

# CURRICULUM VITAE

## Lynelle Graham, DVM, MS, Diplomate ACVAA, CVA, CertAVCA

Work Address Associate Clinical Professor of Anesthesiology/Pain Management/Integrative Medicine  
North Carolina State University College of Veterinary Medicine  
1060 William Moore Drive, Raleigh, NC 27607-4065  
Veterinary Hospital (general line): 919-513-6500

---

### Education & Training

Residency & Master of Science in Anesthesiology	University of Minnesota CVM	1996-99
Rotating Small Animal Internship	Mississippi State CVM	1995-96
Doctor of Veterinary Medicine	University of Minnesota CVM	1991-95
Northeastern University Study Abroad Program	Nairobi, Kenya	1991
Bachelor of Science in Molecular Biology, cum laude	Grove City College, Grove City, PA	1987-1991

### Professional Appointments, Specialty Certifications & Professional Activities

Diplomate, American College of Veterinary Anesthesia and Analgesia – DACVAA		2003-present
-Associate Clinical Professor of Anesthesiology & Pain Management, NCSU CVM		2019-present
-Adjunct Clinical Professor of Anesthesiology & Pain Management, University of Illinois		2017-2020
-Associate Clinical Professor of Anesthesiology & Pain Management, University of Illinois		2016-2017
-Clinical Professor of Anesthesiology, University of Minnesota CVM		2011-2016
-Associate Clinical Professor of Anesthesiology, University of Minnesota CVM		2004-2011
-Assistant Clinical Professor of Anesthesiology, University of Minnesota CVM		1999-2004
Locum Veterinary Anesthesiologist	-University of Minnesota CVM	2018, 2021
	-University of Illinois CVM	2015, 2018-19
	-North Carolina State University CVM	2018-19
	-Oregon State University CVM	2018
	-University of Georgia CVM	2017-18
	-Veterinary Anesthesia Specialists, Portland, OR	2017-18
	-The Ohio State University CVM	2016, 2018
	-Ontario Veterinary College (Guelph)	2016
	-MedVet Medical & Cancer Center, Cincinnati, OH	2015
	-University of Saskatchewan CVM	2014
	-Washington State University CVM	2013
Certified Veterinary Acupuncture Therapist – CVAT (Canine Rehabilitation Institute), <i>in process</i>		2020-21
Certified Canine Rehabilitation Therapist – CCRT (Canine Rehabilitation Institute)		2017-present
Certified in Animal Chiropractic – CertAVCA (American Veterinary Chiropractic Association)		2002-present
Certified Veterinary Acupuncturist – CVA (IVAS-International Veterinary Acupuncture Society)		1999-present

### State & Provincial Licensure

North Carolina (#8120, <b>active</b> )	Georgia (#VETF000803, academic, inactive)
Minnesota (#08094, <b>active</b> )	Mississippi (#F185; academic, inactive)
USDA National Accreditation (NAN #091155, <b>active</b> )	Ohio (#VET 50164; academic, inactive)
Ontario (#64829, academic, inactive)	Oregon (#7826, inactive)
Saskatchewan (#2435, academic, inactive)	Washington (#VT60782898, inactive)

## Awards and Honors

2006-07 Professional and Administrative Staff Special Compensation for Support of University Strategic Initiatives  
2003 Small Animal Clinical Sciences (SACS) Department Excellence in Clinical Teaching Award  
2001& 1998 Selected to place Doctoral Hoods on the University of Minnesota CVM Graduating DVM Classes  
2000 Teaching Awards from the University of Minnesota CVM Classes of 2001 & 2002  
1999 Teaching Award from the University of Minnesota College of Veterinary Medicine Class of 2001  
1997-98 Resident Award for Excellence in Clinical Teaching at the University of Minnesota CVM  
1998 University of Minnesota College of Veterinary Medicine Graduate Student Travel Award  
1995 Fenway Award in recognition of a professional interest in canine medicine/surgery and a demonstration of concern and excellent care for the animal patient and human companions  
1995 H.C.H. Kernkamp Veterinary Student Award for student contributions to the profession  
1995 Auxiliary to the American Veterinary Medicine Association Award  
1995 University of Minnesota College of Veterinary Medicine Alumni and Friends Society Scholarship  
1995 International Programs Committee Fellowship Award for International Study  
1994-95 SCAVMA/International Veterinary Students' Association Scholarship  
1994 University of Minnesota College of Veterinary Medicine Student Council Award for leadership in extracurricular activities and service to the University, the College and the community

## Teaching Chronicle

### North Carolina State University CVM

VMB 977 Anesthesia: Clinical Rotation

65% clinical assignment to anesthesiology = 34 weeks/year (+)

15% clinical assignment to integrative medicine = 7-8 weeks/year

VMB 991 Advanced topics in Anesthesia (selective, spring), 2 lectures, 2 labs

VMB 900 Vet Pain: Physiology and Clinical Problems for 3<sup>rd</sup> year students, 1 lecture + Moodle discussions

VMC 957 Feline OHE/neuter laboratory for 3<sup>rd</sup> year students, ~4 labs/semester

