and Education Foundation Young Investigator Grant.

Major goal: Quantify the effects of daily nimodipine administration on subchondral microvasculature and trans-endplate diffusion.

Role: Consultant (Co-PI: James Lawrence, Eric Ledet) Identifying the Early Effects of Mechanical Loading on the Lumbar Spine Using A Novel *In Vivo* Animal Model: Sanders GP; Linley S; McCallum S; Brule E; Vandeventer E; Leimer E; VanEtten B; Colloggi K; Puzas JE; Sowa GA; Lotz JC; Vanderzanden J; Glennon JC; DiRisio DJ; Lawrence JP; Ledet EH. Submitted to the North American Spine Society, 25th Annual Meeting Orlando Florida. October 5-9, 2010.

The Potential Role of Extensor Muscle Fatigue in the Onset of Intervertebral Disc Degeneration: a Novel *In Vivo* Model: Grabowsky MBM; Pallotta NA; Connelly MW; Van Etten B; MacDonald RA; Alley M; Glennon JC; Dubin AH; German JW; Uhl RL; Ledet EH. Submitted to the North American Spine Society, 25th Annual Meeting Orlando Florida. October 5-9, 2010.

T1 Relaxation Maps in the Rabbit Lumbar Spine after Chronic Cyclic Loading *In Vivo*: Identifying Early Signs of Intervertebral Disc Degeneration: Sanders GP; Linley S; McCallum S, Brule E; Vandeventer E; VanEtten B; Colloggi K; Glennon JC; DiRisio DJ; Lawrence J; Vanderzanden J; Ledet EH. Submitted to the Orthopedic Research Society, 56th Annual Meeting New Orleans, Louisiana. March 6-9, 2010.

Disc Height Reduction and Recovery after Cyclic Compression in an *In Vivo* Rabbit Model: Sanders GP; Linley S; Brule E; Vandeventer E; VanEtten B; Colloggi K; Glennon JC; DiRisio DJ; Lawrence J; Vanderzanden J; Ledet EH. Submitted to the Orthopedic Research Society, 56th Annual Meeting, New Orleans, Louisiana. March 6-9, 2010.

Effects of Chronic Cyclic Loading on the Rabbit Lumbar Spine: Histologic and Gene Expression Analysis: Sanders GP; Linley S; Puzas JE; Sowa GA; Lotz JC; Vanderzanden J; Glennon JC; DiRisio DJ; Lawrence JP; Ledet EH. Submitted to the Orthopedic Research Society 56th Annual Meeting New Orleans, Louisiana. March 6-9, 2010.

A Novel Model for Studying the Effects of Muscle Fatigue on the *In Vivo* Biomechanics of the Spine: Grabowsky MBM, Pallotta NA, Fiorella DL, Glennon JC, Dubin A, German JW, Uhl RL, Van Etten BR, Ledet EH. Submitted to the 55th Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009.

Effects of Chronic Cyclic and Static Loading on the Rabbit Lumbar Spine: An *In Vivo* Pilot Study Sanders GP, Linley S, Ramsey DS, Abbott R, Puzas JE, Glennon JC, DiRisio DJ, Belden C, Ledet EH. Submitted to the 55th Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009.

Intervertebral Disc Height Reduction and Recovery after Cyclic Compression in an *In Vivo* Rabbit Model. Sanders GP, Abbott R, Ramsey DS, Linley S, Glennon JC, DiRisio DJ, Ledet EH. Submitted to the 55th Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009.

A Novel *In Vivo* Model to Study the Effects of Chronic Cyclic Loading in the Lumbar Spine. Sanders GP; Ramsey DS; Glennon JC; DiRisio DJ; Ledet EH. Submitted to the 55th Annual Meeting of the Orthopaedic Research Society. Las Vegas, NV. February 22-25, 2009.

Small intestinal submucosa for anular repair: Long term response in an *in vivo* sheep model.
Ledet EH, Carl AL, Glennon JC, Jesuran W, Belden C. Spine. 2009 34 (14), 1457-1463.

Book Chapters:

Megacolon: In Small Animal Surgery Secrets. 2nd Edition. Harari, J. Elsevier 2003.

Bone grafting: In Small Animal Surgical Secrets. Harari J. Editor. Elsevier 2000.

Osteochondrosis: In Small Animal Surgical Secrets. Harari J. Editor. Elsevier 2000.

Osteochondrosis: In Clinical Veterinary Advisor. Cote E. Editor. Mosby 2007, 2011, 2013, 2015.

Bone grafting: In Clinical Veterinary Advisor: Cote E. Editor Mosby 2007, 2011.

Projects (unpublished):

Sclerosis of subchondral bone in the lumbar spine. Pathway to disc degeneration.
Carl AL, Ledet EH, Glennon JC, DiRisio D. Albany Medical College, Albany NY and Rensselaer Polytechnical Institute, Troy, NY 2006

Assessment of Soft Tissue Healing Following Grade 3 Open Tibial Fracture and Treatment with Platelet Rich Plasma. Ledet EH, Tymeson MP, Hospodar PP, Uhl RL, Glennon JC, Kallakury B. Albany Medical College Albany, NY. 2003

Seminars:

Anterior Cruciate Ligament Surgery in the Canine Patient. Orthopedic Grand Rounds, Capital Region Orthopedic Group. May 23, 2007

Tibial Tuberosity Advancement 2. Kyon Orthopedic Seminar, Boston, MA August 2014

Patella Groove Replacement. Kyon Orthopedic Seminar, Boston, MA August 2014

Tibial Tuberosity Advancement 2. Kyon Orthopedic Seminar, Boston, MA January 2015

Tibial Tuberosity Advancement 2. Kyon-ACVS symposium, Nashville TN October 2015