

## CURRICULUM VITAE - BACKGROUND INFORMATION

A. **Name:** Gillian Jane McLellan, BVMS, PhD, DipACVO, DipECVO, DVOpthal, FARVO, MRCVS  
B. **Citizenship:** United Kingdom, United States of America  
C. **Contact Information:** [gillian.mclellan@wisc.edu](mailto:gillian.mclellan@wisc.edu); +1 (608) 314-4514

D. **Formal Education**

<b>Glasgow University Veterinary School</b>	Bachelor of Veterinary Medicine and Surgery	1990
<b>Royal College of Veterinary Surgeons, UK</b>	Certificate in Veterinary Ophthalmology	1993
<b>Royal Veterinary College, University of London, UK</b>	Alternative Residency, ECVO & RCVS	1993-2000
<b>University of London, UK</b>	PhD (Ophthalmology, Cell Biology)	1994-2000
<b>University of California, Davis</b>	Alternative Residency, ACVO	2000-2001
<b>Iowa State University</b>	Alternative Residency, ACVO	2001-2003

E. **Positions Held / Academic Appointments**

Assistant Veterinarian	Croft Veterinary Surgeons, UK	1990-1993
Clinical Assistant (Ophthalmology)	Royal Veterinary College, UK	1993-1997
Research Assistant	Royal Veterinary College, UK	1994-1997
Lecturer in Ophthalmology	Royal Veterinary College, UK	1997-2000
Temporary Lecturer	University of California, Davis, CA	2000-2001
Locum Clinician (Ophthalmology)	Royal Veterinary College, UK	2001
Clinician (Ophthalmology)	Iowa State University, Ames, IA	2001-2003
Assistant Professor (Ophthalmology)	Iowa State University, Ames, IA	2003-2006
Visiting Professor	University of Wisconsin-Madison	2005-2008
Affiliate Assistant Professor	Iowa State University, Ames, IA	2006-2007
Consultant /Member	Ocular Services on Demand (OSOD)	2007-2019
Associate Scientist / Clinical Instructor	University of Wisconsin-Madison	2008-2013
Locum Clinician / Instructor	Iowa State University, Ames, IA	2008
Assistant Professor	University of Wisconsin-Madison	2013-2018
Associate Professor with tenure	University of Wisconsin-Madison	2018-2022

**Current Appointments**

**Chair, Department of Surgical Sciences** **2021-present**  
University of Wisconsin-Madison

**Professor of Comparative Ophthalmology** 2022 – present  
*Department of Surgical Sciences,*  
School of Veterinary Medicine, University of Wisconsin-Madison  
*Department of Ophthalmology and Visual Sciences,*  
(Executive Joint Appointment)  
University of Wisconsin School of Medicine and Public Health

<https://mclellan.ophth.wisc.edu/>

**Consultant / Member** 2007-present  
Comparative Ophthalmic Research Laboratories (CORL)  
<https://www.ocularservices.com/about/osodcorl-collaboration>

**Member** 2025-present  
Research External Advisory Board  
*The Ohio State University College of Veterinary Medicine*

**F. Honors and Awards**

<b>Editorial Board member, <i>Investigative Ophthalmology and Visual Sciences</i></b>	2025-present
<b>Fellow, Big Ten Academic Alliance (BTAA) Department Executive Officers Program</b>	2023
<b>Zoetis Award for Veterinary Research Excellence</b>	2022
<b>RGC Repopulation, Stem Cell Transplantation, and Optic Nerve Regeneration (RReSTORe) Consortium, invited Senior Investigator</b> <a href="http://www.hopkinsmedicine.org/wilmer/rrestore">http://www.hopkinsmedicine.org/wilmer/rrestore</a>	2022-present
<b>Fellow of the Association for Research in Vision and Ophthalmology (FARVO, Silver)</b>	2022
<b>Tim and Nancy Speaker Chair in Canine Health, UW-Madison</b>	2020-2027
<b>Appointed Member, Pathophysiology of Eye Disease-2 (PED2) Standing Study Section</b> <b>NIH Brain Disorders and Clinical Neuroscience Integrated Review Group</b>	2021-2025
<b>Loris and David Rich Lecturer in Visual Science, University of Alabama at Birmingham</b>	Feb 2021
<b>Board of Reviewing Editors, <i>eLife</i></b>	2021-2024
<b>Association of American Veterinary Medical Colleges Leadership Academy</b>	2019-2020
<b>Trabecular Meshwork Society</b> (invited member)	2019-current
<b>Vision for Animals Foundation</b> Board member (appointed by invitation)	2018- 2024
<b>Marfan Foundation, Early Investigator Award</b>	2017-2019
<b>Association for Research in Vision and Ophthalmology Animals in Research Committee</b>	2016-2021
Publications subcommittee Chair	2017-2018
Chair Elect	2018-2019
Chair	2019-2021
<b>Visiting Professor, North Texas Eye Research Institute</b>	May 2016
<b>Nominee, Award for Mentoring Undergraduates in Research and Scholarly Activities</b> University of Wisconsin-Madison.	2016
<b>Executive Board, European College of Veterinary Ophthalmologists (elected)</b> (Executive Secretary 2006-2009 and 2009-2010; Vice-President 2010-2012; President 2012-2014; Past-President 2014-2016)	2006-2016
<b>Fight for Sight Grant-in-Aid</b>	2014-2015
<b>Academic Staff Professional Development Award, University of Wisconsin-Madison</b> (to support travel to give invited presentation at International Society for Eye Research, Berlin, Germany, 2012)	2012
<b>Faculty Domestic Travel Award, University of Wisconsin-Madison</b> (to support travel to present and moderate at ARVO Annual Meeting)	2019,2023

Faculty International Travel Award, University of Wisconsin-Madison (to support travel to present and participate in ECVO Annual Meeting, Greece)	2023
Member, journal Editorial Board, <i>Veterinary Ophthalmology</i>	2010-2022
Mid-Western Veterinary Ophthalmology Society Annual Weekend Meeting Horus Award for Best Scientific Presentation.	2006
Student Scholars and Leaders Recognition Ceremony, Iowa State University Recognition of Exceptional Faculty Support.	2004 & 2005

**G. Memberships in Academic, Professional, Philanthropic and Scholarly Societies**

American Academy of Veterinary Pharmacology and Therapeutics, Associate Fellow  
 American College of Veterinary Ophthalmologists  
 Association for Ocular Pharmacology and Therapeutics  
 Association for Research in Vision and Ophthalmology  
 British Small Animal Veterinary Association  
 British Association of Veterinary Ophthalmologists  
 Bascom Hill Society, University of Wisconsin  
 Dane County Veterinary Medical Association  
 European College of Veterinary Ophthalmologists  
 European Society of Veterinary Ophthalmology  
 International Society for Clinical Electrophysiology of Vision  
 International Society for Eye Research  
 International Society of Veterinary Ophthalmology  
 Institute for Clinical and Translational Research, University of Wisconsin  
 McPherson Eye Research Institute  
 Middleton Society, School of Medicine and Public Health, UW-Madison  
 Royal College of Veterinary Surgeons, UK  
 Trabecular Meshwork Society  
 Wisconsin Veterinary Medical Association

**Licenses and Certifications**

Diplomate, American College of Veterinary Ophthalmologists (Recertified by ABVO through 06/30/2027)  
 Diplomate, European College of Veterinary Ophthalmologists, European Specialist in Veterinary Ophthalmology  
 (Mandatory Recertification completed in 2022 through 2028)  
 Diploma, Veterinary Ophthalmology (Royal College of Veterinary Surgeons)  
 Veterinary Faculty License – State of Wisconsin (#85-875)  
 Veterinary License (limited to ophthalmology) – State of Iowa (#7454)  
 Member of the Royal College of Veterinary Surgeons (overseas practicing member)  
 Institute of Biology Accreditation for Project Licensees (Animals [Scientific Procedures] Act), UK  
 GLP trained and certified in Good Laboratory Practices  
 Certified in Mental Health First Aid (National Council for Behavioral Health; Recertified in 2020)

## 2. RESEARCH

### **A. Personal Research Statement**

My team studies blinding eye diseases that impact the lives of humans and animals, with an emphasis on glaucoma. Glaucoma is a leading cause of irreversible blindness in people and animals worldwide, and results in loss of retinal ganglion cell somas and their axons in the optic nerve. A critical constraint in understanding glaucoma pathophysiology, in both animals and humans, is the lack of controlled *in vivo* studies and lack of appropriate animal models. To gain insight, my research team has identified and studies translationally-relevant, animal models of spontaneous glaucoma, in both veterinary clinical and laboratory settings. Applying cutting edge electrophysiology, imaging, molecular and cell biology approaches, in naturally occurring forms of glaucoma in companion animals, in rodent experimental models and in cellular and *ex vivo* ocular models, the primary goal of my research aims to address critical deficiencies in our understanding of glaucoma pathophysiology, and its treatment, in both animals and humans. Our overarching goal is to identify and accelerate translation of promising new strategies to prevent vision loss in glaucoma patients across species. Basic scientific, translational and clinical research in my lab currently focuses on three key aspects of glaucoma pathophysiology: 1) Unraveling the complex interactions between resident glia, neurons and extracellular matrix in the retina, optic nerve head and brain in glaucoma, and in other neurodegenerative conditions, including Alzheimer's disease 2) Defining abnormalities in the structure and function of aqueous humor outflow pathways from the eye, and their genetic basis, particularly in congenital and developmental glaucomas that share common features in dogs, cats and humans, and 3) Refining and validating imaging and diagnostic tools to determine glaucoma risk and monitor disease progression, including pursuit of new knowledge of the genetic basis of angle closure glaucoma in dogs as a foundation for the development of genetic tests for glaucoma in this species.

As a veterinary clinician-scientist with expertise spanning a broad range of disease conditions affecting the visual system, familiarity with many different advanced diagnostic modalities and model systems, I serve as co-Director of the Animal Models and Organ Culture Module of UW-Madison's long-standing Core Grant for Vision Research. I have extensive experience in the assessment of retina and optic nerve structure and function in vivo, in studies involving a range of rodent and larger species models, including rabbits, dogs, cats and non-human primates. I am the Program Director responsible for the Multimodal Imaging for Animal Models of Eye Disease program and served on the steering committee of the Wisconsin Advanced Imaging of the Visual System (WAIVS) laboratory, which developed novel Adaptive Optics systems for exquisitely detailed *in vivo* imaging of individual cells within the retina of humans and animals. In these roles, I am frequently asked to consult or collaborate on the design and conduct of basic and translational research studies involving laboratory animal models of ocular and CNS disease. These consultations continue to yield productive, interdisciplinary collaborations that have garnered substantial extramural funds and resulted in numerous publications, some outside my main area of research focus. These collaborations include investigations of the pathophysiology of retinal toxicity associated with the anti-epileptic drug, vigabatrin (for which I was an R01 consortium/ site PI); and of gene delivery and gene editing approaches in both the anterior segment and posterior segment of the eye for treatment of glaucoma.

**Accomplishments:** I have continued to build and maintain a strong portfolio of intra- and extra-mural funding for my research program, including several federal grants. I have demonstrated a sustained track record of publications (~5 per year); frequent scientific presentations that disseminate findings of these basic, translational and clinical research studies, and a robust pipeline of forthcoming manuscripts from my lab. I have cemented an international reputation for expertise in comparative glaucoma research and pathophysiology of eye disease, as evidenced by my service on numerous study sections and grant review panels, including for the BrightFocus Foundation's National Glaucoma Research Grant Program and as a permanent member of the NIH PED2 standing study section, and service on editorial boards of the journals *IOVS*, *Veterinary Ophthalmology* and *e-Life*. I am recognized as an international leader in veterinary ophthalmology, and in vision research in the field of glaucoma research - the latter evidenced by invited presentations for AOPT (Association for Ocular Pharmacology and Therapeutics) and invitations to join the Trabecular Meshwork Society and RReSTORe (both of which are elite, international groups of established researchers in the field); and serve on the ISER/BrightFocus Glaucoma Fast Track workshop faculty, in a program designed for young scientists in the field. I have been recognized by ARVO as a silver Fellow for sustained contributions to research in vision and ophthalmology.

**B. Publications** (in reverse chronological order)

Key: a= concept development and design; b = data acquisition; c= analysis; d=writing (incorporating all effort of laboratory personnel, students and trainees under my supervision).

(McLellan is corresponding and/ or senior author on those publications marked by §; 6 most noteworthy recent publications are marked by \*; teaching publications for education of veterinarians and students or co-authored by trainees and students are marked with †; invited publications/contributions are marked in bold).

**Scientific Journals:**

**[1] Research Published in refereed Journals:**

**2025**

1. §†Oikawa, K, Kiland, JA, Rai, A, Mathu, V, Zaluckyj, HG, McLellan, GJ. Effects of topical 0.002% omidenepag isopropyl on IOP intraocular pressure and pupil diameter in normal and glaucomatous cats: a pilot study. (Manuscript in press) *Veterinary Ophthalmology* (Accepted November, 2025) [a=100%,b=100%,c=100%,d=100%] Grants: Research to Prevent Blindness; Vision for Animals Foundation; NIH P30 EY0016665, T32EY027721 and T35 OD011078. Originated study with resident/post-doc Dr. Oikawa, helped secure resources and support, mentored primary author, graduate students and veterinary research summer scholar in data collection, analyses and manuscript preparation. Edited successive drafts of manuscript.
2. †Pentlarge Barrow, R, Strong, T, Oikawa, K, McLellan, GJ, Bentley, E. The White Coat Effect Influences Intraocular Pressure in Dogs: Comparing Tonometry Values Obtained in the Clinic Versus Home. (Manuscript in press) *Veterinary Ophthalmology* (accepted October 2025) [a=50%,b=20%,c=50%,d=40%] Grants: Research to Prevent Blindness; K08 EY018609, P30 EY0016665. Originated study with Dr. Bentley, provided resources and support, mentored veterinary directed study student, veterinary rotating intern and veterinary resident in data collection, analyses and manuscript preparation. Co-authored and edited successive drafts of manuscript.
3. §†Torné, O, Nilles JP, Smith, AL, Snyder, KC, Oikawa, K, Kiland, JA, Telle MR, Banghart, M, McLellan GJ. Imaging Canine Post-Trabecular Aqueous Outflow Pathways: Effect of Acute Intraocular Pressure Elevation in Normal Eyes. (2025) *Veterinary Ophthalmology* (doi: 10.1111/vop.70080. Epub ahead of print Sept 22nd. PMID: 40984008. [a=100%,b=100%,c=90%,d=100%] Grant: Unrestricted funds from the UW Foundation including Tim and Nancy Speaker Chair in Canine Health; ACVO Vision for Animals Foundation; Research to prevent Blindness; "la Caixa" Foundation; NIH Grants P30 EY016665 and S10 OD018221. Originated study, secured funding, provided resources, directed resident, graduate and veterinary students in data acquisition and analyses; significantly edited and revised manuscript drafted by graduate student and veterinary student.
4. §†Kiland, JA, Terhaar, HM, Walleck, HE, Chen, N, Torné, O, Oikawa, K, McDaniel, KW, Wahl T, and McLellan, GJ Comparison of Rebound and Applanation Tonometry in Eyes with Focal Corneal Edema.(2025) *Veterinary Ophthalmology* ep 14. doi: 10.1111/vop.70075. Epub ahead of print Sept 14th. PMID: 40947571. [a=100%,b=100%,c=80%,d=100%] Grant: NIH P30 EY016665; Research to prevent Blindness. Originated study, directed staff and veterinary and undergraduate students in data acquisition and analyses; significant contribution to manuscript preparation.

**2024**

5. †Yang VY, Eaton JS, Kiland JA, Koch KE, Oikawa K, Hetzel SJ, McLellan GJ. Effects of 0.024% latanoprostene bunod on intraocular pressure and pupil diameter in normal cats and cats with congenital glaucoma. *Vet Ophthalmol*. 2024 Nov 28. doi: 10.1111/vop.13302. Epub ahead of print. PMID: 39609901.  
[a=40%,b=50%,c=40%,d=20%]  
Grant: Award to JSE from the UW SVM Companion Animal Fund; ACVO Vision for Animals Foundation; Research to prevent Blindness; NIH Grant P30 EY016665. Originated study with colleague (JSE) and directed comparative ophthalmology resident (first author), laboratory staff, post-doc and undergraduate student in data acquisition and advised on analyses; significantly edited and revised manuscript drafted by resident.

6. §†Oikawa, K, Eaton, JS, Kiland, JA, Torne, O, Mathu, V, Nickells, RW, McLellan, GJ. Intravitreal AAV2 gene delivery to feline retinal ganglion cells *Vision Research Vision Res*. Epub 2024 2025 Jan;226:108519 [a=60%, b= 70%, c=70%,d=80%] Grants: This study was supported in part by funding from NIH R01 EY027396 (G.J.M.), R01 EY030123 (R.W.N), P30 EY016665 and S10 OD026957; UW-Madison ICTR CTSA grants supported by NIH UL1TR002373, and an unrestricted award to the University of Wisconsin-Madison Department of Ophthalmology and Visual Sciences from Research to Prevent Blindness. Facilities and services of the Translational Research Initiatives in Pathology laboratory (T.R.I.P.) are supported by the UW Department of Pathology and Laboratory Medicine, UW Carbone Cancer Center (NIH P30 CA014520 and NIH S10OD023526). Jointly developed study concept and secured funding in collaboration with co-corresponding author co-PI, RW Nickells. Directed staff, trainees and junior faculty in the conduct of this project and mentored post-doctoral trainee as the lead author.

7. §†Torne, O., Oikawa, K., Teixeira, L.B.C, Kiland, J.A., McLellan, G.J. (2024) Trabecular Meshwork Abnormalities in a Model of Congenital Glaucoma due to LTBP2 Mutation. *Invest Ophthalmol Vis Sci* Oct 1;65(12):28. doi: 10.1167/iovs.65.12.28. PMID: 39432401; PMCID: PMC11500042. [a=90%,b=100%,c=90%,d=100%]  
Grant Support: NIH R21 EY034373 (G.J.M.), La Caixa Foundation LCF/BQ/AA20/11820026 (O.T.), the Marfan Foundation (G.J.M.) and an unrestricted grant from Research to Prevent Blindness to the Department of Ophthalmology and Visual Sciences, University of Wisconsin-Madison. NIH core grants P30 EY016665 and P30 CA014520. Originated study, directed graduate student (first author), post-doc and lab personnel in data acquisition and analyses; significantly edited and revised manuscript drafted by graduate student.