VMC 932 Canine OHE/neuter laboratory for 2<sup>nd</sup> year students, ~2 labs/semester

VMC 937 Laboratory (PE, U/S) for 1<sup>st</sup> year students, ~2 labs/semester

BIT 402/502 Biotechnology Networking & Professional Development-mock interview 2x/year

Veterinary Anesthesia and Analgesia Club (VAAC) – lunchtime discussions with 1<sup>st</sup>-3<sup>rd</sup> year students – 1x/year

Weekly Journal Club in Veterinary Anesthesia for House Officers - coordinator (2020-present)

Anesthesiology & morbidity/mortality discussions; attend weekly, present 2-3x/y, maintain e-resources

Weekly Advanced Topic Rounds in Veterinary Anesthesia for House Officers - coordinator (2020-present)

Resident board review of rotating topics, including current and classic literature, cardiopulmonary physiology, anesthetic/analgesic drug pharmacology, uptake/distribution of anesthetic agents, physics of anesthesiology, and species-specific concerns; attend weekly, maintain schedule, maintain e-resources

### University of Illinois CVM:

VM 609 Medicine and Surgery; Anesthesiology subset (8 lectures), 2015-2018

VM 605 Veterinary Pharmacology; Anesthesiology subset (2 lectures), 2017

VCM 592 Special Problems in Veterinary Anesthesia (2015-2018)

Anesthesiology journal club and morbidity/mortality discussions; attend weekly and present ~4x/year

VCM 593 Advanced Topics in Veterinary Anesthesia; (2015-2018, course coordinator 2016-2017)

Resident review of rotating topics, including current literature, focusing on general review, cardiopulmonary physiology, drug pharmacology, physics of anesthesiology, equine anesthesiology, uptake/distribution of anesthetic agents

### University of Minnesota CVM:

VMED 8793 Seminars in Veterinary Anesthesiology; Course Coordinator, 2004-2015

CVM 6662 Comparative Anesthesiology; 4<sup>th</sup> year Clinical Rotation Coordinator, 2004-2014

CVM 6494 Advanced Small Animal Anesthesia (6-8 lectures), 1999-2015

CVM 6805 Large/Production Animal Anesthesia (2 lectures plus 1 lab), 1999-2016

CVM 6321 Principles of Anesthesia and Critical Care Medicine (8-10 lectures plus 6-8 labs), 1999-2015

CVM 6690 Introduction to Integrative Medicine (2-6 lectures plus 2-3 labs); Course Coordinator, 2003-10

CVM 6505 Directed Studies Complementary/Integrative Medicine, 1999-2004

## **Graduate Students / Residents / Specialty Interns**

Amber Wallace, DVM	-anticipated completion 2023
Jessica Briley, DVM	-anticipated completion 2022
Wen Wang, DVM	-anticipated completion 2022
GianLuca Bini, DVM	-anticipated completion 2021
Matthew Milloway, DVM, DACVAA	-completed 2020
Felipe Martins, MV, MS	-completed 2020 (U IL; MS degree/residency)
Danielle Strahl-Heldreth, DVM, MS, DACVAA	-completed 2019 (U IL; MS degree/residency)
Adrianna Sage, DVM, MS, DACVAA	-completed 2019 (U IL; MS degree/residency)
Hilary Shipley, DVM, DACVAA	-completed 2018 (U M; residency)
Elizabeth Goudie, DVM, MS, DACVAA	-completed 2016 (U M; residency)
Lindsey (Mathews) Murphy, DVM, MS	-completed 2012 (U M; MS degree/residency)
Daniel Almeida, MV, MS, DACVAA	-completed 2012 (U M; MS degree/residency)
Tiffany Granone, DVM, MS, DACVAA	-completed 2011 (U M; MS degree/residency)
Maria Killos, DVM, MS, DACVAA	-completed 2008 (U M; MS degree/residency)
Carolina Ricco, MV, MS, DACVAA	-completed 2007 (U M; MS degree/residency)
Alonso Guedes, MV, MS, PhD, DACVAA	-completed 2006 (U M; PhD degree/residency)

## **Professional Service:**

### Memberships in Professional and Scientific Societies:

American College of Veterinary Anesthesia and Analgesia, Diplomate (DACVAA); 2003-present  
American Veterinary Medical Association (AVMA), 1995-present  
American Holistic Veterinary Medical Association (AHVMA), 2004-present  
American Academy of Veterinary Acupuncture (AAVA), 2000-present  
International Veterinary Acupuncture Society (IVAS), 1999-present  
American Veterinary Chiropractic Association (AVCA), 2001-present  
College of Integrative Veterinary Medicine (CIVT), 2016-present  
North American Veterinary Anesthesia Society (NAVAS), 2018-present  
International Veterinary Academy of Pain Management (IVAPM), 2003-2010, 2014-present  
North Carolina Veterinary Medical Association (NCVMA), 2019-present  
Minnesota Veterinary Medical Association (MVMA), 1994-2006, 2014-2016  
Veterinary Emergency & Critical Care Society, 1996-2014  
Veterinary Botanical Medical Association (VBMA), 2003-2008