8. Ted S. Acott, Michael P. Fautsch, Weiming Mao, C. Ross Ethier, Alex S. Huang, Mary J. Kelley, Mini Aga, Sanjoy K. Bhattacharya, Terete Borras, Diane Bovenkamp, Uttio Roy Chowdhury, Abbot F. Clark, Mohammed I. Dibas, Yiqin Du, Michael H. Elliott, Jennifer A. Faralli, Haiyan Gong, Samuel Herberg, Murray A. Johnstone, Paul L. Kaufman, Kate E. Keller, Ruth A. Kelly, David Krizaj, Markus H. Kuehn, Hoi Lam Li, Raquel Lieberman, Shan C. Lin, Yutao Liu, Fiona S. McDonnell, Colleen M. McDowell, Gillian J. McLellan, Philip Mzyk, Kayarat Saidas Nair, Darryl R. Overby, Donna M. Peters, VijayKrishna Raghunathan, Ponugoti Vasantha Rao, Gavin W. Roddy, Najam A. Sharif, Myoung Sup Shim, Yang Sun, Benjamin R. Thomson, Carol B. Toris, Colin E. Willoughby, Hao F. Zhang, Thomas F. Freddo, Rudolf Fuchshofer, Kamisha R. Hill, Alireza Karimi, Krishnakumar Kizhatil, Casey C. Kopczynski, Paloma Liton, Gaurang Patel, Michael Peng, Padmanabhan P. Pattabiraman, Ganesh Prasanna, Ester Reina-Torres, E. Griffen Samples, John R. Samples, Cynthia L. Steel, Clemens A. Strohmaier, Preeti Subramanian, Chenna Kesavulu Sugali, Joseph van Batenburg-Sherwood, Cydney Wong, Hannah Youngblood, Gulab S. Zode, Elizabeth White, W. Daniel Stamer; Consensus Recommendations for Studies of Outflow Facility and Intraocular Pressure Regulation Using Ex Vivo Perfusion Approaches. *Invest. Ophthalmol. Vis. Sci.* 2024;65(14):32.

[https://doi.org/10.1167/iovs.65.14.32..\[a =2%,d=2% \]](https://doi.org/10.1167/iovs.65.14.32..[a =2%,d=2% ]) I contributed to conceptual development and editing of successive drafts of this important, multi-author consensus paper.

9. §†Oikawa K, Kiland JA, Mathu V, Torne O, Wickland C, Neufcourt S, Mitro C, Lopez R, McLellan GJ. Effects of Telmisartan on Intraocular Pressure, Blood Pressure, and Ocular Perfusion Pressure in Normal and Glaucomatous Cats. *Transl Vis Sci Technol.* 2024 Sep 3;13(9):15. doi: 10.1167/tvst.13.9.15. PMID: 39264603; PMCID: PMC11407481. [a=100%,b=100%,c=100%, d=100%] Grant: NIH R01 EY027396 and Core Grant for Vision Research, P30 EY0016665; Lions Eye Bank of Wisconsin Gift of Sight Discovery Fund; UW-Madison Companion Animal Fund, a National Glaucoma Research Grant from the BrightFocus Foundation, and an unrestricted grant to the Department of Ophthalmology and Visual Sciences from Research to Prevent Blindness. Originated study, directed and mentored graduate student, undergraduate students and staff in data acquisition and analyses; significantly edited and revised manuscript drafted by graduate student.

## 2023

10. §†Oikawa, K., Torne, O., Sun, D., Moon, A.K.B., Kiland, J.A., Møller Trane, R., McLellan, G.J. (2023) Aqueous humor TGF- $\beta$ 2 and its association with intraocular pressure in a naturally-occurring large animal model of glaucoma. *Investigative Ophthalmology and Visual Sciences* Jul 3;64(10):18. doi: 10.1167/iovs.64.10.18. PMID: 37459065; PMCID: PMC10362923  
[a=100%,b=100%, c=90%, d=100%] Grant: Merial /NIH summer research scholarships; UW Start-up Funds, BrightFocus Foundation, Research to Prevent Blindness. NIH/NEI: K08 EY018609; P30 EY0016665, R01 EY02739601. Originated, designed and secured extramural funding for study; mentored and directed graduate student, staff , undergraduate summer research scholar and two veterinary student summer research scholars in data collection, analyses, interpretation and figure preparation; significant contribution to authorship of manuscript.
11. §†Kiland, JA, Terhaar, HM, Walleck, HE, Chen, N, Wahl, TM, McDaniel, KW, and McLellan, GJ (2023) Comparison of the TonoVet Plus, TonoVet and Tono-Pen Vet Tonometers in Normal Cats and Cats with Glaucoma. *Veterinary Ophthalmology* Sep; 26(5):414-421 (epub June 2023) doi: 10.1111/vop.13123. PMCID: PMC10527474  
[a=100%,b=100%,c=80%,d=100%] Grant: Research to prevent Blindness. Supported by Research to Prevent Blindness and NIH P30 EY0016665. Originated study, directed staff and veterinary and undergraduate students in data acquisition and analyses; significant contribution to manuscript preparation.\*\* Awarded certificate of recognition as a top cited paper in 2023 by the journal, *Veterinary Ophthalmology*.\*\*
12. Soucy JR, Aguzzi EA, Cho J, Gilhooley MJ, Keuthan C, Luo Z, Monavarfeshani A, Saleem MA, Wang XW, Wohlschlegel J; RReSTORe Consortium; Baranov P, Di Polo A, Fortune B, Gokoffski KK, Goldberg JL, Guido W, Kolodkin AL, Mason CA, Ou Y, Reh TA, Ross AG, Samuels BC, Welsbie D, Zack DJ, Johnson TV. (2023) Retinal ganglion cell repopulation for vision restoration in optic neuropathy: a roadmap from the RReSTORe Consortium. *Molecular Neurodegeneration*. Sep 21;18(1):64. doi: 10.1186/s13024-023-00655-y. PMID: 37735444; PMCID: PMC10514988.  
[a=2%,d=2%] Contributed to concept development and editing of manuscript drafts as an invited member of the RReSTORe Consortium, for this important multi-author consensus paper in the field of retinal ganglion cell restoration and repopulation in optic neuropathies, including glaucoma.

## 2022

13. †Mischi, E, Soukup,P, Harman,CD, Oikawa,K, Kowalska, ME, Hartnack,S, McLellan, GJ, Komáromy, AM and Pot, SA . (2022) Outer retinal thickness and visibility of the choriocapillaris in four distinct retinal regions imaged with spectral domain Optical Coherence Tomography in dogs and cats. *Veterinary Ophthalmology*, 2022 May;25 Suppl 1, 122-135. doi: 10.1111/vop.12989. PMCID: PMC9246961[a=10%,b=20%, d=10%] Grant: NIH (R01 EY027396 and S10 OD018221 to GJM and Core Grant for Vision Research P30 EY016665 to the University of Wisconsin-Madison) and by an unrestricted award to the Department of Ophthalmology and Visual Sciences, University of Wisconsin-Madison, from Research to Prevent Blindness. Supervised technical staff in acquisition of feline scans and quality control of images submitted by graduate student to image bank for analysis. Discussed concept with corresponding author and edited final manuscript.

14. McDowell, C.M., Kizhatil, K., Elliott, M.H., Overby, D.R., van Batenburg-Sherwood, J., Millar, J.C., Kuehn, M.H., Zode, G. , Acott, T.S., Anderson, M.G., Battacharya, S., Bertrand, J.A., Borras, T., Bovenkamp, D., Cheng, L., Dania, J., Lucio Deleso, M., Du, Y., Faralli, J.A., Fuchshofer, R., Ganapathi, P., Gong, H., Herberg, S., Hernandez, H., Humphries, P., John, S.W.M., Kaufman, P.L., Keller, K.E., Kelley, M.J., Kelly, R.A., Krizaj, D., Kumar, A., Leonard, B., Lieberman, R.L., Liton, P., Liu, Y., Liu, K.C., Lopez, N.N., Mao, W., Mavlyutov, T., McDonnell, F., McLellan, G.J., Mzyk, P., Nartey, A., Pasquale, L., Patel, G., Pattabiraman, P., Peters, D.M., Raghunathan, V., Rao, V., Rayana, N., Raychaudhuri, U., Reina-Torres, E., Ren, R., Rhee, R., Roy-Chowdhury, U., Samples, J., Samples, G., Schuman, J.S., Sheffield, V.C., Stevenson, C.H., Subramanian, P., Sugali, C., Sun, Y., Toris, C.B., Torrejon, K., Vahabikashi, A., Vranka, J.A., Willoughby, C.E., Xin, C., Yun, H., Zhang, H. , Fautsch, M.P., Tamm, E.R., Clark, A.F., Ethier, C.R., and Stamer, W.D. (2022) Consensus Recommendation for Mouse Models of Ocular Hypertension to study aqueous humor outflow and its mechanisms . *Investigative Ophthalmology and Visual Science* (PMCID: PMC8842499 DOI: 10.1167/iovs.63.2.12; accepted Dec 2021) [a=2%, d=5%] Recruited as a co-author for expertise in animal models of glaucoma and specifically tonometry; contributed to manuscript writing, edited successive drafts of this multi-author consensus paper, **by invitation**.

15. \*§†Telle, M.R., Nilles, J., Snyder, K.C., Oikawa, K., Gehrke, S., Teixeira, L.B.C., Kiland, J.A., Huang, and McLellan, G.J. (2022) Development and validation of methods to visualize conventional aqueous outflow pathways in canine glaucoma. *Veterinary Ophthalmology* 2022 May;25 Suppl 1(Suppl 1):84-95. doi: 10.1111/vop.12943. Epub 2021 Sep 28. PMID: 34581493; PMCID: PMC8958177[a=100%,b=90%,c=90%, d=90%] Grant: ACVO Vision for Animals Foundation; Research to prevent Blindness; Lions Eye Bank Gift of Sight Discovery fund; NIH Grants P30 EY016665 and S10OD018221 and veterinary summer research scholarship awarded under NIH T35 OD011078 . Originated study, mentored resident in writing ACVO Vision for Animals small extramural resident research grant which partly funded this project; directed resident, graduate and veterinary students in data acquisition and analyses; significantly edited and revised manuscript drafted by former Resident.

## 2021

16. §†Adelman, S.A., Oikawa, K., Senthilkumar, G., Trane, R.M. and McLellan, G.J. (2021) Mapping Retinal Ganglion Cells in cats with glaucoma. *Molecular Vision* 27:608-621 <http://www.molvis.org/molvis/v27/608> PMCID: [PMC8645189](#) [a=100%,b=100%,c=80%,d=90%] Grant: Merial /NIH summer research scholarship NIH T35 OD011078 and UW-Madison School of Veterinary Medicine; UW Start-up Funds; BrightFocus Foundation; Research to Prevent Blindness, and NIH/NEI: K08 EY018609 and P30 EY0016665. Originated and secured funding for project, study

conducted by graduate students (SAA and KO) under my mentorship with assistance from an undergraduate student. Extensively edited manuscript drafted by graduate student.

17. † Colbert MK, Ho LC, van der Merwe Y, Yang X, McLellan GJ, Hurley SA, Field AS, Yun H, Du Y, Conner IP, Parra C, Faiq MA, Fingert JH, Wollstein G, Schuman JS, Chan KC. (2021) Diffusion Tensor Imaging of Visual Pathway Abnormalities in Five Glaucoma Animal Models. *Investigative Ophthalmology and Visual Science* Aug 2;62(10):21. doi: 10.1167/iovs.62.10.21. PMID: 34410298. PMCID: 8383913 [a=20%, b=20%, c=10%, d=25%] Grant: UW-Madison faculty start-up funds, Research to Prevent Blindness, NIH Grant P30 EY0016665 and UW-ICTR through NCATS grant UL1TR000427. Originated feline studies incorporated in this manuscript; significant contribution of resources and time for data acquisition and supervision of trainees (graduate student and undergraduate student involved in feline image analyses); significant editing of manuscript drafted by first and last authors.
18. † Zaitoun IS, Shahi PK, Suscha A, Chan K, McLellan GJ, Pattnaik BR, Sorenson CM, Sheibani N. (2021) Hypoxic-ischemic injury causes functional and structural neurovascular degeneration in the juvenile mouse retina. *Nature Scientific Reports* 2021 Jun 16;11(1):12670. doi: 10.1038/s41598-021-90447-5. PMID: 34135369. PMCID: 8209038 [b=10%, d=15%] Grant: Support for McLellan lab contribution from NIH Grant S10 OD018221 and Core Grant for Vision Research P30 EY016665 and an unrestricted award to the Department of Ophthalmology and Visual Sciences, University of Wisconsin-Madison, from Research to Prevent Blindness. Supervised first author (Zaitoun), and co-author graduate student (Kore Chan) in acquisition and interpretation of OCT scans and quality control of images. Discussed concept with corresponding author and edited final manuscript.
19. \*§† Oikawa, K., Teixeira, L.B.C., Eliceiri, K.W., McLellan, G.J. (2021) Microstructure of the Feline Optic Nerve Head Resembles that of Humans. *Experimental Eye Research* 202:108315. doi: 10.1016/j.exer.2020.108315. Epub 2020 Oct 19. PMCID: PMC7855208 [a=100%, b=90%, c=100%, d=100%] Grant: BrightFocus Foundation, Research to Prevent Blindness. NIH P30 EY0016665, R01 EY02739601. Originated, designed and secured extramural funding for study; mentored and directed graduate student in data collection in my lab, analyses, interpretation and figure preparation; graduate student was first author.
20. Plummer, C., Bras, D., Grozdanic, S., Komaromy, A., McLellan, G., Miller, P., Sapienza, J., Teixeria, L., Webb, T. (2021) Prophylactic Antiglaucoma Therapy in Dogs with Primary Glaucoma: A Practitioner Survey of Current Medical Protocols. *Veterinary Ophthalmology* 24 Suppl 1:96-108. doi: 10.1111/vop.12820. (epub 2020 Sep 12Online ahead of print.) PMID: 32920915 [a=5%, b=5%, c=10%, d=10%]. Contributed to data analysis and draft manuscript editing and revisions as an invited member of the ACVO-Vision for Animals Foundation Canine Glaucoma Consortium. Grant: Support for the Canine Glaucoma Consortium was provided by Vision for Animals Foundation.
21. Minella, A.L., Kiland, J.A., Gloe, S. and McLellan, G.J. (2021) Validation and comparison of four handheld tonometers in normal ex vivo canine eyes. *Veterinary Ophthalmology* 24 (Suppl 1):162-170. doi: 10.1111/vop.12780. Epub 2020 Jun 1. PMID: 32478941; PMCID: PMC8321415. [a=100%, b=100%, c=100%, d=100%] Grant: Research to Prevent Blindness, Research Agreement from Icare Oy

(Finland) Originated study, directed staff, undergraduate student and intern /clinical trainee in data acquisition and analyses; significant contribution to manuscript preparation.

## **2020**

22. \*§†Oikawa, K., Verhoeve, J.N., Teixeira, L.B.C., Snyder, K.C., Hennes-Beean, E.A., Rasmussen, C.A., Kiland, J.A., Ellinwood, N.M., McLellan, G.J. (2020) Sub-region-specific optic nerve glial activation in a spontaneous glaucoma model. *Molecular Neurobiology*. 57(6):2620-2638. PMCID: PMC7282894; PMID: 32266645 [a=70%,b=20%,c=20%,d=50%]. Grant: NIH: R01 EY0273960; K08 EY018609; P30 EY0016665 ; CTSA award from UW-ICTR through NCATS grant UL1TR000427; Fight For Sight Grant in Aid; BrightFocus Foundation National Glaucoma Research Grant ; Research to Prevent Blindness; JASSO scholarship (latter awarded to graduate student /trainee first author).Originated, designed and secured extramural funding for study; mentored and directed graduate student and veterinary student in data collection, analyses and interpretation; significant contribution to authorship of manuscript, through editing and revision of graduate student's drafts.
23. †Lewin, A.C., Coghill, L.M., McLellan, G.J., Bentley E, Kousoulas, K.G. (2020) Genomic analysis for virulence determinants in Feline herpesvirus type-1 isolates. *Virus Genes* 56(1):49-57 [Epub ahead of print Nov 27,2019] PMCID: PMC7027352 [a=20%, b=10%, d=10%]. Originated parent study and contributed funding to establish viral stocks used in this study, revised manuscript drafted by first author (a former trainee). Grant: Companion Animal Fund, UW-startup funds, Research to Prevent Blindness, NEI/NIH P30EY016665.
24. \*§†Chan, K., Wahlgren, B., Gloe, S., Ver Hoeve, J. N., Hoon, M., Pattnaik, B.R., Williams, J., Wetherbee, B., Kiland, J.A., Vogel, K.R., Jansen, E., Salomons, G., Walters, D., Roullet, J.-B., Gibson, K.M., McLellan, G.J. (2020) Vigabatrin induced retinal functional alterations and second-order neuron plasticity in C57BL/6J mice. *Investigative Ophthalmology and Visual Science*;61(2):17. PMCID: PMC7326505 [ a=60%,b=80%,c=80%, d=80%]. Grants: NIH R01 EY027476, NIH P30 EY016665, NIH S10 OD018221, Fight for Sight summer student fellowship, Research to Prevent Blindness. Originated study with K.M.Gibson, as consortium PI under parent R01 grant, significant contribution of effort to supervision of trainees (graduate student, research intern, post-doc and undergraduate students) in data acquisition and analyses, significant revision of manuscript drafted by first author (MS student).
25. †Krishnan, H., Hetzel, S., McLellan, G.J., Bentley E. (2020) Comparison of Outcomes in Cataractous Eyes of Dogs Undergoing Phacoemulsification Versus Eyes not Undergoing Surgery. *Veterinary Ophthalmology* 23(2):286-291. PMCID: PMC7115757 [a=20%, c=20%,d=20%] Grant: UW-ICTR provided biostatistical support through NCATS grant UL1TR000427. Contributed to original study development, data interpretation and to manuscript preparation by an intern / clinical trainee.

## **2019**

26. \*†Heidari,M., Radcliff, A.B., McLellan, G.J., Verhoeve, J.N., Chan, K., Kiland, J.A., Keuler, N.S., August, B. K, Sebo, D., Field, A.S.,and Duncan, I.D. (2019) Evoked potentials as a biomarker of remyelination. *Proceedings of the National Academy of Sciences* 116(52):27074-27083 PMCID: PMC6936696 [a=30%, b=20%,c=30%, d=20%] Grant: Multiple Sclerosis Society, Research to Prevent Blindness, NIH Grants K08 EY018609 and R01 EY0273960, P30 EY0016665, UW-Madison Faculty start-up funds. Proposed and designed electrophysiology studies reported in this manuscript; significant contribution of resources and personnel for data acquisition, including

supervision of staff and trainees (graduate students) involved in VEP acquisition and analyses; conducted statistical analyses and prepared figures; significant contribution to authorship of manuscript.

27. §†Snyder, K.C., Oikawa, K., Williams, J., Kiland, J.A., Gehrke, S., Teixeira, L.B.C., Huang, A., McLellan, G.J. (2019) Imaging Distal Aqueous Outflow Pathways in a Spontaneous Model of Congenital Glaucoma. *Translational Vision Science and Technology* 8(5):22. doi: 10.1167/tvst.8.5.22. eCollection 2019 Sep. PMID: 31616579. [a=100%,b=100%,c=100%, d=90%] Grants: NIH Grants P30 EY016665 and S10 OD018221; Lions Eye Bank of Wisconsin, The Marfan Foundation, Research to Prevent Blindness. Originated study, directed and supervised trainees (including graduate students, resident, research intern) and staff involved in data acquisition and analyses; extensively revised manuscript drafted by MS student.
28. §†Gloe, S., Rothering, A., Kiland, J.A., McLellan, G.J. (2019) Validation of the Icare TONOVENT Plus rebound tonometer in normal rabbit eyes. *Experimental Eye Research* Aug;185:107698. doi: 10.1016/j.exer.2019.107698 (PMCID: 6698397) [a=100%,b=100%,c=100%, d=100%] Grant: Research to prevent Blindness, NEI/NIH P30EY016665 Originated study, directed staff and undergraduate students in data acquisition and analyses; significant contribution to manuscript preparation.
29. Bradfield, Y., Barbosa, T., Blodi, B., Thompson, S.W., McLellan, G.J., Struck, M., Young, T.L. (2019) Comparison of Intraoperative Anterior Segment OCT Findings in Pediatric Patients with and without Glaucoma. *Ophthalmology Glaucoma*;2(4) :232-239. DOI: 10.1016/j.ogla.2019.04.006 PMID: 32672544 [a=20%, c=10%, d=25%] Originated study / concept for study design and participated in study design and planning for data analyses; significant contribution to manuscript preparation and revision.
30. §†Telle, M.R. Chen, N., Shinsako, D., Oikawa, K., Kiland, J.A., Møller Trane, R., McLellan, G.J. (2019) Relationship between corneal sensitivity, corneal thickness, corneal diameter, and intraocular pressure in normal cats and cats with congenital glaucoma. *Veterinary Ophthalmology*. 22(1):4-12. (PMCID: PMC6129219). [a=100%,b=100%,c=90%,d=90%] Grant: UW Startup funds, Research to Prevent Blindness, NEI/NIH P30EY016665, Lions Eye Bank of Wisconsin Gift of Sight Discovery Fund; UW-Madison Companion Animal Fund, and a National Glaucoma Research Grant from the Bright Focus Foundation. Originated and designed study; directed resident, graduate student and undergraduate students in data collection and analyses; mentored trainees in manuscript preparation. **WINNER: ACVO Award for Best Published Clinical Research Study by a Resident; ACVO, 2018.**
31. †Beckwith-Cohen, B., Hoffman, A., McLellan, G.J. and Dubielzig, R.R. (2019) Feline Neovascular Vitreoretinopathy and Anterior Segment Dysgenesis with Concurrent Glaucoma in Domestic Cats. *Veterinary Pathology* ;56(2):259-268. doi: 10.1177/0300985818798087. PMID: 30222091 [a=5%,b=10%,c=10%,d=20%] Grant: Research to Prevent Blindness. Contributed to concept for study, mentoring of pathology fellow / graduate student who collated and analyzed data, and contributed significant effort to authorship and revision of manuscript.

## 2018

32. †Lewin, A.C., Kolb, A.W., McLellan, G.J., Bentley, E., Bernard, K.A., Newbury, S.P. and Brandt, C.R. (2018) Genomic, Recombinational and Phylogenetic Characterization of Global Feline Herpesvirus-1 Isolates *Virology* May; 518:385-397. PMCID: PMC5935452  
[a=40%,b=20%,c=5%,d=30%] Grant: Companion Animal Fund, UW-startup funds, Research to Prevent Blindness, NEI/NIH P30EY016665. Originated study with Dr. Brandt, provided resources and financial support (drafted /co-authored grant proposal), mentored resident conducting research project, contributed significant effort to authorship and editing of manuscript. (PMCID:PMC5935452) **WINNER: Boehringer Ingelheim National Resident Research Award.**

33. \*§†Adelman, S., Shinsako, D., Kiland, J.A., Yaccarino, V., Ellinwood, N.M, Ben Shlomo, G. and McLellan, G.J. (2018) The Post-Natal Development of Intraocular Pressure in Normal Domestic Cats (*Felis catus*) and Cats with Inherited Congenital Glaucoma. *Experimental Eye Research* 66:70-73. doi: 10.1016/j.exer.2017.10.016 (PMCID : PMC5756501)  
[a=100%, b=80%,c=100%,d=100%] Grant: NIH/NEI: K08 EY018609 and P30 EY16665; new faculty startup funds from UW-Madison; Research to Prevent Blindness; Grant in Aid from Fight For Sight ; National Glaucoma Research Grant from BrightFocus Foundation [grant number G2016129] and the UW Institute for Clinical and Translational Research [grant number UL1TR000427, from the Clinical and Translational Science Award of the NCATS/NIH]. Originated study, mentored undergraduate students involved in project, directed or conducted data analyses and contributed significant effort to authorship and editing of paper.

34. §†Snyder, K.C., Lewin, A., Mans, C., McLellan, G.J. (2018) Validation of Rebound and Applanation Tonometers in Normal Chinchilla Eyes (*Chinchilla lanigera*) *Veterinary Ophthalmology*, 21(1):4-9 doi: 10.1111/vop.12468. PMID: 28303681[a=100%, b,100%, c=90%, d= 90%] Grant: Research to Prevent Blindness. Originated study, mentored senior DVM student during elective study / research project, directed or conducted data analyses and contributed significant effort to authorship of paper.

#### Publications prior to promotion to Associate Professor

35. Kolb, A.W., Lewin, A.C., Moeller Trane, R., McLellan, G.J., Brandt, C.R. (2017) Phylogenetic and Recombination Analysis of the Herpesvirus Genus Varicellovirus. *BMC Genomics* . Nov 21;18(1):887. doi: 10.1186/s12864-017-4283-4. PMID: 2915720 (PMCID: PMC5697016)  
[a=10%, d=10%] Grant: NEI/NIH P30EY016665, UW-Madison Companion Animal Fund. Provided significant input when study was conceived and contributed to study design / origination of study, mentored resident involved in data analyses, contributed to authorship and editing of manuscript.

36. §†Pryor S.G., Bentley E., McLellan G.J., et al. Retinal detachment post-phacoemulsification in Bichon Frises: a retrospective study of 54 dogs. *Veterinary Ophthalmology*. 2016;19(5):373-378. doi:10.1111/vop.12310 PMID: 26429670 PMCID: PMC4818727  
[a=20%;b=5%;c=20%;d=20%] Grant: UW-ICTR provided biostatistical support through NCATS grant UL1TR000427. Contributed to study concept and development and supervision of intern / clinical trainee during data acquisition and analysis, revised draft manuscript for publication.

37. §†Kiland, J.A., Voss, A.M., \*McLellan, G.J. (2016) Effect of timolol maleate on intraocular pressure, pupil diameter, and heart rate in normal and glaucomatous cats. *Veterinary Ophthalmology* 19 Suppl 1:91-96. PMCID: PMC4930696.  
[a=100%;b=100%;c=100%;d=100%] Grant: NEI/NIH K08 EY018609 and P30 EY0016665; Companion Animal Fund; Research to Prevent Blindness. Originated study, mentored undergraduate student involved in project, directed or conducted data analyses and supervised and edited paper co-authored by staff member and undergraduate student.

38. §†Gosling, A.A., Kiland, J.A., Rutkowski, L.E., Ellinwood, N.M., \*McLellan, G.J. (2016) Effects of topical corticosteroid administration on intraocular pressure in normal and glaucomatous cats *Veterinary Ophthalmology* 19 Suppl 1:69-76 PMCID : PMC4930713. [a=100%;b=100%;c=100%;d=100%] Grant: NEI/NIH P30 EY0016665; Companion Animal Fund; Research to Prevent Blindness. Originated study, mentored Resident and 2 undergraduate students involved in project, directed or conducted data analyses and supervised and edited manuscript written by trainees and lab staff.

39. §McLellan, G.J., Aktas, Z., Hennes-Beean, E., Kolb, A.W., Larsen, I.V., Schmitz, E.J., Clausius, H., Yang, J., Hwang, SH, Morisseau, C, Inceoglu, B, Hammock, BD, and §Brandt, C.R. (2016) Effect of a Soluble Epoxide Hydrolase inhibitor, UC1728, on LPS-Induced Uveitis in the Rabbit. *Journal of Ocular Biology* doi: 10.13188/2334-2838.1000024 PMCID PMC5218821. [a=30%, b=30%,c=10%, d= 30%] Grant: CORL, NEI/NIH P30EY016665; Research to Prevent Blindness. Contributed to study design, co-ordinated and participated in all in-life studies, conducted all ophthalmic exams, contributed to authorship and editing of paper.

40. \*§†Kuehn, M.H., Lipsett, K., Menotti-Raymond, M., Whitmore, S.S., Scheetz, T., David, V.A., O'Brien, S.J., Zhao, Z., Jens, J.A., Snella, E.M., Ellinwood, N.M., McLellan, G.J. (2016) A Mutation in *LTBP2* Causes Congenital Glaucoma in Domestic Cats (*Felis catus*) *PLoS One* DOI 10.1371/journal.pone.0154412 PMCID: PMC4858209. [a=50%;b=40%;c=30%;d=50%] Grant: NEI/NIH K08 EY018609 and P30 EY0016665; Glaucoma Research Foundation; Batelle Platform Grant (Iowa State University), Center for Integrated Animal Genomics Iowa State University; Research to Prevent Blindness. Originated study; directed or conducted all clinical data acquisition and analyses, coordinated inter-institutional collaborations and contributed significant effort to authorship of paper. Undergraduate and graduate students were involved in these studies.

41. Becker, S., Eastlake, K., Jayaram, H., Jones M.F., Brown, R.A., McLellan, G.J., Charteris, D.G., Khaw, P.T., Limb, G.A. (2016) Allogeneic transplantation of Müller-derived RGC improves retinal function in a feline model of ganglion cell depletion *Stem Cell Translational Medicine*, 5(2):192-205 PMCID PMC4729554. [a= 5%; c=5%;d=10%] Grant: NEI/NIH K08 EY018609, Research to Prevent Blindness. Consulted on study design and protocol development, assisted with data analyses; contributed significant effort to authorship of paper.

42. §†McDonald, J.E., Kiland, J.A., Kaufman, P.L., Bentley, E., Ellinwood, N.M., \*McLellan, G.J. (2016) Effect of Topical Latanoprost 0.005% on Intraocular Pressure, Pupil Diameter and Aqueous Flow in Normal and Glaucomatous Cats. *Veterinary Ophthalmology*. 19 ,Suppl 1:13-23 PMCID: PMC4755930. [a=100%;b=80%;c=80%;d=90%] Grant: NEI/NIH K08 EY018609 and P30 EY0016665; Merial summer scholarship; Companion Animal Fund, Research to Prevent Blindness. Originated study, mentored DVM student during summer research scholarship project, directed or conducted data analyses and contributed significant effort to authorship of paper.

43. §†Beckwith-Cohen, B., Bentley, E., Gasper, D.J., McLellan, G.J., Dubielzig, R.R. (2015) Keratitis in Six Dogs Following Topical Glaucoma Treatment with Carbonic Anhydrase Inhibitors. *Journal of the American Veterinary Medical Association*. 15;247(12):1419-26. PMID: 26642138 [a=10%, b=10%, c=10%, d= 20%] Grant: NIH 5T32OD010423-07. Provided input when study conceived, managed two of six clinical cases, contributed effort to analyses of clinical data and authorship and editing of paper. Ocular pathology fellow and graduate student contributed to this manuscript.

44. §†Scott, E.M., Teixeira, L.B.C., Pinkerton, M.E., Flanders, D.J., Dubielzig, R.R., McLellan, G.J. (2016; e- pub ahead of print 2015) Canine orbital rhabdomyosarcoma: a report of 18 cases. *Veterinary Ophthalmology* Mar;19(2):130-137; doi: 10.1111/vop.12270. PMID: 25846977 [ a=10%, b=10%, c=10%, d= 20%] Grant: Grateful client donation; UW-Madison School of Veterinary Medicine start-up funds. Provided input when study

conceived, clinically managed 3 of 18 clinical cases, contributed financial support from start-up and discretionary funds for electron microscopy, assisted with analyses of clinical data and contributed to authorship and editing of paper. **WINNER: Dr Paul Dice Memorial Award for Best Published Case Report by a Resident; ACVO, 2015**

45. \*§†Teixeira, L.B.C., Buhr, K.A., Bowie, O., Duke, F.D., Nork, T.M., Dubielzig, R.R., McLellan, G.J. (2014) Quantifying Optic Nerve Axons in a Cat Glaucoma Model by a Semi-Automated Targeted Counting Method *Molecular Vision* 20:376-385. PMCID: PMC3976691  
[a=80%;b=80%;c=80%;d=80%] Grants: NEI/NIH 5K08 EY018609 and P30 EY0016665, UW-ICTR., Research to Prevent Blindness. Originated study, mentored undergraduate student who participated in much of data collection, and provided salary support and mentorship to L. Teixeira (ocular pathology fellow), contributed to analyses and authorship of paper.

46. †Delgado, C., Mans, C., McLellan, G.J., Bentley, E., Sladky, K.K., Miller, P.E. (2014) Evaluation Of Rebound Tonometry In Red-Eared Slider Turtles (*Trachemys scripta elegans*) *Veterinary Ophthalmology* 17(4):261-267. PMCID: PMC4124514.  
[a=10%;c=20%; d=30%] Grant: NEI/NIH 5K08 EY018609-05 (support for my time only) Advised on study design, assisted with data analyses and contributed to authorship of paper; co-mentor Resident.

47. §†McLellan, G.J., Kemmerling, J.P., Kiland, J.A. (2013) Validation of the TonoVet® Rebound Tonometer in Normal and Glaucomatous Cats. *Veterinary Ophthalmology*; 16 ( 2), 111–118 PMCID: PMC3443498  
[a=100%; b=100%; c=100%; d= 100%] Grant: NEI/NIH K08 EY018609 and P30 EY0016665 and Research to Prevent Blindness. Originated and directed study and mentored undergraduate student during data collection and analyses; major contributor to authorship and editing of manuscript which was drafted by trainees .

48. §McLellan, G.J. and Bedford, P.G.C. (2012) Oral Vitamin E Absorption in English Cocker Spaniels with Familial Vitamin E Deficiency and Retinal Pigment Epithelial Dystrophy. *Veterinary Ophthalmology*; 15 Suppl 2:48-56. PMID: 22831287  
[a=90%,b=80%,c=100%,d=90%] Grant: Friskies (Nestec) Ltd and Guide Dogs for the Blind Association (UK). Originated, designed and conducted study, analyzed data, prepared and edited manuscript.

49. §McLellan, G.J. and Rasmussen, C.A. (2012) Optical Coherence Tomography for the Evaluation of Retina and Optic Nerve Morphology in Animal Subjects: Practical Considerations. *Veterinary Ophthalmology* 15 Suppl 2:13-28 PMCID: PMC3459243 **[Invited Research Review]** [a=90%,b=60%,d = 60%] Grant: NEI/NIH K08 EY018609, P30 EY0016665 and Research to Prevent Blindness. Formulated outline, major contributor to authorship and editing of manuscript.

50. †Schallek, J., McLellan, G.J., Viswanathan, S., Ts'o D. (2012) Retinal Intrinsic Optical Signals in a Cat Model of Primary Congenital Glaucoma *Investigative Ophthalmology and Visual Science* 53 (4), 1971-1981. PMCID: PMC3996824 [a=15%,b=10%,d=20%] Grant: NEI/NIH K08 EY018609. Co-ordinated inter-institutional collaboration, providing access to study animals, contributed to study design and data interpretation, and revised / edited manuscript drafted by graduate student at collaborating institution.

51. §†Sigle, K.J., Camaño-Garcia, G., Carriquiry, A.L., Betts, D.M., Kuehn, M.H., McLellan, G.J. (2011) The effect of dorzolamide 2% on circadian intraocular pressure in cats with primary congenital glaucoma. *Veterinary Ophthalmology* 14 (Suppl 1), 48-53. PMCID: PMC3348180. First author was Resident in Veterinary Ophthalmology under my mentorship.

52. §†Espinheira, Gomes, F., Bentley E., Lin, T.-L., McLellan, G.J. (2011) Effects of unilateral topical administration of 0.5% tropicamide on anterior segment morphology and intraocular pressure in normal cats and cats with primary congenital glaucoma. *Veterinary Ophthalmology* 14 ( Suppl 1), 75-83. PMCID: PMC3348182. First author was Resident in Comparative Ophthalmology under my mentorship.