### External Academic and Administrative Service:

American Academy of Veterinary Acupuncture (AAVA)  
-Board of Directors: 2009-12 & 2016-17; Vice President 2017-18; President 2018-19; Past President 2019-20  
-AVMA House of Delegates (HOD) representative for the AAVA 2020-23  
American College of Veterinary Anesthesia and Analgesia (ACVAA)  
-Board of Directors, 2005-09; Exam Committee, 2006-09; Director for Residency Program, 2005-2016;  
-American Board of Veterinary Specialties (ABVS) alternate representative, 2006-08  
-Committee on Residency Standards, 2004-06; Liaison to Academy of Veterinary Technician Anesthetists (AVTA), 2004-06  
Ad-hoc Reviewer for JAVMA; AJVR; VAA; Vet Dermatology; Clinician's Brief; Mississippi State University CVM 'expert in field' intramural grant reviewer  
International Veterinary Acupuncture Society (IVAS) Teaching Associate for Basic Course; 2008  
American Holistic Veterinary Medical Association (AHVMA) Student Chapter Faculty Advisor, 1999-2013  
Veterinary Emergency & Critical Care Society (VECCS) Student Chapter Faculty Advisor, 1997-99

### Internal Committees & Academic Service:

NCSU: Search committee, assistant & associate clinical professors in anesthesiology, 2021-22  
CVM Admissions committee, 2021-24

CVM Non-Resident CVM Student Applicant Welcome Weekend, MBS volunteer, 2020  
UMN CVM: Section Chief, Anesthesiology, 2002, 2004-06, 2008-10, 2011-12, 2013-2014  
Member of UMN CVM Graduate Faculty; 2003-16  
Promotions and Tenure (P&T) Committee, UMN CVM; 2011-16  
Residency/Post Graduate Training Committee; 2008-15  
Clinical Emergency/Criticalist Search Committee; 2013-14  
Clinical Anesthesiologist Search Committees; 2000, 2003, 2005, 2007, 2009, 2011  
Anesthesiology Resident Search Committee; 2000, 2001, 2004, 2005, 2007, 2008, 2012  
Clinical Ophthalmologist Search Committees; 2003, 2005, 2009  
Mentoring Committee for Assistant Professors; 2009-2010  
Academic Programs Committee; 2006-2009  
Outreach/Professional Service/Continuing Education Merit Review Committee, 2001-06  
CT planning Committee; 2012-2013  
POCT (Point of Care Testing) Committee; 2011-14  
Clinical Management Committee (CMC); 2002, 2004-06

## Professional Publications and Research

### Chapters & Reviews:

1. **Graham L.** From the Page to the Patient (FPTP) for Clinician's Brief, 2021
2. **Graham LF**, Boudreaux MA, Marsden SP. Integrative Pain Management, in *Pain Management in Veterinary Practice*; edited by Egger CM, Love L and Doherty T; Wiley Blackwell, 2014
3. Malone EM, **Graham LF**. Management of Gastrointestinal Pain. *Vet Clin North Amer* (Equine) 18(1):133-150, 2002

### Original Papers in Refereed Journals (\*senior lead author reflected as last name listed):

1. Hovda T, Love L, \***Graham LF**. Anesthesia Case of the Month, sponsored by the ACVAA: Rapid progression of suspected idiopathic ventricular arrhythmias (IVA) in a German Shepherd dog under anesthesia. *Journal of the American Veterinary Medical Association*. (submitted)
2. Cassady K, Balko J, Scharf V, Briley J, Slead T, \***Graham LF**. Anesthesia Case of the Month, sponsored by the ACVAA: Successful rapid resolution of acute endotracheal tube obstruction by a blood clot following nasopharyngeal polyp removal in a pediatric feline. *Journal of the American Veterinary Medical Association* 259:3; 251-4; August 2021 <https://doi.org/10.2460/javma.259.3.251>
3. Keating SCJ, Fries R, Kling K, **Graham LF**, Clark-Price SC, Schaeffer DJ. Effect of methadone or hydromorphone on cardiac conductivity in dogs before and during sevoflurane anesthesia. *Frontiers in Veterinary Science*; September 2020.7:573706. <https://doi.org/10.3389/fvets.2020.573706>
4. Shipley H, Guedes A, **Graham L**, Goudie-DeAngelis E, Wendt-Hornickle E. Preliminary appraisal of the reliability and validity of the Colorado State University Feline Acute Pain Scale. *Journal of Feline Medicine and Surgery*. 21:4; 335-39; April 2019
5. Strahl-Heldreth DE, Clark-Price SC, Keating SCJ, Escalante GC, **Graham LF**, Chinnadurai, SK, Schaeffer DJ. Effect of intracoelomic administration of alfaxalone on the righting reflex and tactile stimulus response of common garter snakes (*Thamnophis sirtalis*). *American Journal Veterinary Research*. 80:2; 144-151; February 2019
6. Murphy (Mathews) LA, Barletta M, **Graham LF**, Reichl LJ, Duxbury MM, Quandt JE. Comparison of the cardiovascular effects and propofol induction dose of dogs premedicated with either acepromazine or trazodone undergoing general anesthesia for orthopedic procedures, *Journal of the American Veterinary Medical Association*. 250:4; 408-416; February 2017
7. Goudie-DeAngelis E, Wendt-Hornickle EL, Almeida DC, Murphy LA, \***Graham LF**. Anesthesia Case of the Month: Pulmonary Thromboemboli. *Journal of the American Veterinary Medical Association*. 249:12; 1360-1364; December 2016
8. Almeida D, Barletta M, Mathews L, **Graham L**, Quandt J. Clinical comparison between invasive blood pressure and a non-invasive blood pressure monitor in anesthetized sheep. *Research in Veterinary Science*, 97(3): 582-6; December 2014