53. Rutz-Mendocino, M.M., Snella, E.M., Jens, J., Carlson, S.A., Kuehn, M.H., McLellan, G.J. and Ellinwood, N.M (2011) The Identification and Removal of Potentially Confounding Phenotypes from a Siamese-derived Feline Glaucoma Breeding Colony. *Comparative Medicine* 61, (3), 251-257. PMCID: PMC3123758

54. §†Elsmo, E.J., Kiland, J.A., Kaufman, P.L. and McLellan, G.J. (2011) Evaluation of Rebound Tonometry in Non-Human Primates. *Experimental Eye Research* 92, (4), 268-273 PMCID: PMC3060952 . First author was veterinary student summer research scholar under my mentorship.

55. Allgoewer, I., McLellan, G.J., Agarwal, S. (2010) A keratoprosthesis prototype for the dog. *Veterinary Ophthalmology*, 13, (1), 47-52.

56. §†Sigle, K.J., McLellan, G.J., Haynes, J.S., Myers, R.K., Betts, D.M. (2006) Unilateral uveitis in dog with uveodermatologic syndrome. *Journal of the American Veterinary Medical Association*, 228, 4, 543-548. First author of this clinical case report was veterinary ophthalmology Resident under my mentorship.

57. §†McLellan, G.J., Aquino S.M, Mason, D.R., Kinyon, J. and Myers, R.K. (2006) Use of posaconazole in the management of orbital invasive aspergillosis in a cat. *Journal of the American Animal Hospital Association*, 42, 302-307. Two co-authors were clinical Resident trainees.

58. §†Watté, C. M., McLellan, G.J., Elks, R., and Moore, D. L. (2004) Clinical Experience with butyl-2-cyanoacrylate adhesive in the management of canine and feline corneal disease. *Veterinary Ophthalmology*, 7, 5, 319-326. First author and two co-authors were veterinary ophthalmology Residents.

59. §†McLellan, G. J., Cappello, R., Mayhew, I. G., Elks, R., Lybaert, P., Watté, C., Moore, D. L. and Bedford, P.G.C (2003) Clinical and pathological observations in English cocker spaniels with primary metabolic vitamin E deficiency and retinal pigment epithelial dystrophy *The Veterinary Record*, 153, 287-292. Four veterinary ophthalmology residents participated in data collection for study.

60. †Moore, D.L., McLellan, G.J. and Dubielzig, R.R. (2003) A study of the morphology of canine eyes enucleated or eviscerated due to complications following phacoemulsification. *Veterinary Ophthalmology*, 6, 3, 219-226. First author was veterinary ophthalmology resident under my mentorship.

61. §†McLellan, G. J., Elks, R., Lybaert, P., Watté, C., Moore, D.L. and Bedford, P. G. C. (2002) Vitamin E deficiency in dogs with retinal pigment epithelial dystrophy. *The Veterinary Record* 151, 663-667. Four veterinary ophthalmology residents participated in data collection for study.

62. §†Mason, D.R., Lamb, C.R. and McLellan, G.J. (2001) Ultrasonographic findings in 50 dogs with retrobulbar disease. *Journal of the American Animal Hospital Association* 37, (6), 557-562. First author was veterinary student on semester-long diagnostic imaging elective.

63. †Cooper, S. C., McLellan, G. J., Rycroft, A. (2001) A study of the normal conjunctival flora of healthy domestic rabbits (*Oryctolagus cuniculus*) *The Veterinary Record*. 149, 232-235.

64. §McLellan, G. J., Archer, F. J. (2000) Corneal stromal sequestration and keratoconjunctivitis sicca in a horse. *Veterinary Ophthalmology*, 3,(2-3), 207-212.
65. Davidson, M.G., Geoly, F.J., Gilger, B.C., McLellan, G.J., Whitley, W. (1998) Retinal degeneration associated with vitamin E deficiency in hunting dogs. *Journal of the American Veterinary Medical Association*, 213, (5), 645-651.
66. §McLellan, G.J. and Bedford, P.G.C. (1997) Cytoskeletal intermediate filaments of canine retinal pigment epithelial cells in vivo and in vitro. *Research in Veterinary Science*, 63, 245-251.

**Other peer reviewed Continuing Education Publications / Reviews:** (in reverse chronological order)

Key: a= concept development and design; b = data acquisition / assembly of teaching materials; c= analysis / synthesis; d=writing

(McLellan is corresponding and/ or senior author on those publications marked by §; teaching publications co-authored by trainees and students are marked with †; invited publications/contributions are marked in bold.)

1. §†Telle, M.R., McLellan, G.J. (2019) Cloudy Eye in a Labrador Retriever. *Clinician's Brief* [Invited Case Study] Epub July, 2019 <https://www.cliniciansbrief.com/article/cloudy-eye-labrador-retriever> [a=100%,b=100%,d=100%] Grant: None. Conceived format for invited review, recruited and mentored resident coauthor, assembled resources and made major contribution to authorship and editing of this invited review for a continuing education publication directed at practicing veterinarians.
2. §McLellan, G.J., Teixeira, L.B.C (2015) Feline Glaucoma. *Veterinary Clinics of North America: Small Animal. [invited review]* Nov;45(6):1307-1333. PMID: 26342763. [ a=90%, b=80%, c=80%, d= 80%] Grant: none. Conceived format for invited definitive review of current state of knowledge on feline glaucoma directed at practicing veterinarians, comparative ophthalmology specialists and trainees. Recruited coauthor, assembled resources and made major contribution to authorship and editing manuscript.
3. §†Scott, E.M. and McLellan, G.J. (2013) Top 5 Glaucoma Drugs. *Clinician's Brief [Invited Review]*; 11 (3),81-83 & 94-95. [a=80%,d=50%] Grant: none. Conceived format for invited review, recruited and mentored resident coauthor, assembled resources and made major contribution to authorship and editing of this invited review for a continuing education publication directed at practicing veterinarians.
4. §McLellan, G.J. (2012) Measuring IOP in dogs & cats (Capsule Commentary). *Clinician's Brief* (June 6, epub) [invited commentary, editorial] [a=100%,d=100%] Grant: none
5. §McLellan, G.J. and Miller, P.E. (2011) Feline Glaucoma- A Comprehensive Review. *Veterinary Ophthalmology [Invited Review]*14 (Suppl 1), 15-29. PMCID: PMC3348181
6. §McLellan, G.J. (2004) Deep and progressive corneal ulcers in horses: diagnosing microbial keratitis and selecting appropriate antimicrobial therapy. *Compendium on Continuing Education for the Practicing Veterinarian*, 26,12, 967-971. [invited review]
7. §McLellan, G.J. (2004) Deep and progressive corneal ulcers in horses: inhibiting proteinase activity, controlling uveitis, and evaluating response to therapy. *Compendium on Continuing Education for the Practicing Veterinarian* , 26,12, 972-975. [invited review]
8. §†McLellan, G.J., Good, K.L. (2001) Equine Ophthalmic Emergencies. *Continuing Professional Development: Veterinary Medicine*, 3, (2), 39-47. Co-authored by Resident in veterinary ophthalmology.

**Other published editorial, educational and outreach materials:**

9. Pietila, E, and McLellan, GJ (2019) RED EYE? EMERGENCY OR NOT? A short guide to recognition and first aid of glaucoma and uveitis [ Brochure published by ICare oy, Finland distributed globally to veterinary practitioners]
10. Gilger BC, McLellan GJ, Michau TM; Editorial Board. Editorial - Veterinary ophthalmology. *Vet Ophthalmol.* 2022 Nov;25(6):424-425. doi: 10.1111/vop.13032. Epub 2022 Oct 13. PMID: 36227728.

**[2] Papers Submitted to Refereed Journals, currently in Review / Revision:**

1. Huang, A., Dalloul, J.M., Sugali, C.K., Dhamodaran, K., Dai, J., † Rai, A., McLellan, G.J., Mao, W. Cross-linked actin networks (CLANs) and their role in the trabecular meshwork. Submitted to *Experimental Eye Research* January 2026. [a=0%, b=5%, c=2%, d= 10%] Grants: NIH R21 EY034373 (G.J.M.) core grant P30 EY016665, and an unrestricted grant from Research to Prevent Blindness to the Department of Ophthalmology and Visual Sciences, University of Wisconsin-Madison. Supervised graduate student co-author who collected and prepared figures for this review paper, edited and revised manuscript.
2. †Lueck, L, Cameron, S, Ogata, N, Weng, H-Y, Veenstra, B, Elbe, A, Wilson, R; Zetterberg, H; McLellan, GJ; Crawford, LK. Correlations between plasma biomarkers of neurodegeneration and clinical signs of feline cognitive dysfunction in geriatric cats. Originally submitted to *Journal of Veterinary Internal Medicine* September 2025 (manuscript in revision for resubmission) [a=40%, 20%, c=5%, d= 15%] Grant: Morris Animal Foundation; Institute for Clinical and Translational Research. Originated study with Drs. Cameron and LaTasha, secured funding , provided resources and mentorship during manuscript preparation, during successive edits of draft produced by a neurology resident.
3. †Ferguson, S., Dulli, R., Lewin, A., Larsen, I., Kolb, A., McLellan, G.J., Bentley, E., Bernard, K.A., Newbury, S.P., Brandt, C.R. Feline Herpes Virus Type 1 Penciclovir and Ganciclovir Resistance in Animal Shelters Across the United States. (Submitted to *Antiviral Research* , in revision [a=40%,b=30%,c=5%,d=20%] Grant: Companion Animal Fund, UW-startup funds, Research to Prevent Blindness, NEI/NIH P30EY016665. Originated study with Dr. Brandt, provided resources and financial support (drafted /co-authored grant proposals), mentored veterinary summer scholar and resident conducting research project, contributed effort to authorship in editing of manuscript.
4. §†Lovstad, J., Jorgensen, D., Gamble, K and McLellan, G.J. Effects of Positional Dependency on Intraocular Pressure in Anesthetized Exotic Carnivores and Non-Human Primates (manuscript in revision). [a=20%, c=30%, d=40%] Grant: none. Mentored VM student who participated in data collection and collation, contributed effort to study design, data analyses and authorship of paper.
5. Becker, S., Jayaram, H., Eastlake, K., McLellan, G.J., Limb, G.A. (manuscript in revision) Inhibitory effect of an immunosuppressive drug regime on the feline electroretinogram *Veterinary Ophthalmology* [a= 5%; c=15%;d=30%] Grant: NEI/NIH K08 EY018609, Research to Prevent Blindness. Consulted on study design and assisted with data analyses; contributed significant effort to authorship of paper.
6. §†McLellan, G.J., Beckwith-Cohen, B., Gains, M., Bexfield, N.H., Archer, J. (manuscript in revision) A Study of the Diagnostic Value of Aqueous Humor Cytology in Canine And Feline Intraocular Disease *Veterinary Ophthalmology*. [a=100%;b=25%;c=90%; d=85%] Grant: none. Originated study, participated in data collection, conducted all data analyses and majority of paper authorship. Mentored senior veterinary student during elective project that provided proportion of data.

**In Preparation:** (only manuscripts in advanced stages of preparation are listed)

7. †§Torne Escude, O, Chan, K, Weiss, K, Kim, M, Oikawa, K, McLellan, GJ. Characterization of aqueous outflow pathway and related ocular vasculature with light sheet fluorescence microscopy in tissue-cleared eyes. Submission to *Experimental Eye Research* anticipated March, 2026. Originated study, directed staff and veterinary and undergraduate students in data acquisition and analyses; significant contribution to manuscript preparation. Grant: Research to prevent Blindness; Lions Eye Bank Gift of Sight Discovery fund; NIH Grant P30 EY016665 and a research grant from the Marfan Foundation.

8. †§Vogel, KR, Mathu, V, Torne, O, Kiland, JA., McDowell, CM, McLellan, GJ Culture and Characterization of Normal Canine Trabecular Meshwork Cells *in vitro*. Submission to *Veterinary Ophthalmology* anticipated February, 2026. Originated study, directed staff, postdoctoral, graduate and undergraduate students in data acquisition and analyses; significant contribution to manuscript preparation. Grant: Research to prevent Blindness; NIH Grant P30 EY016665 and Tim and Nancy Speaker Chair Funds.

9. †§ Rai, A, Mathu, V, Vogel, KR, Torne, O, Kiland, JA., Hernandez, H, Sharma, T, McDowell, CM, McLellan, GJ Culture and Characterization of Feline Trabecular Meshwork Cells in vitro. Submission to *Experimental Eye Research* anticipated February, 2026. Originated study, directed staff, postdoctoral, graduate and undergraduate students in data acquisition and analyses; significant contribution to manuscript preparation. Grant: Research to prevent Blindness; Lions Eye Bank Gift of Sight Discovery fund; NIH Grant P30 EY016665 and a research grant from the Marfan Foundation.

10. †Lewin, A.C., Longhurst, C., McLellan, G.J., Brandt, C.R., Kolb, A.W., Bernard, K.A., Newbury, S.P., Bentley, E. Incidence of Ocular and Respiratory Cat Viral Pathogens in Animal Shelters Across the USA: Frequent Co-infections with Feline Herpes virus-1 and Feline Calicivirus.  
[a=40%,b=20%,c=5%,d=30%] Grant: Companion Animal Fund, UW-startup funds, Research to Prevent Blindness, NEI/NIH P30EY016665. Originated study with Dr. Brandt, provided resources and financial support (drafted /co-authored grant proposal), mentored resident conducting research project, contributed significant effort to authorship and editing of manuscript.

11. §†McLellan, G.J. Snyder, K.C., Kim, C.B.Y., Nork, T.M., Hennes-Beean, E.A., Kaufman, P.L., Teixeira, L.B.C, Ellinwood, N.M., Verhoeve, J.N. Functional Measures of Glaucoma Progression in a Feline Spontaneous Congenital Glaucoma Model. (Submission to *Investigative Ophthalmology and Visual Sciences* anticipated February, 2026)  
[a=80%, b=50%, c=60%, d=70%] Grant: NIH: K08 EY018609; P30 EY0016665, R01 EY02739601, and UW-ICTR through NCATS grant UL1TR000427; Fight For Sight Grant in Aid; BrightFocus Foundation National Glaucoma Research Grant; Research to Prevent Blindness. Originated, designed and secured extramural funding for study; collected data and mentored and directed staff and veterinary student in data collection, analyses, interpretation and figure preparation; significant contribution to authorship of manuscript.

12. §†Scott, E.M., McLellan, G.J., Harman, C.D., Koehl, K.L., Plummer, C.E., and Komaromy, A.M. Aqueous Humor Concentrations of TGF- $\beta$  in a Canine Model of Open Angle Glaucoma. Submission to *Molecular Vision* anticipated 2026  
[a=60%,b=20%, c=40%, d=30%] Grant: Vision for Animals Foundation; UW-Foundation unrestricted funds for glaucoma research, Research to Prevent Blindness. Originated study and contributed funding support from unrestricted funds; mentored resident in submission of small extramural grant to fund study and in data collection, analyses, interpretation and figure preparation; significant contribution to authorship of manuscript (contribution equal to that of senior / last author, AK).

13. §†Kiland, J.A., Gloe, S. and McLellan, G.J. Relationship of Tonopen Avia-Vet readings to manometric IOP and values obtained with other common tonometers in *ex vivo* horse eyes. Submission to *Veterinary Ophthalmology* anticipated February, 2026

[a=100%,b=100%,c=100%, d=100%] Grant: Research to prevent Blindness. Originated study, directed staff and undergraduate student in data acquisition and analyses; significant contribution to manuscript preparation.

### **[3] Papers Published in Non-refereed Journals & Editorials:**

1. Ofri, R, Millichamp, NJ, Keller, C, McLellan, GJ, Komáromy, AM, Morton, D, Matas, M, Miller Michau, T, Coall, S Sansom, J, Leonard, BC; Concerns About a Dog Model of Dry Eye Disease. *Trans. Vis. Sci. Tech.* 2024;13(3):28. <https://doi.org/10.1167/tvst.13.3.28>. (Letter to the Editor)
2. Gilger, B.C., McLellan, G.J., Miller Michau, T., Editorial Board. (2022) Editorial: Veterinary Ophthalmology (Guidelines for Ethical Research in Veterinary Ophthalmology) *Veterinary Ophthalmology* 25 (6): 424-425: doi: 10.1111/vop.13032. Epub 2022 Oct 13. PMID: 36227728
3. §McLellan, G.J. and Bedford, P.G.C. (1997) Retinal pigment epithelial dystrophy in the dog: a review and research update. *Veterinary International*, 9, (1), 26-31.
4. §McLellan, G.J. and Bedford, P.G. C. (1995) Retinal pigment epithelial dystrophy: the significance of antioxidants and the potential role of lipoprotein abnormalities in the formation of lipopigment. *Veterinary International*, 7, (4), 18-19.

### **[4] Invited Papers Published in Conference Proceedings:**

1. §McLellan, G.J. (2012) Spontaneous large animal models of glaucoma. *Proceedings XX Biennial Meeting of the International Society for Eye Research* (Berlin, Germany) **[invited oral presentation]**

(see also “Invited Lectures” [Section C])

### **[5] Published Textbooks**

[Two published Texbooks, see section 7 below]

### **[6] Chapters in Books**

[Five published textbook chapters: teaching]

1. §McLellan G.J and Narfström, K. (2014) “The Canine and Feline Fundus” In: The BSAVA Manual of Canine and Feline Ophthalmology. (3rd Edition) (Eds. D.J. Gould and G.J. McLellan) (BSAVA, Cheltenham, UK) [a=80%,d=70%] Invited chapter author / Editor. Recruited co-author, developed chapter outline, made significant contribution to chapter content.
2. Dennis, R., Johnson, P. J. and McLellan G.J. (2014) “Diagnostic Imaging of the Eye and Orbit” In: The BSAVA Manual of Canine and Feline Ophthalmology (3rd Edition) (Eds. D.J. Gould and G.J. McLellan) (BSAVA, Cheltenham, UK) Invited chapter co-author / Editor. [a=40%,d=35%] Recruited co-authors, developed chapter outline, made significant contribution to chapter content and edited final chapter.
3. §†Lewin, A.C. and McLellan G.J (In Review /Production) Ophthalmic Examination and Ancillary Diagnostic Tests. In: Domestic Rodents: Medicine and Surgery (Ed. C. Mans and V. Jekl) (CRC Press, Oxford, UK) Invited chapter

author / contributor.[a=50%,d=50%]. Developed chapter outline, recruited and mentored co-author (a Resident / trainee in veterinary ophthalmology) and made significant contribution to chapter content and editing.

4. §McLellan, G.J. (2021) Diseases of the Canine Optic Nerve. In: Veterinary Ophthalmology, 6th Edition (Ed. Gelatt, K.N, Ben-Shlomo, G., Gilger, B., Hendrix, D., Kern, T. and Plummer, C). pp Invited chapter author / contributor for this completely revised edition of the definitive textbook reference for specialists and trainees in Veterinary Ophthalmology. **This textbook is required reading for Residents in Veterinary Ophthalmology, internationally.**

5. §†McLellan, G.J. (2002) "The Canine Fundus". In : The BSAVA Manual of Small Animal Ophthalmology.(2nd Edition) (Ed. S.M. Crispin and S. M. Petersen-Jones) (BSAVA, Cheltenham, UK). [a=100%,d=90%] Invited chapter author / contributor.

#### **[7] Edited Textbooks:**

1. §Gould D.J. and McLellan G.J. (Editors) The BSAVA Manual of Canine and Feline Ophthalmology, 3rd Edition (2014) (BSAVA Publications, Cheltenham, UK) (Also published in Japanese translation, 2016) [a=60%,d=50%]. **Invited Editor and Contributor.**

Responsible for developing chapter outline and recruited chapter authors for this multi-author textbook, as well as contributing two chapters (see above). for this popular 400+page manual of clinical veterinary ophthalmology aimed as a practical reference guide for veterinary general practitioners, veterinary students, technicians and residents. Extensive editing of submitted chapters by myself and co-editor (This Manual has so far sold several thousand copies internationally since publication and has been translated into Japanese).

2. Dubielzig, R.R., Ketring,, K., McLellan, G.J., Albert, D. Veterinary Ocular Pathology. A Comparative Review Elsevier. (2010) (Saunders Elsevier Ltd., Oxford, UK). **Invited co-author** [a=20%, d=30%] Conceived outline for structure and content of first two introductory chapters, contributed content and extensively edited all chapters including responsibility for incorporation of all literature citations throughout 450+ page textbook. This work is considered the definitive text on veterinary and comparative ocular pathology and is widely consulted by both veterinary pathologists and those involved in ocular toxicology. Aimed at trainees and specialists in veterinary anatomic pathology and veterinary ophthalmology, the book is required reading for veterinary ophthalmology Residents internationally, for board certifying exam preparation. It has been widely cited in the veterinary literature (>200 citations) since publication. A second edition of this Textbook is currently in preparation as a multi-author text.

#### **[8] Contributed Abstracts and Scientific Proceedings (reverse chronological order):**

(McLellan as presenting author marked by §, Presentation given by trainee marked by †)

#### **Abstracts / presentations (Previous calendar year highlighted):**

##### International:

1. McLellan, GJ, Kiland, JA, Terhaar, H, Walleck, H, Chen, N, Torne, O, Oikawa, K, Wahl, T (2025) Accuracy and Precision of Rebound and Applanation Tonometers in Eyes with Focal Corneal Oedema Eur Coll Vet Ophthalmol Annual Scientific Meeting , May 2025, Edinburgh, UK [oral presentation]
2. †Oikawa, K , Adams, GA, Kiland, JA, McLellan, GJ (2025) Neurofilament light chain as a biomarker of neuro-degeneration in glaucoma, Annual Meeting Assoc Res Vis Ophthalmol (May 2025 , Salt Lake City, UT) [ poster presentation]
3. Kiland, JA, Hao, S, McLellan GJ (2025) Comparison of the TONOVENT Pro®, TONOVENT Plus ®, and TONOVENT® tonometers in a feline glaucoma model Annual Meeting Assoc Res Vis Ophthalmol (May 2025 , Salt Lake City, UT) [ poster presentation]

4. McLellan, GJ, Torné, O, Oikawa, K, Kiland, JA, Kragerud, B, Teixeira, LBC, Muir, P (2025) Identification of a novel genetic variant associated with Primary Acute Angle Closure (PACG) in dogs. Annual Meeting Assoc Res Vis Ophthalmol (May 2025, Salt Lake City, UT) [ poster presentation]
5. †Torne, O, Jimmerson, M, Teixeira, L, Liu, Y, Elicieri, K, McLellan GJ (2024) Distal outflow pathway abnormalities in feline glaucoma. Eur Coll Vet Ophthalmol Annual Scientific Meeting, Amsterdam, Netherlands [oral presentation]
6. †Oikawa, K, Torne, O, Kiland, JA, McLellan, GJ (2024) Distinct sub-region-specific optic nerve head (ONH) molecular profiles in a large animal glaucoma model. Annual Meeting Assoc Res Vis Ophthalmol (May 2024, Seattle, WA) [ oral presentation]
7. †Torne, O, Oikawa, K, Larsen, S, Young, A, Teixeira, LBC, McDowell, CMM, Peters, DM and McLellan, GJ (2024) Expression of LTBP2 and associated extracellular matrix (ECM) proteins during postnatal development of the anterior segment (AS) in normal eyes and in an LTBP2 mutant glaucoma model Assoc Res Vis Ophthalmol (May 2024, Seattle, WA) [poster presentation]
8. McLellan, GJ, Torne, O, Kiland, JA, Oikawa, K (2024) Transcriptomic profiling of laser capture micro-dissected (LCM) trabecular meshwork (TM) reveals early molecular effects of LTBP2 mutation prior to glaucoma development Assoc Res Vis Ophthalmol (May 2024, Seattle, WA) [poster presentation]
9. McLellan, GJ (2024) Juggling Eyeballs Lessons in Biology from our Veterinary Glaucoma Patients. Society for Comparative Ocular Pathology ( April 12-13, Madison, WI) [oral presentation]
10. †Torne, O (2024) Distal Outflow Pathway Abnormalities in Feline Glaucoma. Society for Comparative Ocular Pathology ( April 12-13, Madison, WI) [oral presentation]
11. †Oikawa, K, Kiland JA, Eaton JS, Torne O, Mathu V, Nickells RW, McLellan GJ (2023) Intravitreal AAV2 Gene Delivery to Feline Retinal Ganglion Cells (RGCs) Annual Meeting Assoc Res Vis Ophthalmol. (April 2023, New Orleans, LA) [poster presentation]
12. †Torne O, Oikawa K, Teixeira L, Kiland JA, McLellan GJ (2023) Early Life Trabecular Meshwork Pathology Associated with LTBP2 Mutation in a Feline Model of Primary Congenital Glaucoma (PCG). Annual Meeting Assoc Res Vis Ophthalmol. (April 2023, New Orleans, LA [poster presentation]
13. †Mathu V, Vogel K, Oikawa K, Torne O, Kiland JA, Smith A, McDowell CM, McLellan GJ (2023) Isolation and Culture of Normal and Glaucomatous Feline Trabecular Meshwork Cells (TMCs) Annual Meeting Assoc Res Vis Ophthalmol. (April 2023, New Orleans, LA) [poster presentation]
14. §McLellan GJ, Oikawa K, Kiland JA, Snyder KC, Teixeira L, Chan K, Lindemann J, Hennes-Beean E, Ver Hoeve J (2023) Evoked Potentials Detect Functional Correlates of Axon Loss in Feline Glaucomatous Optic Neuropathy Annual Meeting Assoc Res Vis Ophthalmol. (April 2023 New Orleans, LA) [poster presentation]
15. Kiland JA, Terhaar H, Walleck H, Chen N, Torne O, Oikawa K, Wahl T, McDaniel K, McLellan GJ (2023) Accuracy and Precision of Rebound and Applanation Tonometers in Eyes with Focal Corneal Edema. Annual Meeting Assoc Res Vis Ophthalmol. (April, 2023, New Orleans, LA )[poster presentation]
16. †Oikawa, K, Kiland, JA, Torne, O, Gloe, S, Mathu, V, Wetherbee, B, McLellan, GJ (2022) Disease Stage-Dependent Optic Nerve Head (ONH) Molecular Alterations in a Feline Glaucoma Model ISER / BrightFocus Concepts and Breakthroughs in Glaucoma Symposium, Atlanta, GA [poster presentation; \*\*ISER/FastTrack travel grant awardee\*\*] Meeting postponed from October 2021 due to Covid-19 pandemic.
17. †Torne O, Oikawa, K, Kiland, J, Teixeira, LBC, McLellan GJ (2022) Outflow pathway assessment in a feline model of glaucoma due to LTBP2 mutation. ISER / BrightFocus Concepts and Breakthroughs in Glaucoma Symposium, Atlanta, GA [poster presentation; \*\*ISER/FastTrack travel grant awardee\*\*] Meeting postponed from October 2021 to May 2022 due to Covid-19 pandemic.

18. †Oikawa, K, Kiland JA, Mathu, V, Torne, O, McLellan GJ (2022) Early Neuroinflammatory Responses in the Visual Pathway in a Feline Inherited Glaucoma Model. Annual Meeting Assoc Res Vis Ophthalmol [ virtual oral presentation, hybrid meeting] \*\*ARVO Travel Award Recipient\*\*

19. †Torne Escude, O, Oikawa, K, Kiland JA, McLellan GJ (2022) Effect of acute intraocular pressure elevation in normal and feline congenital glaucoma eyes due to LTBP2 mutation. Annual Meeting Assoc Res Vis Ophthalmol [ virtual poster presentation, hybrid meeting] \*\*ARVO Travel Award Recipient\*\*

20. § McLellan, GJ, Terhaar, HM, Walleck, HE, Chen, N, Wahl, TM, McDaniel, KW, Kiland, JA (2021) Comparison of TonoVet Plus, TonoVet and Tono-pen Vet tonometers in normal cats and cats with glaucoma and corneal disease. Annual Meeting Eur Coll Vet Ophthalmol [Virtual oral presentation]

21. †Torne Escude, O, Oikawa, K, Kiland, JA, Weiss, K, Huisken, J, McLellan, GJ (2021) Characterization of the distal outflow pathway in feline primary congenital glaucoma (PCG) due to LTBP2 mutation. Annual Meeting Eur Coll Vet Ophthalmol [Virtual oral presentation]

22. †Oikawa, K, Kiland, JA, Torne, O, Gloe, S, Mathu, V, Wetherbee, B, McLellan, GJ (2021) Optic nerve head (ONH) glial activation molecular signature across disease stages in a feline glaucoma model. Annual Meeting Assoc Res Vis Ophthalmol [virtual poster presentation; \*\* ARVO Travel Award Recipient\*\*]

23. †Torne, O, Oikawa, K, Kiland, JA, Teixeira, L, McLellan, GJ (2021) Trabecular meshwork pathology in a feline model of glaucoma due to LTBP2 mutation. Annual Meeting Assoc Res Vis Ophthalmol [virtual poster presentation; \*\* ARVO Travel Award Recipient\*\*]

24. †Oikawa, K, Kiland, JA, McLellan, GJ. (2020) Spatiotemporal characterization of neuroinflammatory responses in the optic nerve head (ONH) in a genetic feline model of glaucoma. Proceedings, 2020 Annual Meeting Assoc Res Vis Ophthalmol (Baltimore, MD) Abstract #2427 [accepted poster presentation] Invest. Ophthalmol. Vis. Sci. 61(7):268. \*\*MEETING CANCELLED DUE TO COVID-19 PANDEMIC\*\*

25. †Torne, O, Chan, K, Oikawa, K, Kim, M, Weiss, K, Huisken, J, Nakamura, T, McLellan, GJ. (2020) Advanced imaging of aqueous outflow pathways in models of congenital glaucoma due to LTBP2 mutation. Proceedings, 2020 Annual Meeting Assoc Res Vis Ophthalmol (Baltimore, MD). Invest. Ophthalmol. Vis. Sci. 61(7):3450. \*\*MEETING CANCELLED DUE TO COVID-19 PANDEMIC\*\*

26. Ikeda, A, Takimoto, T, Oikawa, K, Ikeda, S, McLellan, GJ, Sheibani, N, Dubielzig, R, Albert, D. (2020) Genomic analysis of cat lens and lens tumor. Invest. Ophthalmol. Vis. Sci. 61(7):3630. \*\*MEETING CANCELLED DUE TO COVID-19 PANDEMIC\*\*

27. § McLellan, GJ, Torne, O, Oikawa, K (2020) Trabecular meshwork extracellular matrix changes in a large animal model of glaucoma associated with *LTBP2* mutation. Accepted Abstract (2020) Annual Meeting Assoc Res Vis Ophthalmol (Baltimore, MD) \*\*MEETING CANCELLED DUE TO COVID-19 PANDEMIC\*\*

28. § McLellan, G. J., Oikawa, K., Kiland, J.A. Spatiotemporal characterization of neuroinflammatory responses in the optic nerve head (ONH) in glaucoma. Federation for European Neuroscience Societies (FENS) Annual Meeting July 11-15th 2020, Glasgow, UK. [Poster Presentation Accepted] \*\*MEETING CANCELLED DUE TO COVID-19 PANDEMIC\*\*

29. § McLellan, GJ, Terhaar, HM, Walleck, HE, Chen, N, Wahl, TM, McDaniel, KW, Kiland, JA comparison of tonovet plus, tonovet and tono-pen vet tonometers in normal cats and cats with glaucoma and corneal disease. Annual Meeting Eur Coll Vet Ophthalmol (Rhodes, Greece) [Presentation Accepted] \*\*MEETING CANCELLED DUE TO COVID-19 PANDEMIC\*\*

30. †Oikawa, K, Kiland, JA, Ellinwood, NM, McLellan, GJ (2019) Regional and temporal complexity of optic nerve head (ONH) neuroinflammation in glaucoma and its association with IOP. Proceedings ISER / BrightFocus Glaucoma Symposium: Concepts and Breakthroughs in Glaucoma (October 22<sup>nd</sup>-26<sup>th</sup>, Atlanta, GA) [oral presentation] \*\*Recognized as top abstract submission by a trainee\*\*

31. †Vogel, K, Oikawa, K, McDowell, CM and McLellan, GJ (2019) Exploring disease mechanisms linking Alzheimer's disease and glaucoma. Proceedings ISER / BrightFocus Glaucoma Symposium: Concepts and Breakthroughs in Glaucoma (October 22nd-26th, Atlanta, GA) [poster presentation]
32. §McLellan, GJ, Kiland, JA, Lopez, R, Oikawa, K (2019) Angiotensin II Receptor Blocker (ARB) therapy in a chronic glaucoma model : initial findings. Proceedings ISER / BrightFocus Glaucoma Symposium: Concepts and Breakthroughs in Glaucoma (October 22nd-26th, Atlanta, GA) [oral presentation]
33. Mischi, E, Soukup, P, Harman, CD, Oikawa, K, McLellan, GJ, Komaromy, AM, Pot, SA (2019) Outer retinal thickness in four distinct retinal regions imaged with optical coherence tomography in dogs and cats. Proceedings Annual Meeting Eur Coll Vet Ophthalmol (May 2019, Antwerp, Belgium) [oral presentation]
34. †Chan, K, Wahlgren, B, Gloe, S, Ver Hoeve J, Hoon, M, Pattnaik, B, Williams, J, Kiland, J, Jansen, E, Salomons, G, Walters, D, Roullet, JB, Gibson, KM, McLellan, GJ (2019) Vigabatrin-induced retinal bipolar cell plasticity in C57BL/6J mice. Proceedings, 2019 Annual Meeting Assoc Res Vis Ophthalmol (Vancouver, BC, Canada) Abstract #968 [paper presentation]
35. †Oikawa, K, Kiland, JA, Ellinwood, NM, McLellan, GJ (2019) Neuro-inflammation and degeneration in the Optic Nerve Head (ONH) in a Genetic Feline Model of Glaucoma. Proceedings, 2019 Annual Meeting Assoc Res Vis Ophthalmol (Vancouver, BC, Canada) Abstract # 673 [poster presentation]
36. Kiland, JA, Rothering, A, Gloe, S, McLellan, GJ (2019) Validation of the ICare TONOVENT Plus® rebound tonometer in normal rabbit eyes. Proceedings, 2019 Annual Meeting Assoc Res Vis Ophthalmol (Vancouver, BC, Canada) Abstract #2427 [poster presentation]
37. §McLellan, GJ ; Telle, MR; Nilles, J; Snyder, K; Oikawa, K; Kiland, JA; Teixeira, LB; Huang, A (2019) Imaging Post-Trabecular Outflow Pathways in Spontaneous Canine Glaucoma. Proceedings, 2019 Annual Meeting Assoc Res Vis Ophthalmol (Vancouver, BC, Canada) Abstract #3184 [poster presentation],
38. Colbert, MK, van der Merwe, Y, Ho, LC, Yang, X, McLellan, GJ, Hurley, SA, Fingert, JH, Parra, C, Faiq, MA, Wollstein, G, Schuman, JS, Chan, KC. (2019) Non-invasive Detection of Visual Pathway Abnormalities in Genetic Experimental Models of Glaucoma Using Diffusion Tensor MRI Proceedings, 2019 Annual Meeting Assoc Res Vis Ophthalmol (Vancouver, BC, Canada) Abstract # 4823 [paper presentation]
39. Heidari, M, Snyder, KC, Dejanovich, S, Radcliff, A, Verhoeve, JN, McLellan, GJ, Duncan, ID (2018) 34<sup>th</sup> Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS)(October 10<sup>th</sup>-12<sup>th</sup>, 2018) Berlin, Germany. Remyelination in the Optic Nerve Detected by Visual Evoked Potentials.
40. § McLellan, GJ, Heidari, M, Snyder, KC, Teixeira, LBC, Oikawa, K, Chan, K, Lindemann, J, Hennes-Beean, EA, Kiland, JA, Dejanovich, S, Radcliff, A, Verhoeve, JN, Duncan, ID (2018) XXIII Biennial Meeting of the International Society for Eye Research (ISER) (September 9<sup>th</sup>-13<sup>th</sup>, 2018) Belfast, UK. Visual Evoked Potentials Detect Functional Correlates of Demyelination, Remyelination and Axon Loss in Feline Models of Common Optic Neuropathies [Poster Presentation].
41. §McLellan, GJ, Snyder, KC, Oikawa, K, Kiland, JA, Gehrke, S, Huang, A (2018) Imaging distal aqueous outflow pathways in a spontaneous model of Primary Congenital Glaucoma (PCG). Proceedings, 2018 Annual Meeting Assoc Res Vis Ophthalmol (Honolulu, HI) Abstract # 5908 [poster presentation]
42. §McLellan, GJ, Hernandez, H, Curry, S and McDowell, CM (2017) Culture and Characterization of Feline Trabecular Meshwork Cells In Vitro. International Society for Eye Research / BrightFocus 2017 Glaucoma Symposium, Atlanta, GA. October 5-8, 2017 [poster presentation]
43. †Oikawa, K, Teixeira, LBC, Eliceiri, KW, McLellan, GJ (2017) Microstructure of the Feline Optic Nerve Head Resembles that of Humans. International Society for Eye Research / BrightFocus 2017 Glaucoma Symposium, Atlanta, GA. October 5-8, 2017 [poster presentation]
44. §McLellan, GJ, Shimony, AM, Hurley, SA, Mossahebi, P, Waller, K, Field, AS, Ellinwood, NM, Ho, LC and Chan, KC. (2017) Diffusion Tensor Imaging of Visual Pathway Micro-Structural Features In Feline Glaucoma: A Pilot Study. Proceedings Annual Meeting Eur Coll Vet Ophthalmol (Estoril, Portugal) [oral presentation]
45. §McLellan, GJ and Oikawa, K (2017) Optic Nerve Head (ONH) TGF- $\beta$  in a Spontaneous Large Animal Glaucoma Model. Proceedings, 2017 Annual Meeting Assoc Res Vis Ophthalmol (Baltimore, MD) Abstract #2547 [poster presentation]