9. Mathews LA, Barletta M, Almeida DC, **Graham LF**, Quandt JE. Evaluation of serial venous and arterial lactate values in healthy sheep undergoing ovariectomy during general anesthesia. *Veterinary Anaesthesia and Analgesia*, 41(5): 498-505; September 2014
10. Ricco CH, Shih A, Killos MB, Henao-Guerrero N, **Graham L**. Different volumes of injectate using electro-stimulator and blinded techniques for brachial plexus block in dogs. *Veterinary Record*, 173 (24): 608-11; December 2013
11. Granone T, Nicholas O, Killos M, Quandt J, \***Graham L**. Comparison of three different inhalant anesthetic agents (isoflurane, sevoflurane, desflurane) in red-tailed hawks (*Buteo jamaicensis*). *Veterinary Anaesthesia and Analgesia*; 39:1; 29-37; January 2012
12. Mathews L, Killos M, \***Graham L**. Anesthesia Case of the Month: cardiac arrest secondary to profound vagal stimulation. *Journal of the American Veterinary Medical Association*. 239:3; 307-310; August 2011
13. Killos M, **Graham L**, Lee J. Comparison of two anesthetic protocols for feline blood donation. *Veterinary Anaesthesia and Analgesia*. 37:3; 230-239; May 2010
14. Ricco CH, Quandt JE, Novo RE, Killos M, \***Graham L**. Use of a wireless system to measure invasive arterial blood pressure in ponies – preliminary study. *Veterinary Anaesthesia and Analgesia*. 36:1; 1 – 8; January 2009
15. Killos M, \***Graham LF**: Anesthesia Case of the Month: anesthetic side effects secondary to intraoperative topical ocular phenylephrine. *Journal of the American Veterinary Medical Association*. 230:12; 1812-1814; June 2007
16. Ricco CH, \***Graham LF**: Undiagnosed diaphragmatic hernia — the importance of preanesthetic evaluation. *Canadian Veterinary Journal*. 48:6; 615–618; June 2007
17. Rassmussen LM, Lipowitz A, **Graham LF**. Development and verification of saphenous, tibial and common peroneal nerve block techniques for analgesia below the thigh in the non-chondrodystrophoid dog. *Veterinary Anaesthesia and Analgesia*. 33:1; 36-48; January 2006
18. Rassmussen LM, Lipowitz A, **Graham LF**. Controlled, clinical trial assessing saphenous, tibial and common peroneal nerve blocks for the control of perioperative pain following stifle surgery in the non-chondrodystrophoid dog. *Veterinary Anaesthesia and Analgesia*. 33:1; 49-61; January 2006
19. **Graham LF**, Torres SMF, Horne KL, Jessen CR, Hendrix PK: The effect of propofol induced sedation on intradermal test reactions in dogs with atopic dermatitis. *Journal of Veterinary Dermatology* 14; 167-176, 2003

#### Scientific Abstracts:

1. Strahl-Heldreth DE, Clark-Price SC, Keating SCJ, **Graham LF**, Chinnadurai, SK. The effect of intracelomic alfaxalone on the righting reflex and response to Semmes-Weinstein monofilaments in the common garter snakes (*Thamnophis sirtalis*); Presented at the American College of Veterinary Anesthesiologists Annual Meeting; Nashville, TN; September, 2017 (*Veterinary Anaesthesia and Analgesia*, 44:5;1262.e4; September 2017 <http://dx.doi.org/10.1016/j.vaa.2017.09.008>)
2. Sage AM, Keating SC, Lascola KN, **Graham LF**, Schaeffer D, Clark-Price SC. Evaluation of total intravenous anesthesia with ketamine-xylazine combined with either midazolam or high or low dose propofol in horses: cardiopulmonary effects and recovery characteristics; Presented at the American College of Veterinary Anesthesiologists Annual Meeting; Nashville, TN; September, 2017 (*Veterinary Anaesthesia and Analgesia*, 44:5;1262.e2; September 2017 <http://dx.doi.org/10.1016/j.vaa.2017.09.005>)
3. Goudie-DeAngelis E, **Graham LF**, Snyder C, David F. Improved accuracy of Inferior Alveolar Nerve Block (IANB) is achieved with intraoral approach in canine cadavers; Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; Washington, DC; September, 2015 (*Veterinary Anaesthesia and Analgesia*, 42:6;A65; November 2015)
4. Mathews LA, Almeida DC, Barletta M, **Graham LF**, Quandt JE. Evaluation of serial venous and arterial lactate values in healthy sheep undergoing ovariectomy during general anesthesia; Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; Nashville, TN; September, 2011 (*Veterinary Anaesthesia and Analgesia*, 39:4; 17; July 2012)