46. †Oikawa, K, VerHoeve, J.N., Teixeira, L.B., Kiland, J.A., Hennes-Beean, E.A., Ikeda, A., Ellinwood, N.M., McLellan, G.J. (2016) Molecular Pathogenesis of Early Glaucomatous Optic Neuropathy in a Spontaneous Feline Model. XXII Biennial Meeting of the International Society for Eye Research (Tokyo, Japan) [poster presentation]

47. §McLellan, G.J., Adelman, S., Teixeira, L.B., Oikawa, K., Ellinwood, N.M. (2016) Retinal ganglion cell (RGC) somas persist after loss of axons in a spontaneous feline glaucoma model. Proceedings, 2016 Annual Meeting Assoc Res Vis Ophthalmol (Seattle, WA) Abstract #2539 [poster presentation]

48. §McLellan, G.J., Gosling, A.A., Kiland, J.A., Rutkowski, L.E., Ellinwood, N.M. (2015) Steroid-induced ocular hypertensive response in a spontaneous feline glaucoma model. Proceedings, 2015 Annual Meeting Assoc Res Vis Ophthalmol (Denver, CO) Abstract #3268 [poster presentation]

49. †Oikawa, K, VerHoeve, J.N., Teixeira, L.B., Kiland, J.A., Hennes-Beean, E.A., Liu, X.-Y., Ikeda, A., Ellinwood, N.M., McLellan, G.J. (2016) Early changes in optic nerve head (ONH) gene expression in a spontaneous glaucoma model. Proceedings, 2016 Annual Meeting Assoc Res Vis Ophthalmol (Seattle, WA) Abstract #6080 [oral presentation]

50. Duncan, I.D., Radcliff, A.B., Field, A.S., McLellan, G. and Ver Hoeve, J.N. (2015) Histological promotion of remyelination of vitamin B12 in a model with global demyelination, and the cell/s responsible. Proceedings, Neuroscience (Annual Meeting of the Society for Neuroscience), October 17th -20th, (Chicago, IL). [poster presentation]

51. §McLellan, G.J., Ellinwood, N.M., Teixeira, L.B.C., Danford, F.L., Vande Geest, J.P. (2014) The Lamina Cribrosa Region Of The Optic Nerve Head In A Spontaneous Feline Genetic Model Of Glaucoma. Proceedings: International Society for Eye Research biennial meeting (San Francisco, CA) [oral presentation]

52. §McLellan, G.J., Teixeira, L.B., Snyder, K.C., Rasmussen, C.A., Hennes-Beean, E.A., Verhoeve, J.N. (2014) Early Optic Neuropathy in a Spontaneous Feline Model of Congenital Glaucoma Proceedings, 2014 Annual Meeting Assoc Res Vis Ophthalmol (Orlando, FL) [poster presentation]

53. §McLellan, G.J., Hurley, S.A., Mossahebi, P., Ellinwood, N.M., Field, A.S. (2014) Quantitative MRI-derived optic nerve microstructural features in a feline glaucoma model. Proceedings: International Society for Imaging of the Eye (Orlando, FL). [poster presentation]

54. §McLellan, G.J., Moon, A., Sheibani, N., Park, S.Y., Ellinwood, N.M. (2013) Active and Latent TGF-Beta2 in the Aqueous Humor of Cats with Glaucoma. Program and Abstracts of the 2013 International Society for Eye Research Sarasota Symposium on Molecular Mechanisms of Glaucoma (Sarasota, FL) p30. [poster presentation]

National:

55. McLellan GJ, Adams G, Kiland JA, Oikawa K (2024) *Midwest Eye Research Symposium Iowa City, IA* "Neurofilament light chain as a biomarker of neurodegeneration in feline glaucoma" [ 10 minute oral presentation]

56. †Mathu, V, Burkhalter, R, Thao, MK, Kragerud, B, Kiland, JA, Oikawa, K, McLellan, GJ (2024) *Midwest Eye Research Symposium Iowa City, IA* "Effect of Unilateral Optic Nerve Crush and Microbead Injection on Optomotor Response Ratio in 5XFAD and wt C57BL/6J Mice" [ 10 minute oral presentation]

57. †Thao, MK, Mathu, V, Kragerud B, Burkhalter, R, Oikawa, K, Kiland, JA, McLellan, GJ (2024) *Midwest Eye Research Symposium Iowa City, IA* "Microbead-Induced Ocular Hypertension and Optic Nerve Crush Reduce Ganglion Cell Complex Thickness in a Mouse Model of Alzheimer's Disease"

58. †Lueck, L, Cameron, S, Crawford, L, Ogata, N, Weng, H-Y, Arendt, T, Elbe, A, Hahn, L, Bendlin, B, Zetterberg, H and McLellan, GJ (2024) Evaluation of plasma biomarkers in cats with and without evidence of feline cognitive dysfunction. Proceedings 2024 Am Coll Vet Int Med Forum, Minneapolis, MN [ resident presentation]

59. †Yang, VY, Eaton, JS, Kiland, JA, Koch, KE, Oikawa, K, McLellan, GJ (2022) Effect of 0.024% latanoprostene bunod on intraocular pressure and pupil diameter in normal cats and cats with primary congenital glaucoma *Proceedings Annual Meeting Amer Coll Vet Ophthalmol* Palm Springs, CA [oral presentation]

60. † Mathu, V, Vogel, KR, Torne, O, Oikawa, K, Kiland, JA, McDowell, CM, McLellan, GJ (2022) Feline Trabecular Meshwork Cell Isolation and Culture Using Magnetic Particles. *Mid-West Eye Research Symposium*, Iowa City, Iowa [Poster Presentation] \*\* Award for Best Graduate Student Poster Presentation\*\*

61. † Mueller, E, Kiland, JA, Mitro, C, Peterson, M, McLellan, GJ (2022) Effect of differing concentrations of netarsudil ophthalmic solution on intraocular pressure in cats .*National Veterinary Scholars Symposium*. University of Minnesota

62. †Chan, KH, Weiss, K, Torne, O, Kim, M, Huisken, J, McLellan GJ (2021) Characterization Of Aqueous Outflow Pathway Associated Ocular Vasculature by Light Sheet Fluorescence Microscopy *Proceedings Annual Meeting Amer Coll Vet Ophthalmol* Indianapolis IN [Virtual oral presentation, hybrid meeting]

63. †Oikawa, K, Kiland, JA, Torne,O, Coffey,O, David,S, McLellan,GJ (2021) Association between OCT- derived optic nerve head parameters and optic nerve axon count in feline congenital glaucoma (2021) Annual Meeting Amer Coll Vet Ophthalmol Indianapolis IN [Virtual oral presentation]

64. Faghihi, H, McLellan, GJ, Kiland, JA, Salek, S and Rajaei, SM (2021) Effect of Topical 0.0015% Tafluprost on Intraocular Pressure in Cats. *Proceedings Annual Meeting Amer Coll Vet Ophthalmol* Indianapolis IN [Virtual oral presentation, hybrid meeting]

65. †Nilles, JP, Telle, MR, Oikawa, K, Kiland, JA, Snyder, KC and McLellan, GJ (2019) Effect of acute intraocular pressure elevation on the post-trabecular aqueous outflow pathways in dogs. *Proceedings, Amer Coll Vet Ophthalmol.* Maui, HI; November 6-10, 2019. [oral presentation].

66. †Minella, AL, Kiland, JA, McLellan, GJ (2018) Validation of the TonoVet Plus and Tono-pen Avia Tonometers in Normal Canine Eyes. *Proceedings, Amer Coll Vet Ophthalmol.* Minneapolis, MN; September 26-29, 2018. [poster presentation].

67. †Lewin, A, McLellan, GJ, Bentley, E, Bernard, KA, Newbury, SP, Brandt, CR (2018) Genomic Analysis of Feline Herpesvirus Type 1 Isolates. *Proceedings, Amer Coll Vet Ophthalmol.* Minneapolis, MN; September 26-29, 2018. [oral presentation].

68. †Krishnan, H, Hetzel, S, McLellan, GJ, Bentley, E (2018) Comparison of Outcomes in Eyes Undergoing Cataract Surgery Versus Eyes Not Undergoing Cataract Surgery. *Proceedings, Amer Coll Vet Ophthalmol.* Minneapolis, MN; September 26-29, 2018. [oral presentation].

69. † Oikawa, K, Sun, D, Kiland, JA, Hennes-Beean, EA, Trane, RM, McLellan, GJ. (2018) Relationship Between Aqueous Humor Transforming Growth Factor Beta (TGF- $\beta$ ) and IOP in Feline Congenital Glaucoma. *Proceedings, Amer Coll Vet Ophthalmol.* Minneapolis, MN; September 26-29, 2018. [oral presentation].

70. †Snyder, KC, Oikawa, K, Gehrke, S, Williams, J, Teixeira, LBC, Huang, A, McLellan, GJ. (2018) Dynamic Imaging of Distal Aqueous Humor Outflow Pathways in Feline Congenital Glaucoma (FCG). *Proceedings, Amer Coll Vet Ophthalmol.* Minneapolis, MN; September 26-29, 2018. [oral presentation].

71. †Adelman, SA, Oikawa, K, Senthilkumar, G, Møller Trane, R, Teixeira, LBC, McLellan, GJ. (2018) Mapping and Quantifying Retinal Ganglion Cell Somas in Normal and Glaucomatous Cats. *Proceedings, Amer Coll Vet Ophthalmol.* Minneapolis, MN; September 26-29, 2018. [oral presentation].

72. †Telle, MR, Snyder, KC, Oikawa, K, Teixeira, LBC, Kiland, JA, Bentley, E, Huang, A, McLellan, GJ (2018) Development and Validation of New Methods to Visualize Conventional Aqueous Outflow Pathways in Canine Glaucoma. *Proceedings, Amer Coll Vet Ophthalmol.* Minneapolis, MN; September 26-29, 2018. [oral presentation].

73. Huang, A.S., McLellan,G.J., Tan, J.C., Francis, B.A., Weinreb, R.N. (2017) Angiographic Aqueous Humor Outflow Imaging. *Proceedings of the Trabecular Meshwork Society Annual Meeting (Portland, OR)*. [oral presentation]

74. †Oikawa, K, Kiland, JA, Wickland,C, Neufcourt,S, and McLellan,GJ (2017) Effect of Telmisartan on IOP, Blood Pressure and Ocular Perfusion Pressure in a Spontaneous Feline Glaucoma Model. *Proceedings, Amer Coll Vet Ophthalmol.* Baltimore, MD; October 11-14, 2017. [oral presentation]

75. †Lewin, AC, Longhurst, C, McLellan, GJ, Brandt, CR, Kolb, AW, Bernard, KA, Newbury, SP and Bentley, E (2017) Infectious Ocular Disease Severity Varies by Pathogen Detected in Cats. *Proceedings, Amer Coll Vet Ophthalmol.* Baltimore, MD; October 11-14, 2017. [oral presentation]

76. †Telle, MR, Chen, N, Kiland, JA, Shinsako, D and McLellan GJ (2017) Corneal Sensitivity and Relationship between Corneal Biometric Parameters in Glaucomatous and Normal Cats. *Proceedings, Amer Coll Vet Ophthalmol.* Baltimore, MD; October 11-14, 2017. [oral presentation]

77. Kolb, AW, Lewin, AC, McLellan, GJ, and Brandt, CR (2017) Phylogenetic, Recombination, and Genetic Distance Analysis of the Varicellovirus Genus Suggests an Association Between Genomic G-C content and Genetic Distance. *36<sup>th</sup> Annual Meeting American Society for Virology*, Madison, WI June 24-28, 2017 [oral presentation]

78. †Lewin, AC, Longhurst, C., McLellan, G.J., Brandt, C.R., Kolb, A.W., Bernard, K., Newbury, S.P., Bentley, E. Infectious ocular disease severity varies by pathogen in cats. *36<sup>th</sup> Annual Meeting American Society for Virology*, Madison, WI June 24-28, 2017 [oral presentation]

79. †Snyder, K.C., Mans, C., Lewin, A.C and McLellan, G.J. (2016) Tonometer Validation and IOP Reference Values in the Normal Chinchilla (Chinchilla lanigera) *Proceedings, Amer Coll Vet Ophthalmol.* (Monterey, CA) [oral presentation]

80. †Oikawa, K., VerHoeve, J.N., Rasmussen, C.A., Kiland, J.A., Hennes-Beean, E.A., Rasmussen, C.A., Liu, X.-Y., Ikeda, A., Ellinwood, N.M., McLellan, G.J. (2015) Early optic nerve changes in a spontaneous feline glaucoma model. *Proceedings, Amer Coll Vet Ophthalmol.* (Coeur d'Alene, ID). [oral presentation]

81. †Snyder, K.C., Kim, C.B.Y., Nork, T.M., Hennes-Beean, E.A., Teixeira L.B.C., Ellinwood, N.M., Verhoeve, J.N., McLellan, G.J. (2015) Functional Measures of Glaucoma Progression in a Spontaneous Feline Congenital Glaucoma (FCG) Model. *Proceedings, Midwest Eye Research Symposium*, August 7th, (Iowa City, IA). [poster presentation]

82. †Oikawa, K., VerHoeve, J.N., Rasmussen, C.A., Kiland, J.A., Hennes-Beean, E.A., Splinter-Bondurant, S., Liu, X.-Y., Ikeda, A., Ellinwood, N.M., McLellan, G.J. (2015) Early optic nerve changes in a spontaneous feline glaucoma model. *Proceedings, Midwest Eye Research Symposium*, August 7th, (Iowa City, IA). [poster presentation]

83. †Adelman, S.A., Shinsako, D., Kiland, J.A., Hennes-Beean, E.A., Jens, J.A., Ellinwood, N.M., Ludwig, A., Yaccarino, V., Ben Shlomo, G., McLellan, G.J. (2015) Post-natal development of Intraocular Pressure in Feline Congenital Glaucoma (FCG) and in Normal Cats. *Proceedings, Midwest Eye Research Symposium*, August 7th, (Iowa City, IA). [poster presentation]

84. †Beckwith-Cohen, B., Bentley, E., Gasper, D.J., McLellan, G.J., Dubielzig, R.R. (2014) Canine keratitis associated with brinzolamide and dorzolamide: clinical and histological diagnosis and treatment. *45<sup>th</sup> Trans. Am. Coll. Vet Ophthalmol.* (Fort Worth, TX), p.42 [oral presentation]

85. †Gosling, A.A., Kiland, J.A., Rutkowski, L.E., McLellan, G.J. (2014) Effects of topical corticosteroid administration on intraocular pressure in normal and glaucomatous cats. *45<sup>th</sup> Trans. Am. Coll. Vet Ophthalmol.* (Fort Worth, TX), p.82 [oral presentation]

86. †Pryor, S.G., Bentley, E., McLellan, G.J., Giuliano, E.A., Allbaugh, R.A., Rankin, A.J., Labelle, A.L., Buhr, K.A. (2014) Retinal detachment post-phacoemulsification in Bichon Frise: a retrospective study of 54 dogs. *45<sup>th</sup> Trans. Am. Coll. Vet Ophthalmol.* (Fort Worth, TX), p.109 [oral presentation]

87. †Scott, E.M., Teixeira, LBC, Pinkerton, M.E., Dubielzig, R.R., McLellan, G.J. (2014) Canine orbital rhabdomyosarcoma: a report of 15 cases. *45<sup>th</sup> Trans. Am. Coll. Vet Ophthalmol.* (Fort Worth, TX), p.125 [oral presentation]

88. §†Adelman, S, McLellan GJ, Ellinwood, N.M, Yaccarino, V.J.. Jens, J.K., Ludwig, A.L, Ben-Shlomo, G. (2013) Early life intraocular pressures in normal cats and cats with primary congenital glaucoma. *44<sup>th</sup> Trans. Am. Coll. Vet Ophthalmol.* (Puerto Rico), p. 143 [oral presentation]

89. §McLellan, G.J., Voss, A.M., Bowie, O.R., Free, B.R. and Yaccarino, V. (2013) Effect of timolol maleate on intraocular pressure, pupil diameter, and heart rate in normal and glaucomatous cats. *44<sup>th</sup> Trans. Am. Coll. Vet Ophthalmol.* (Puerto Rico), p. 144 [oral presentation]

90. †Scott, E.M., Komaromy, A.M., Harman, C.D., Koehl, K., Plummer, C.E. and McLellan, G.J. (2013) Active, latent and total TGF- $\beta$ 2 concentrations in the aqueous humor of dogs with open angle glaucoma. *44<sup>th</sup> Trans. Am. Coll. Vet Ophthalmol.* (Puerto Rico), p.141 [oral presentation]

91. †Adelman, S., Teixeira, L.B.C., Bowie, O., Ellinwood, N.M., McLellan, G.J. (2014) Correlation between retinal ganglion cell soma and axon counts in a glaucoma model. *Merial – NIH Annual Summer Research Scholars Symposium* (Cornell, NY). [poster presentation]

92. †Bowie, O., Teixeira, L.B., Nork, T.M., Dubielzig, R.R. and McLellan G.J. (2013) Optic Nerve Axon Loss in a Cat Model of Glaucoma. Proceedings 6th Annual Midwest Eye Research Symposium (Iowa City, Iowa) p.16. [poster presentation]

93. †Voss A.M., Bowie, O.R., Free B.R., Yaccarino, V. and McLellan, G.J. Effect of Timolol Maleate on Pressure, Pupil Diameter and Heart Rate in Normal and Glaucomatous Cats. Proceedings 6th Annual Midwest Eye Research Symposium (Iowa City, Iowa) p.45 [poster presentation]

94. †Yaccarino, V., Adelman, S., Ben Shlomo, G, Ellinwood, NM and McLellan G.J. (2013) Characterization of Intraocular Pressure in a Spontaneous Feline Glaucoma Model. Proceedings 6th Annual Midwest Eye Research Symposium (Iowa City, Iowa) p.49 [poster presentation]

95. †Dashek, R.J., Dubielzig, R.R., Teixiera, L.B.C. and McLellan, G.J. (2013) Tissue Localization of TGF- $\beta$ 2 and its Receptors in a Feline Model of Congenital Glaucoma. Proceedings of the 2013 Merial-NIH National Veterinary Scholars Symposium (Michigan State University, East Lansing, MI) [poster presentation]

*UW-Madison Abstracts / Presentations: (no longer updated for trainees post 2019 due to high volume of trainee presentations)*

96. † Oikawa K, Kiland JA, Rai A, Mathu V, McLellan GJ (2024) Evaluating a novel topical EP2 receptor agonist as a treatment for feline glaucoma School of Veterinary Medicine Phi Zeta Research Day [oral presentation] – \*AWARD \*Excellence by a House Officer in Research.

97. §McLellan, GJ (2024) Region Specific Molecular Pathology in Glaucomatous Optic Neuropathy. (2024) Department of Ophthalmology and Visual Sciences Research Retreat [oral presentation]

98. §McLellan, GJ (2019) Glaucomatous optic nerve neuro-inflammation and degeneration. George Kambara MD Vision Science Symposium, April 12<sup>th</sup>, 2019 [oral presentation]

99. †Vogel, KR (2019) Vigabatrin: synaptic remodeling of bipolar cells. George Kambara MD Vision Science Symposium, April 12th, 2019 [oral presentation]

100. †Chan, K, Wahlgren, B, Gloe, S, Verhoeve, JN, Hoon, M, Pattnaik, B, Williams, J, Kiland, JA, Jansen, EWE, Salomons, GS, Walters, DC, Roullet, J-B, Gibson, KM, McLellan, GJ (2019) Vigabatrin-induced retinal bipolar cell plasticity in C57BL/6J mice School of Veterinary Medicine Phi Zeta Research Day[poster presentation]

101. † Nilles, JP, Snyder, KC, Kiland, JA, Telle, MR, McLellan, GJ (2019) Effect of acute intraocular pressure (IOP) elevation on the post-trabecular aqueous outflow pathways in dogs. School of Veterinary Medicine Phi Zeta Research Day [poster presentation] \*AWARD \*Best veterinary student research project

102. †Snyder, KC, Teixeira, L, Oikawa, K, Kiland, JA, McLellan, GJ. (2019) Multimodal imaging of aqueous outflow pathways in feline congenital glaucoma (FCG) School of Veterinary Medicine Phi Zeta Research Day [poster presentation] –\*AWARD \*Best House Officer research project

103. †Oikawa, K, Kiland JA, Ellinwood, NM, McLellan, GJ (2019) Neuro-inflammation and degeneration in the Optic Nerve Head (ONH) in a Genetic Feline Model of Glaucoma. School of Veterinary Medicine Phi Zeta Research Day [poster presentation]

104. §McLellan GJ (2019) One Health/One Vision: A Comparative Approach to Understanding Glaucoma Pathophysiology. McPherson Eye Research Institute Noon Seminar, March 12<sup>th</sup>, 2019

105. †Oikawa KO (2019) Neuro-inflammation and degeneration in the optic nerve head in a spontaneous glaucoma model. McPherson Eye Research Institute Noon Seminar, MERI presentation March 12th, 2019

106. † Oikawa, K, Sun, D, Kiland, JA, Hennes-Beean, EA, Trane, RM, McLellan, GJ. (2018) Relationship Between Aqueous Humor Transforming Growth Factor Beta (TGF- $\beta$ ) and IOP in Feline Congenital Glaucoma. McPherson Eye Research Institute Annual Fall Lecture and Poster Session. [Poster presentation]. \*AWARD\* Honorable mention Best Trainee Poster Presentation.

107. †Adelman,S., Teixiera, L.B.C., Bowie, O., Ellinwood, N.M., McLellan, G.J.(2014) Correlation between retinal ganglion cell soma and axon counts in a glaucoma model. *McPherson Eye Research Institute. Annual Poster session and Symposium* (Madison, WI) [poster presentation]

108. †Snyder, K.C., Verhoeve, J., Ellinwood, N.M., Hennes-Beann, E., Kim, C.B.Y., McLellan, G.J. (2014) Functional Measures of Glaucoma Progression in an Animal Model *McPherson Eye Research Institute. Annual Poster*

session and Symposium (Madison, WI) [poster presentation]

109.†Scott, E.M., Komaromy, A.M., Harman, C.D., Koehl, K., Plummer, C.E. and McLellan, G.J. (2013) Active, latent and total TGF- $\beta$ 2 concentrations in the aqueous humor of dogs with open angle glaucoma. *McPherson Eye Research Institute. Annual Poster Session and Symposium* (Madison, WI) [poster presentation]

110.†Snyder, K., Ver Hoeve, J.N., Hennes-Beean, E.A., Kim, C.B.Y and McLellan, G.J. (2013) Visual Evoked Cortical Potentials in a Feline Congenital Glaucoma Model. *McPherson Eye Research Institute. Annual Poster Session and Symposium* (Madison, WI) [poster presentation]

**Abstracts / presentations 2008- 2013:**

International:

111.‡McLellan, G.J. (2012) Spontaneous large animal models of glaucoma. *Proceedings XX Biennial Meeting of the International Society for Eye Research* (Berlin, Germany) [invited oral presentation]

112.‡McLellan, G.J., Kleifgen, E., Finch, A., Ellinwood, N.M. and Rasmussen, C.A. (2012) Evaluation of Optic Nerve Head Morphology by SD-OCT in Normal and Glaucomatous Cats. *Proceedings Annual Meeting Eur Coll Vet Ophthalmol* (Trieste, Italy).[oral presentation]

113.‡McLellan, G.J., Kleifgen, E., Kaufman, P.L, Rasmussen, C.A. (2012) Detection of Early Structural Changes by SD-OCT in a Feline Model of Congenital Glaucoma, *Proceedings, 2012 Annual Meeting Assoc Res Vis Ophthalmol* (Fort Lauderdale, FL) [poster presentation]

114.†Teixeira, L.B., Bowie, O., Nork, T.M., Dubielzig, R.R., McLellan, G.J. (2012) Quantifying Optic Nerve Axon Loss In a Cat Glaucoma Model by a Semi-Automated Counting Method. *Proceedings, 2012 Annual Meeting Assoc Res Vis Ophthalmol* (Fort Lauderdale, FL) [poster presentation]

115.Ver Hoeve, J.N., Field, A., McLellan, G., Duncan, I.D. (2011) Flash-Evoked ERGs and VEPs in a Novel Animal Model of Demyelination. *Proceedings, XLIX Annual Meeting of the International Society for Clinical Electrophysiology of Vision* ( Lac Beauport, Québec, Canada), p.30 [oral presentation]

116.‡McLellan, G.J., VerHoeve, J.N., Rasmussen, C.A., Hennes-Beean, E.A., Heyne, G.W., Kim, C.B.Y. (2011)Visual Evoked Cortical Potentials As A Marker Of Early Functional Loss In A Spontaneous Feline Glaucoma Model *Proceedings, 2011 Annual Meeting Assoc Vis Res Ophthalmol* (Fort Lauderdale, FL) [poster presentation]

117.†Espinheira Gomes, F., Bentley, E., Ramsey, L., Kemmerling, J., Lin, T.-L., McLellan, G.J. Effects of Tropicamide on Intraocular Pressure and Anterior Segment Morphology in Normal and Glaucomatous Cats. (2011) *Proceedings Annual Scientific Meeting Eur Coll Vet Ophthalmol* (Berlin, Germany).[oral presentation]

118.Kuehn,M.H., McLellan, G.J., Pfleging, A., Snella, E.M., Ellinwood, N.M. (2011) Spontaneous Mutations In LTBP2 Are Associated With Congenital Glaucoma In Cats. *Proceedings, 2011 Annual Meeting Assoc Vis Res Ophthalmol* (Fort Lauderdale, FL) [poster presentation]

119.Sorden, S.D., Eggers,J.S., Tukov, F.F., McLellan, G.J., Miller. P.E., Wheeldon,,E.B. (2011) Commotio Retinae and Paraocular Gland Necrosis in Rabbits Associated with Medial Ear Artery Catheters. *Proceedings, 2011 Annual Meeting Assoc Vis Res Ophthalmol* (Fort Lauderdale, FL) [poster presentation]

120.‡McLellan, G.J., Rasmussen C.A., Seo,K., Finch,A.K., Xiong, K. Spectral Domain-OCT Imaging of the Retina and Optic Nerve in Normal and Glaucomatous Cats (2010) *Proceedings Annual Meeting Eur Coll Vet Ophthalmol* (Berlin, Germany). [oral presentation]

121.‡McLellan, G.J., Kim, C.B.Y., Seo, K, Heyne, G.W., Ver Hoeve, J.N. Pattern ERG Deficits in a Feline Model of Primary Congenital Glaucoma (2010) *Proceedings, 2010 Annual Meeting Assoc Vis Res Ophthalmol* (Fort Lauderdale, FL) [ poster presentation]

122.Kiland, J.A., Elsmo, E.J., Kaufman, P.L., McLellan, G.J (2010) .Evaluation Of Rebound And Applanation Tonometry In Cynomolgus Monkeys *Proceedings, 2010 Annual Meeting Assoc Vis Res Ophthalmol* (Fort Lauderdale, FL) [poster presentation]

123.Ellinwood, N.M., Deckman, K.H., Zhao, Z., Rutz-Mendicino, M.M., Jens, J.K., David, V.A., Kuehn, M.H., O'Brien, S.J., Menotti-Raymond, M.A., McLellan,G.J (2010) Candidate Gene Analysis of a Feline Model of Primary Congenital Glaucoma Implicates LTBP2 as the Causative Locus *Proceedings, 2010 Annual Meeting Assoc Vis Res Ophthalmol* (Fort Lauderdale, FL) [oral presentation]

124. <sup>†</sup>Seo, K., Rasmussen C.A., Finch, A.K., Xiong, K., Kaufman, P.L., McLellan, G.J. SD-OCT Imaging of the Retina and Optic Nerve in Normal and Glaucomatous Cats (2010) Proceedings, 2010 Annual Meeting Assoc Vis Res Ophthalmol (Fort Lauderdale, FL) [poster presentation]

125. <sup>§</sup>McLellan, G.J., Kemmerling, J.P., Kiland, J.A. Evaluation Of Rebound And Applanation Tonometry In Normal And Chronically Glaucomatous Cats (2009) Proceedings Annual Meeting Eur Coll Vet Ophthalmol (Copenhagen, Denmark).[oral presentation]

126. <sup>§</sup>McLellan, G.J., Lin, T.-L., Hildreth, S., Petersen, C., Leon, A., Jens, J.K., and Ellinwood, N.M. Diurnal Intraocular Pressure And Response To Topically Administered 1% Brinzolamide In A Spontaneous Feline Model Of Primary Congenital Glaucoma (2009) Proceedings, 2009 Annual Meeting Assoc Vis Res Ophthalmol (Fort Lauderdale, FL) [poster presentation]

127. Ellinwood, N.M., Jens, J.K., Rutz, M.M., Faylon, M.P., Snella, E.M., Kuehn, M.H., McLellan, G.J. Preliminary Characterization of the Genetics and Inheritance of Primary Congenital Glaucoma in a Spontaneous Feline Model (2009) Proceedings, 2009 Annual Meeting Assoc Vis Res Ophthalmol (Fort Lauderdale, FL) [poster presentation]

128. T'so, D.Y., Schallek, J., McLellan, G., Viswanathan, S. Functional retinal imaging of intrinsic optical signals in a cat model of glaucoma. (2008) Proceedings, 2008 Annual Meeting Assoc Vis Res Ophthalmol (Fort Lauderdale, FL) [oral presentation]

National:

129. Harvey, A., Szurka, J., Miller, P., Bentley, E., McLellan, G.J. (2012) Occurrence of Complications Following Intravitreal Injections in Cynomolgus Monkeys, Dogs, and Rabbits. *Proceedings, 63<sup>rd</sup> Am. Assoc. Lab. Anim. Sci. (AALAS) National Meeting* (Minneapolis, MN) P134. [poster presentation]

130. <sup>†</sup>Lovstad, J., Gamble, K., McLellan, G.J. (2012) Intraocular Pressure Measurement by Applanation Tonometry: Baseline Assessment in Exotic Carnivores and Non-Human Primates. *Proceedings 44<sup>th</sup> Annual Meeting Am. Assoc. Zoo Vet.* (Oakland, CA) [poster presentation]

131. <sup>†</sup>Delgado, C., Lovstad, J., Kuehn, C.E., Bentley, E., McLellan, G.J. (2012) Effect of Topical Pilocarpine and Latanoprost on IOP and Anterior Segment Morphology in Normal and Glaucomatous Cats. *43rd Trans. Am. Coll. Vet Ophthalmol.* (Portland, OR), p.49 [oral presentation]

132. <sup>§</sup>McLellan, G.J., Moon, A.K.B., Sheibani, N., Park, S.Y., Ellinwood, N.M. (2012) Active and Latent TGF-Beta2 in the Aqueous Humor of Cats With Glaucoma. *43rd Trans. Am. Coll. Vet Ophthalmol.* (Portland, OR), p.59 [oral presentation]

133. <sup>†</sup>Strong, T.D., Bentley, E., McLellan, G.J. (2012) Intraocular Pressure in Dogs is Influenced by the White Coat Effect. *43rd Trans. Am. Coll. Vet Ophthalmol.* (Portland, OR), p.135 [oral presentation]

134. <sup>†</sup>Moon, A.K.B., Sheibani, N., Park, S.Y., Ellinwood, N.M. and McLellan, G.J. (2012) Active and Latent TGF- $\beta$ 2 in the Aqueous Humor of Cats With Glaucoma. *Proceedings of the 2012 Merial-NIH National Veterinary Scholars Symposium* (Colorado State University, Fort Collins, CO)

135. <sup>†</sup>Bowie, O., Teixeira, L.B., Nork, T.M., Dubielzig, R.R., McLellan, G.J. (2012) Optic nerve axon loss in a Cat Model of Inherited Glaucoma : validation of a semi-automated targeted sampling method. *Proceedings of the 2012 Midwest Eye Research Symposium.* (Iowa City, IA).[poster presentation]

136. <sup>†</sup>McDonald, J.E., Kiland, J.A., Kaufman, P.L., Bentley, E., McLellan, G.J. (2011) Effect of latanoprost on diurnal intraocular pressure and pupil diameter in normal and glaucomatous cats. *42nd Trans. Am. Coll. Vet Ophthalmol.* (Hilton Head, SC). [oral presentation]

137. <sup>†</sup>Delgado, C., Mans, C., Bentley, E., Lovstad, J.N., McDonald, J.E., Sladky, K.K., McLellan, G.J., Miller, P.E. (2011) Evaluation of rebound tonometry in red-eared slider turtles (*Trachemys scripta elegans*). *42nd Trans. Am. Coll. Vet Ophthalmol.* (Hilton Head, SC).[oral presentation]

138. <sup>†</sup>McDonald, J.E., Kiland, J.A., Kaufman, P.L., Bentley, E., McLellan, G.J. (2011) Effect of latanoprost on diurnal intraocular pressure and pupil diameter in normal and glaucomatous cats. *Proceedings 2011 Midwest Eye Research Symposium* (Iowa City, Iowa)

139. <sup>†</sup>Kleifgen, E., Finch, A., Rasmussen, C.A., McLellan, G.J. (2011) Evaluation of Optic Nerve Head Morphology by SD-OCT in Normal and Glaucomatous Cats. *Proceedings 2011 Midwest Eye Research Symposium* (Iowa City, Iowa)

140. <sup>§</sup>McLellan, G.J., Seo, K., Finch, A.K., Xiong, K., Rasmussen, C.A. SD-OCT Imaging of the Retina and Optic Nerve in Normal and Glaucomatous Cats (2010) *41<sup>st</sup> Trans. Am. Coll. Vet Ophthalmol.* (San Diego, CA). [oral presentation]

141. §McLellan, G.J., Kim, C.B.Y., Seo, K., Ver Hoeve, J.N. Pattern ERG Deficits in Feline Primary Congenital Glaucoma (2010) 41<sup>st</sup> Trans. Am. Coll. Vet Ophthalmol. (San Diego, CA). [oral presentation]

142. †Espinheira Gomes, F., Bentley, E., Ramsey, L., Kemmerling, J., Lin, T.-L., McLellan, G.J. Effects of Unilateral Topical Administration of 0.5% Tropicamide on Intraocular Pressure and Pupillary Diameter in Normal Cats and Cats with Primary Congenital Glaucoma. (2010) 41<sup>st</sup> Trans. Am. Coll. Vet Ophthalmol. (San Diego, CA). [oral presentation]

143. §McLellan, G.J., Kemmerling, J.P., Kiland, J.A. Evaluation Of Rebound And Applanation Tonometry In Normal And Chronically Glaucomatous Cats (2009) 40<sup>th</sup> Trans. Am. Coll. Vet Ophthalmol. (Chicago, IL). [oral presentation]