5. Mathews LA, Reichl LJ, **Graham LF**, Duxbury MM, Quandt JE. Comparison of the cardiovascular effects of acepromazine versus trazodone as premedications in dogs anesthetized for TPLO or TTA surgical procedures; Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; Nashville, TN; September, 2011 (*Veterinary Anaesthesia and Analgesia*, 39:4; 1; July 2012)
6. Mathews L, \***Graham L**. Vagally mediated cardiac arrest and successful CPR in a French Bulldog; Proceedings of the International Veterinary Emergency and Critical Care Society (IVECCS); San Antonio, TX; September, 2010
7. Granone T, **Graham L**, Quandt J, Nicholson A. A fatal cardiac lesion in a horse; Proceedings of the International Veterinary Emergency and Critical Care Society (IVECCS); Chicago, IL; September, 2009
8. Ricco CH, Killos MB, **Graham LF**. Comparison of two techniques for performing brachial plexus blockade in anesthetized dogs using low and high volumes of methylene blue; Proceedings of the 10<sup>th</sup> World Congress of Veterinary Anaesthesia, Glasgow UK; August-September 2009 (*Veterinary Anaesthesia and Analgesia*, 37:3; 1-88; May 2010)
9. **Graham L**. Changes in anesthetic monitoring parameters observed in acute gastrointestinal perforation during feline gastroduodenoscopy (6 cases, 1995-2006); Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; New Orleans, LA; September, 2007 (*Veterinary Anaesthesia and Analgesia*, 35:6; 1-18; November 2008)
10. Ricco C, Quandt J, **Graham L**, Novo R. Use of an implantable blood pressure monitor, Physiotel PA-C40®, to assess arterial blood pressure during anesthetic induction, maintenance and recovery in ponies; Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; New Orleans, LA; September, 2007 (*Veterinary Anaesthesia and Analgesia*, 35:6; 1-18; November 2008)
11. Ricco C, Quandt J, **Graham L**, Novo R. Use of an implantable blood pressure monitor, Physiotel PA-C40®, to assess arterial blood pressure in anesthetized ponies-surgical technique and complications; Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; New Orleans, LA; September, 2007 (*Veterinary Anaesthesia and Analgesia*, 35:6; 1-18; November 2008)
12. Ricco CH, Killos MB, **Graham LF**. Comparison of two techniques for performing brachial plexus blockade in anesthetized dogs using low and high volumes of methylene blue; Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; New Orleans, LA; September, 2007 (*Veterinary Anaesthesia and Analgesia*, 35:6; 1-18; November 2008)
13. Killos M, **Graham L**. Comparison of two anesthetic protocols for feline blood donation; Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; New Orleans, LA; September, 2007 (*Veterinary Anaesthesia and Analgesia*, 35:6; 1-18; November 2008)
14. Killos M, Lee J, **Graham L**. Comparison of two anesthetic protocols for feline blood donation-preliminary results. Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; Chicago, IL; October 2006 (*Veterinary Anaesthesia and Analgesia*; 34:1; January 2007)
15. Ricco CH, Quandt JE, Novo RE, Killos M, **Graham L**. Use of a wireless system to measure invasive arterial blood pressure in ponies – preliminary study. Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; Chicago, IL; October 2006; *Veterinary Anaesthesia and Analgesia*; 34:1; January 2007)
16. Killos M, Lee J, **Graham L**. Comparison of two anesthetic protocols for feline blood donation-preliminary results. Proceedings of the World Congress of Veterinary Anesthesia, Santos, Brazil, September 2006 (*Veterinary Anaesthesia and Analgesia*; 34:4; 1-77; July 2007)
17. Ricco CH, Quandt JE, Novo RE, Killos M, **Graham L**. Use of a wireless system to measure invasive arterial blood pressure in ponies – preliminary study. Proceedings of the 2006 World Congress of Veterinary Anesthesia (WCVA); Santos, Brazil; September 2006 (*Veterinary Anaesthesia and Analgesia*; 34:4; 1-77; July 2007)
18. **Graham LF**, Farnsworth K, Cary J: The effect of yunnan baiyao on the template bleeding times and activated clotting times in healthy ponies under halothane anesthesia. Proceedings of the International Veterinary Emergency and Critical Care Society (IVECCS); San Antonio, TX; September, 2002 (*Journal of Veterinary Emergency and Critical Care*, 12:4; 279; 2002)
19. Rasmussen J, Love S, **Graham LF**: Retrieval of a Gastric Foreign Body from an Adult Komodo Monitor (*Varanus komodoensis*). Abstract in the Proceedings American Association of Zoo Veterinarians (AAZV); October, 2002

20. Tobias AH, Jacob KA, Urness M, Fine DM, **Graham LF**, Hendrix PK: Evaluation of the Modified Amplatzer Duct Occluder in Naturally Occuring Patent Ductus Arteriosus in Dogs. Abstract in the Proceedings American College of Veterinary Internal Medicine (ACVIM), Denver CO; May 2002
21. **Graham LF**, Merkel L, Hendrix PK: Comparison of Three Premedication Techniques on Passage of an Endoscope Through the Pyloric Sphincter in Dogs. Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; Dallas, TX; October, 1999 (*Veterinary Surgery*, 29:2; 132; 2000)
22. **Graham LF**, Torres S, Horne K, Hendrix PK: Effects of Propofol Induced Sedation on Intradermal Skin Testing in Dogs. Proceedings of the American College of Veterinary Anesthesiologists Annual Meeting; Orlando, FL; October, 1998 (*Veterinary Surgery*, 28:2; 126; 1999)

#### Grants:

1. Cohen E, Keenihan E, Cicci M (and Bailey K, **Graham L** – *not part of grant, but helping with project*). ACVR Resident Research Grant Award - Comparison of VIBE, PETRA and UTE MRI sequences and standard T2W, PD, and T1W MRI sequences with CT for evaluation of the canine skull; 2020 (\$7,500)
2. Keating SCJ, Fries R, Vitt J, Clark-Price SC, **Graham LF**. Effect of intravenous methadone on cardiac electrical conductivity in healthy dogs; University of Illinois College of Veterinary Medicine Companion Animal Research Grant Program - Max and Ginger Levine Endowment Fund; 2016-2020 (\$4316)
3. Clark-Price SC, Keating SCJ, **Graham L**, Evaluation of intracelomic alfaxalone in common garter snakes (*Thamnophis sirtalis*), Zoetis, 2016-2017 (\$3000).
4. Mathews LA, Almeida DC, Barletta M, **Graham LF**, Quandt JE. Evaluation of serial venous and arterial lactate values in healthy sheep undergoing ovariectomy during general anesthesia; Privately funded; 2010 (\$700)
5. **Graham L (PI)**, Mathews L, Killos M, Quandt J; The comparison of two techniques for blood donation in domestic cats; University of Minnesota College of Veterinary Medicine Small Companion Animal Research Grants; 2007-10 (\$6400)
6. Granone T, Mandsager R, Quandt J, **Graham L**; An investigation of the characteristics of isoflurane, sevoflurane and desflurane in red tailed hawks; Privately funded; 2008 (\$900)
7. **Graham L (PI)**, Killos M, Quandt J, Lee J; The comparison of two anesthetic protocols for chemical restraint of domestic cats for blood donation; University of Minnesota College of Veterinary Medicine Small Companion Animal Research Grants; 2005-07 (\$6700)
8. Ricco C, Killos M, **Graham L**; Comparison of 2 techniques for methylene blue staining of the brachial plexus in dogs; Privately funded; 2006 (\$1200)
9. Ricco C, Quandt J, Novo R, **Graham L**; Use of a wireless system to assess invasive arterial blood pressure during induction, maintenance and recovery from general anesthesia in ponies; DSI- Transoma Medical; 2006 (\$8500)
10. **Graham LF**, Farnsworth K, Cary J; The effect of yunnan baiyao on the template bleeding times and activated clotting times in healthy ponies under halothane anesthesia; Privately funded; 2000 (\$1200)
11. Tobias AH, Jacob KA, Urness M, Fine DM, **Graham LF**, Hendrix PK; Evaluation of the modified Amplatzer Duct Occluder in naturally occurring patent ductus arteriosus in dogs; AGA Medical Corporation; 1999-2001 (\$36,380)
12. **Graham LF**, Merkel L, Hendrix PK; Comparison of Three Premedication Techniques on Passage of an Endoscope Through the Pyloric Sphincter in Dogs; Privately funded; 1998-99 (\$1100)
13. **Graham LF**, Torres S, Horne K, Hendrix PK. Effects of Propofol Induced Sedation on Intradermal Skin Testing in Dogs; Privately funded; 1998-99 (\$2300)

#### **Professional Lectures, Presentations and CE**

##### Lectures by Invitation with Published Proceedings:

1. *Westside Animal Hospital Dental Education Group*, Durham NC; 2021; 2 hours; Veterinary Anesthesia for Dentistry – Updates & New Information
2. *SIAARTIVet webinars (Società Italiana Anestesia, Analgesia, Rianimazione e Terapia Intensiva)*; 2021; 2 hours; "Bulldogs, Pugs & Frenchies – oh my! How the last decade has improved our anesthesia" (Parts 1 & 2)

3. *NCSU CVM Office of CE & Outreach-April is Anesthesia Month*, Raleigh, NC; 2021; 1 hr; “A decade of literature – how can we do better with brachycephalic dogs?”
4. *VetLectures*, Whitefish, MT; 2020; 6 hours; Brachycephalic Anesthesia – NO Such Thing as “Routine” (1.5 hr); Alfaxalone vs Propofol – Should I make the switch? (1 hr); Elephants and Sharks – Capnography leveraged to its best (1 hr); The truth about what your pulse ox is REALLY telling you (1.5 hr); Clinical Pearls, Part 2 – what I’ve learned during 2 decades in the anesthesia trenches (1hr)
5. *Westside Animal Hospital Dental Education Group*, Durham NC; 2019; 2 hours; An Evening of Veterinary Anesthesia for Dentistry – Updates and Open Discussion
6. *3rd Annual Continuing Education Conference of the Veterinary Care & Specialty Group*, Chattanooga, TN; 2019; 1 hour; Brachycephalic Anesthesia – NO Such Thing as “Routine”
7. *VetLectures*, Portland, OR; 2018; 5 hours; The truth about what your pulse ox is REALLY telling you; Brachycephalics – maximizing your anesthetic success; Clinical Pearls – what I’ve learned from 2 decades in the anesthesia trenches, Chronic Pain Management – case-based discussion
8. *Veterinary Cancer Society (VCS)*, Portland, OR; 2017; 1 hour; Chronic Pain Management for Cancer Patients - maximizing quality of life
9. *10<sup>th</sup> -14<sup>th</sup> annual Introductory Veterinary Courses in Traditional Chinese Herbal Medicine*, Chicago; 2006-2010; 9-12 hours; Introduction to Herbal Medicine; Herbal Qi Tonics; Coagulation and Yunnan PaiYao; Introduction to Herbal Therapy for Analgesia/Blood Stasis; Introduction to Herbal Therapy for Yin and Yang Deficiencies; Introduction to Phlegm-busting Herbs for Analgesia; Dampness Draining Herbs and Formulas Providing Pain Relief
10. *Wild West Annual Meeting*; Reno; 2008; 6 hours; Everything You Need to Know about Yunnan Baiyao; Traditional Chinese Medical Therapies for Hematologic Disorders; Considerations for Integrative Medicine: interactions between herbs & anesthetics/analgesics; Integrative Medical Therapies for Critical Care Patients
11. *Mather’s Lecture Series*, University of Minnesota CVM; Saint Paul; 2007; 2 hours; Pulse Oximetry: Evidence vs Audience-an EBM discussion regarding pulse oximetry use within veterinary medicine and corollaries to human medicine
12. *6th Annual Holistic Veterinary Medicine Symposium*, Davis, CA; 2006; 1.5 hours; Clinical Evidence for Yunnan PaiYao
13. *SCAVMA Symposium*, Minneapolis; 2006; 2 hours; Coagulation and Yunnan PaiYao
14. *1st Annual Central Veterinary Conference-East*, Baltimore; 2006; 8 hours; Yunnan PaiYao; Acupuncture Analgesia; Herbal Pain Management; Herb-Drug Interactions; Milk Thistle Facts and Fiction
15. *World Veterinary Congress/Annual AVMA Meetings*; Minneapolis; 2005, 2 hours; Herbal Options for Chronic Pain Management
16. *American Holistic Veterinary Medical Association & Veterinary Botanical Medicine Association Annual Meetings*, Ogden, UT; 2005; 3 hours; Drug Interactions-botanicals & anesthetics, Yunnan Baiyao-Where’s the Clinical Evidence?
17. *Minnesota Association of Veterinary Technicians Annual Meeting*, Minneapolis; 2005; 2 hours; Brachycephalic Anesthesia: No Such Thing as Routine, Anesthetic Techniques for the Geriatric Patient
18. *Annual Meeting of the American College of Veterinary Anesthesiologists and International Academy of Veterinary Pain Management (IAVPM)*; Phoenix; 2004; 2 hours; Acupuncture Analgesia...how to get started in a case-based approach
19. *Milwaukee Area Veterinary Medical Association*; Milwaukee; 2004; 3 hours; Progresses in Pain Management
20. *107<sup>th</sup> Minnesota Veterinary Medical Association Annual Meeting*; Minneapolis; 2004; 1.5 hours; Anesthetic Management of the Hemorrhaging Patient
21. *University of Minnesota Fall Companion Animal Conference*, Saint Paul; 2003; 6 hours; Clinical Update on the Use of Transdermal Fentanyl Patches; Indications, Contraindications and Complications of Epidural Analgesia; Analgesic Techniques
22. *University of Minnesota Fall Equine Conference*; Saint Paul; 2003; 1.5 hours; Novel Therapies for the Hemorrhaging Horse

23. *Mather's Lecture Series*, University of Minnesota CVM, 2003 (Rochester, MN) & January 2002 (Saint Paul); Common Anesthetic Questions from the Referring Community
24. *Minnesota Veterinary Medical Association Spring Seminar*, Saint Paul; 2002; 2 hours; Complementary and Alternative Methods of Pain Management
25. *Minnesota Association of Veterinary Technicians Annual Meeting*; Minneapolis; 2001; 1 hour; Top Ten Questions about Veterinary Acupuncture
26. *Mather's Lecture Series*, University of Minnesota CVM, 2002 (Rochester) & January 2001 (Saint Paul); 2 hours; Novel Therapies for Anemia-Oxyglobin® and Chinese Herbs
27. *102nd Minnesota Veterinary Medical Association Annual Meeting*; Minneapolis; 1999; 3 hours; Brachycephalic Anesthesia; No Such Thing as Routine & Anesthetic Complications: What to do When Things DON'T go as Planned

Lectures & Presentations without Published Proceedings:

1. Iowa State CVM Student American Holistic Veterinary Medical Association (SAHVMA), 2010
2. Purdue University School of Veterinary Medicine Grand Rounds, 2009

Lay Presentations and Volunteer Opportunities:

1. "Anesthesiologists – They're not just for surgeries" by Hannah Beers for Pet Columns from the University of Illinois CVM (vetmed.illinois.edu/petcolumns), published in Pet Talk for the *Champaign Urbana News-Gazette*, March 12, 2017
2. Interview with CI Living (local daily TV show) about veterinary acupuncture; March 7, 2017 ([http://www.illinoishomepage.net/news/video/acupuncture-for-our-forever-friends\\_20170307212154/668191086](http://www.illinoishomepage.net/news/video/acupuncture-for-our-forever-friends_20170307212154/668191086))
3. Volunteer veterinary anesthesiologist (2014-18)
  - Exotic Feline Rescue Center (IN) & the Peter Emily International Veterinary Dental Foundation
  - Feral/Barn Cat Trap Neuter Release program at Glenwood Veterinary Clinic; Glenwood City, WI
4. *Northwoods Boxer Club and Rescue*; March 2006
5. *University of Minnesota CVM Mini Vet School*, "Introduction to Transfusion Medicine"; 2005
6. *Interview with Mary Hoff for integrative medicine article in The Edge*; April 2003
7. Common Client Questions about Veterinary Acupuncture / Integrative Medicine
  - Minnesota Husky Breeders Association*, Minneapolis, MN; March 2003
  - Interview with WCCO-TV, Dimension Report*; Minneapolis, MN; July 2002
  - Putting on the Dog (UMN VTH Partners)*, Saint Paul, MN; April 2002
  - Minnesota Dachshund Breeders Association*; Minneapolis, MN; April 2001

CE meetings attended:

NC Veterinary Pain Short Course with Comparative Pain Research & Education Center (virtual), 2021  
 North American Veterinary Anesthesia Society (NAVAS) Spring Symposium (virtual), 2021  
 Canine Rehabilitation Institute Certified Veterinary Acupuncture Therapist (CVAT) course; 2020-21  
 NCSU CVM Thoracic Radiology Bootcamp; 2020  
 USDA National Accreditation, plus state-specific training for North Carolina; 2020  
 Annual Meeting of the American Academy of Veterinary Acupuncture (AAVA); 2010-2013, 2017-2020  
 Annual Meeting of the American Holistic Veterinary Medical Association (AHVMA); 2005-2017, 2019  
 Canine Rehabilitation Institute Canine Pain Management & Neurology courses; 2018  
 Healing Oasis Wellness Center (HOWC) course with Dr. Pedro Rivera; 2018  
 Canine Rehabilitation Institute Canine Rehabilitation Therapist (CCRT) course; 2017  
 ACVAA Regional Anesthesia Bootcamp; Cornell University CVM, 2016  
 Healing Oasis Wellness Center (HOWC) Cranio-Sacral Therapy course; 2015  
 International Veterinary Acupuncture Society Course (CVA-IVAS); 1999, 2008 (TA), 2015 (auditor)  
 Annual Meetings of the American College of Veterinary Anesthesia & Analgesia and International Veterinary Emergency & Critical Care Society; 1996-2004, 2006-07, 2009, 2011, 2013  
 Annual Meeting of the American Veterinary Chiropractic Association (AVCA); 2008, 2011  
 Annual Introductory Veterinary Course in Traditional Chinese Herbal Medicine; 2004-2010  
 Annual Advanced Courses in Veterinary Traditional Chinese Herbal Medicine & Acupuncture; 2006-10

AVMA Veterinary Leadership Experience (VLE); 2008  
The Inner Life of Healers Seasonal Retreat Series for Health Professionals; 2004-2006  
Mindfulness Based Stress Reduction (MBSR) of the U of M Center for Spirituality and Healing; 2004  
Grant Writing Seminar, University of Minnesota; 2005, 2007  
Minnesota Society of Anesthesiologists (MSA); 2001, 2003, 2005  
Five Element & Eight Principle Theory: Translating Western Diagnoses in Disease Patterns; 2004  
Metaphorical Interpretation of Patients & Plants in Traditional Chinese Veterinary Herbal Medicine; 2004  
Association of Veterinary Acupuncturists of Canada (AVAC) Intro to Chinese Herbal Medicine; 2004  
Center for Teaching and Learning Services Teaching Enrichment Series Workshops; 2003-2004  
Advances in Pain Management; sponsored by Pfizer Animal Health and VHA; 2003  
Grant writing workshop - Getting Started as a Successful Grant Writer and Academician; 2002  
Tellington Touch Basic Seminar; 2002