**Abstracts / presentations prior to 2008:**

International:

144. §McLellan, G.J., Kuehn, M.H., Ellinwood, N.M., Kim, C.Y., Jens, J., Sigle, K.J., Petersen, C. A feline model of primary congenital glaucoma – histopathological and genetic characterization. (2006) Proceedings, 2006 Annual Meeting Assoc Vis Res Ophthalmol (Fort Lauderdale, FL) [poster presentation]

145. §McLellan, G.J., Betts, D.M., Sigle, K., Grozdanic, S. Congenital Glaucoma in the Siamese Cat: A Novel Spontaneous Animal Model for Glaucoma Research. (2005) Proceedings 2005 Annual Meeting Assoc Vis Res Ophthalmol (Fort Lauderdale, FL). [poster presentation]

146. §McLellan, G.J., Fales-Williams, A. Progression of superficial punctate keratitis to squamous cell carcinoma in a Shetland sheepdog (2005) Proceedings Annual Meeting Eur Coll Vet Ophthalmol (Porto, Portugal), 129. [poster presentation]

147. §McLellan, G. J., Cappello, R., Mayhew, I. G., Elks, R., Lybaert, P., Watté, C., Moore, D. L. and Bedford, P.G.C (2000) Systemic manifestations of vitamin E deficiency in canine RPED (CPRA) 31st Trans. Am. Coll. Vet. Ophthalmol. (Montreal, Canada) 41 [oral presentation]

148. †Watté, C. M., McLellan, G.J., Elks, R., Hartley, K. and Moore, D. L. (2000) Clinical Experience with N-butyl cyanoacrylate adhesive in the management of canine and feline corneal disease 31st Trans. Am. Coll. Vet. Ophthalmol. (Montreal, Canada) 64. [oral presentation]

149. §McLellan, G. J., Boulton, M. E. (2000) The RPE fluorophore profile of dogs with vitamin E deficiency or central progressive retinal atrophy differs from human RPE “age pigment”. Investigative Ophthalmology and Visual Science, 41, (4), S146. [poster presentation]

150. †Mason, D.R., Lamb, C.R., McLellan, G. J. (1999) Ultrasonographic findings in 50 dogs with retrobulbar disease. 30th Trans. Am. Coll. Vet. Ophthalmol. (Washington, DC) Veterinary Ophthalmology, 2, (4), 263. [oral presentation]

151. †Cappello, R., McLellan, G., Wheeler, S. J., Chandler, K., Rusbridge, C., Lybaert, P., Elks, R., Mayhew, I. G., Bjornsson, A. P. (1998) Neurological findings in Cocker spaniels with familial vitamin E deficiency and retinal pigment epithelial dystrophy. Proceedings 4th European FECAVA SCIVAC Congress (Bologna, Italy), 506. [oral presentation]

152. §McLellan, G. J., Elks, R. , Gains, M. (1998) Intraocular haemorrhage and secondary glaucoma associated with multiple iridociliary cysts in a dog. Proceedings of 1998 Meeting ECVO - ESVO - SOVI (Bologna, Italy), 26. [oral presentation]

153. §McLellan, G.J., Watson, P., Paganga, G., Elks, R., Lybaert, P., Bedford, P.G.C. (1997) Vitamin E deficiency in canine retinal pigment epithelial dystrophy (central progressive retinal atrophy). 28th Trans. Am. Coll. Vet. Ophthalmol. (Santa Fe, New Mexico), 38-39. [oral presentation]

154. §McLellan, G. J., Watson, P., Paganga, G., Elks, R., Lybaert, P., Bedford, P.G.C. (1997) Vitamin E Deficiency in Canine Retinal Pigment Epithelial Dystrophy (RPED)- Results of the Oral Vitamin E Tolerance Test in Clinically Normal Dogs and in RPED Affected Cocker Spaniels. Proceedings of WSAVA/BSAVA/FECAVA World Congress (Birmingham, England). [oral presentation]

155. §McLellan, G.J., Boulton, M., Wakamatsu, K. and Bedford, P.G.C. (1997) Melanogenesis in cultured canine RPE cells. ARVO Investigative Ophthalmology and Visual Science, 38, (4), S601. [poster presentation]

156. §McLellan, G. J., Ruaux, C. and Bedford, P.G.C. (1996) Cytoskeletal intermediate filaments of canine RPE cells. ARVO Investigative Ophthalmology and Visual Science, 37, (3), S382. [poster presentation]

National:

157. <sup>§</sup>McLellan, G.J., Sigle, K., Kuehn, M.H. Effect of topical 1% tropicamide on intraocular pressure in cats with primary congenital glaucoma. (2005) 36th Trans. Am. Coll. Vet Ophthalmol. (Nashville, TN). [oral presentation]

158. <sup>†</sup>Sigle, K, McLellan, G.J., Camaño-Garcia, G, Betts, D.M., Kuehn, M.H. The effect of topical dorzolamide 2% on intraocular pressure in cats with primary congenital glaucoma (2005) 36th Trans. Am. Coll. Vet Ophthalmol. (Nashville, TN). [oral presentation]

§McLellan, G.J., Betts, D., Sigle, K., Grozdanic, S. Congenital Glaucoma In The Siamese Cat – A New Spontaneously Occurring Animal Model For Glaucoma Research (2004) 35<sup>th</sup> Trans. Am. Coll. Vet. Ophthalmol. (Washington, DC) 36. [oral presentation]

159. <sup>†</sup>Sigle, K.S., Ostojic, J., McLellan, G.J., Betts, D.M., Sakaguchi, D.S., Grozdanic, S.D. Morphometric analysis of glaucomatous dog retinas – tapetal sparing of peripheral but not central retina. (2004) 35<sup>th</sup> Trans. Am. Coll. Vet. Ophthalmol. (Washington, DC) 36. [oral presentation]

160. <sup>§</sup>McLellan, G.J., Cobb, M.A., Lybaert, P. and McLaren, I.M. Determination of the concentration of sodium fusidate in feline tear fluid and ocular tissues following topical application of fusidic acid (2002) 33<sup>rd</sup> Trans. Am. Coll. Vet. Ophthalmol. (Denver, Colorado) 1 [oral presentation]

161. <sup>†</sup>Aquino, S., Niyo, Y., Grozdanic, S., Betts, D., McLellan, G. and Whelan, N. Clinical and histologic features of corneal repair with porcine small intestinal submucosal grafting (2002) 33<sup>rd</sup> Trans. Am. Coll. Vet. Ophthalmol. (Denver, Colorado) 27 [oral presentation]

162. <sup>§</sup>McLellan, G.J., Elks, R., Moore, D., Watte, C., Bexfield, N. and Archer, F.J. A study of the diagnostic value of aqueous humor cytology in canine and feline intraocular disease (2001) 32nd Trans. Am. Coll. Vet. Ophthalmol. (Sarasota, Florida) 51 [oral presentation]

163. <sup>†</sup>Cooper, S. C., McLellan, G. J., Rycroft, A. N. (2000) Study of the conjunctival bacterial flora of normal domestic rabbits (*Oryctolagus cuniculus*). *Proceedings of BSAVA Annual Congress* (Birmingham, England). [oral presentation]

**C. Invited Research Presentations (in addition to competitive abstracts listed in Sections B4 & B8)**

**International Research Presentations:**

1. **24<sup>th</sup> Annual Trabecular Meshwork Study Club (December 5<sup>th</sup>-6<sup>th</sup>, 2025), Fort Lauderdale, FL, 10 minute oral presentation.** ~80 attendees by invitation, “
2. **International Society for Eye Research (ISER) /Bright Focus Foundation Glaucoma Fast Track Symposium (October, 2022)** Invited Speaker, oral presentation 15 minutes: “ (>100 attendees)
3. **Dr. Schroff's Charity Eye Hospital -UW-Madison Global Ophthalmology Program** (February 1-14, 2025): Oral Presentations: “Lessons from our companions: the Intersection of human and animal ophthalmology” (20mins); “Animal Models for Translational Research” (1 hr); “Biomarkers for neurodegeneration in glaucoma” (40mins); “Probing Outflow Pathway pathology in pediatric glaucoma” (30 mins); “Culture of Trabecular Meshwork Cells” (30mins) New Delhi, India. (20-80 attendees)
4. **23rd Annual Trabecular Meshwork Society Study Club (December 13th-14th, 2024) San Diego, CA 10 minute oral presentation** “~ 60 attendees by invitation “Identification of a novel genetic variant associated with Primary Acute Angle Closure (PACG) in dogs”.
5. **International Society for Eye Research, (XXVI Biennial Meeting, Buenos Aires, Argentina (October 20<sup>th</sup>-24<sup>th</sup>, 2024) 15 minute oral presentation** “Region Specific Molecular Pathology In Glaucomatous Optic Neuropathy”
6. **Society for Comparative Ocular Pathology (SCOP) (Annual hybrid meeting, Madison, WI )** 15 minute oral presentation “Juggling Eyeballs: Lessons in Biology from our Veterinary Glaucoma Patients”
7. **Trabecular Meshwork Society Monthly Seminar (February 14<sup>th</sup>, 2024) Duke University, NC (Virtual webinar)**. Invited Speaker: “A glaucoma model that's the cat's whiskers! Lessons from LTBP2 mutant felines” (15 minute oral presentation; 30 minutes Q&A session ) ~80 participants
8. **16<sup>th</sup> Moorfields Eye Hospital International Glaucoma Symposium ( January 26-28<sup>th</sup>, 2024) London, UK** Invited Speaker: “ Outflow Lessons from our furry friends” (15 minute oral presentation; 15 minute Q & A session) ~350 physician and 20 scientist participants
9. **22<sup>nd</sup> Annual Trabecular Meshwork Society Study Club (December 8<sup>th</sup>-10<sup>th</sup>, 2023) Durham, NC.** Invited Speaker: “Transcriptomic profiling of laser capture micro-dissected trabecular meshwork reveals early molecular effects of LTBP2 mutation prior to glaucoma development”. (15 minute oral presentation). 55 invited participants.
10. **International Society for Eye Research (ISER) /Bright Focus Foundation Glaucoma Fast Track Symposium** (May, 2022) Invited Speaker : “Non-rodent models of glaucomatous optic nerve damage” (30 minute presentation (>100 attendees)
11. **20<sup>th</sup> Annual Trabecular Meshwork Study Club ( December 9<sup>th</sup>-11<sup>th</sup>, 2021) San Diego, CA.** Invited speaker: “Anterior Segment Pathology associated with LTBP2 Mutation.” (20min oral presentation) 32 invited registrants (participation by invitation only).
12. **Vision for Animals Foundation, Glaucoma Research Consortium Seminar (June 22<sup>nd</sup>, 2021)** Main Speaker, invited presentation.”Update on Canine Glaucoma Genetics”. (50 minute oral presentation and 40 minute question and answer session; virtual meeting). 310 plus registrants attended or viewed presentation.
13. **Association for Ocular Pharmacology and Therapeutics XV Biennial Meeting (March 4<sup>th</sup>-7<sup>th</sup>, 2021)** Virtual International meeting. Invited presentation. “Imaging the post-trabecular outflow pathways in glaucoma: lessons from animal models”.
14. **Ophthalmic Imaging and ERG in Animals:** (2 day virtual course, sponsored by Ocusciencce LLC, 42 attendees) (February 11<sup>th</sup> -12th, 2021), Las Vegas, NV. (5 hrs lecture, 6 hrs wet lab instruction) “Introduction to Ophthalmic Imaging”; “Maximizing Quality of Ophthalmic Imaging Data in Animal Subjects”; “Moving to Flat mount Data Without the Flat mount: Imaging from Globe to Genes”; “Benefits and Limitations of OCT and Other Wizardry”; “Structure and Function Correlations: Seeing the Big Picture”.

**15. Ophthalmic Imaging and ERG in Animals:** (2 day course, sponsored by Ocusience LLC) (February 28th-29th, 2020), Las Vegas, NV. (5 hrs lecture, 6 hrs wet lab instruction) "Introduction to Ophthalmic Imaging"; "Maximizing Quality of Ophthalmic Imaging Data in Animal Subjects"; "Moving to Flat mount Data Without the Flat mount: Imaging from Globe to Genes"; "Benefits and Limitations of OCT and Other Wizardry"; "Structure and Function Correlations: Seeing the Big Picture".

**16. Interim Scientific Meeting of Australia and New Zealand College of Veterinary Scientists Ophthalmology Chapter** March 22nd-24th 2019 (6 hours total lectures), Yering, Yarra Valley, Victoria, Australia. "Feline Inherited Eye Disease: an Overview"; "Feline Glaucoma: a Cat is NOT a small dog"; "Tonometry: How, When and Why? A Review and self-assessment quiz"; "Glaucoma Pathophysiology from Genes to Cells to the Stuff in Between"; "Beyond the Angle: Advanced Imaging in Glaucoma"; "Animal Welfare and Veterinary Ophthalmology: Implications for Researchers, Clinicians and Manuscript Reviewers".

**17. Ophthalmic Imaging and ERG in Animals:** (2 day course, sponsored by Ocusience LLC) (February 15<sup>th</sup>-16<sup>th</sup>, 2019), Las Vegas, NV. (5 hrs lecture, 6 hrs wet lab instruction) "Introduction to Ophthalmic Imaging"; "Maximizing Quality of Ophthalmic Imaging Data in Animal Subjects"; "Moving to Flat mount Data Without the Flat mount: Imaging from Globe to Genes"; "Benefits and Limitations of OCT and Other Wizardry"; "Structure and Function Correlations: Seeing the Big Picture".

**18. European College of Veterinary Ophthalmologists (ECVO) Annual Scientific Meeting** (May 10th-13th, 2018) Florence, Italy (1.5 hrs lecture) "Feline Inherited Eye Disease: an Overview"; "Responsibilities of Veterinary Ophthalmologists in Veterinary Clinical and Biomedical Research".

**19. Ophthalmic Imaging and ERG in Animals:** (2 day course, sponsored by Ocusience LLC) (March 10<sup>th</sup>-11th, 2017), Las Vegas, NV. (5 hrs lecture, 6 hrs wet lab instruction) "Introduction to Ophthalmic Imaging"; "Maximizing Quality of Ophthalmic Imaging Data in Animal Subjects"; "Moving to Flat mount Data Without the Flat mount: Imaging from Globe to Genes"; "Benefits and Limitations of OCT and Other Wizardry"; "Structure and Function Correlations: Seeing the Big Picture".

**20. Ophthalmic Imaging and ERG in Animals:** (2 day course, sponsored by Ocusience LLC) (March 18<sup>th</sup>-19th, 2016), Las Vegas, NV. (5 hrs lecture, 6 hrs wet lab instruction) "Introduction to Ophthalmic Imaging"; "Maximizing Quality of Ophthalmic Imaging Data in Animal Subjects"; "Moving to Flat mount Data Without the Flat mount: Imaging from Globe to Genes"; "Benefits and Limitations of OCT and Other Wizardry"; "Structure and Function Correlations : Seeing the Big Picture".

**21. Ophthalmic Imaging and ERG in Animals:** (2 day course, sponsored by Ocusience LLC) (February 20<sup>th</sup>-21st, 2015), Las Vegas, NV. (5 hrs lecture, 5 hrs wet lab instruction) "Introduction to Ophthalmic Imaging"; "Maximizing Quality of Ophthalmic Imaging Data in Animal Subjects"; "Moving to Flat mount Data Without the Flat mount: Imaging from Globe to Genes"; "Benefits and Limitations of OCT and Other Wizardry"; "Structure and Function Correlations : Seeing the Big Picture".

**22. ECVO Annual Meeting** (May 19<sup>th</sup> -22<sup>nd</sup>, 2014) London, UK. Hereditary Eye Disease Session (20 minutes) : "Extracellular matrix and glaucoma susceptibility"

**23. XX Biennial Meeting of the International Society for Eye Research** (Berlin, Germany) (July, 2012) "Spontaneous large animal models of glaucoma". Oral Presentation (15 minutes)

**24. The 10<sup>th</sup> Biannual William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology.** (June 2012, Raleigh, NC). Course Tutor / Lecturer. Oral Presentations (5 hours): "Tonometry"; "Funduscopic Interpretation"; "Advanced Fundus Imaging"

**25. Electroretinography in Animal Research (1 day course)** (February 18<sup>th</sup>, 2012), Las Vegas, NV. Sponsored by Ocusience LLC. "Waveform Composition, Retina and Visual pathway Function"; "Benefits and Limitations of flash, pattern and multifocal ERG and VEP"; "Study Design, Interpreting ERGs and Data Analysis" (3 hrs lecture, 3 hrs in vivo lab instruction)

26. **ECVO /ESVO /SOVI /ISVO International Veterinary Ophthalmology Meeting** (May 30<sup>th</sup>-June 3<sup>rd</sup>, 2007) Genova, Italy. Guest Speaker: Research Masterclass- “*Glaucoma – Current Concepts in Pathophysiology*” and “*What’s new in the Management of Glaucoma*” (oral presentations / seminar total 3 hours)

**National Invited Research Presentations, 2013-:**

1. **Indiana University, Indianapolis, IN**, Department of Ophthalmology, Eugene and Marilyn Glick Eye Institute, Indiana University School of Medicine (December 16<sup>th</sup> 2024) “(in person vision research seminar series, 1 hour, invited speaker) ~25-30 participants
2. **University of California-San Francisco**, Grand Rounds / Visiting Professor, UCSF Department of Ophthalmology, San Francisco, CA (April 4<sup>th</sup>, 2024) “*Going with the Flow in Pediatric Glaucoma: Comparative lessons from companion animals*” (Invited Lecture, 45 mins)
3. **University of California-Davis**, Comparative Ophthalmology Grand Rounds, UC Davis School of Medicine and School of Veterinary Medicine, Davis, California (April 9<sup>th</sup>, 2021) “*Primary Congenital Glaucoma: going with the flow*” (Invited Keynote Lecture, 45min, virtual due to COVID-19)
4. **University of Alabama at Birmingham**, Department of Ophthalmology and Visual Sciences, 27<sup>th</sup> Annual Loris and David Rich Lecture Series in Visual Science ( February 3<sup>rd</sup> and 4<sup>th</sup>, 2021) “*Companion Animals and Glaucoma Research: Challenges and Opportunities*” (Invited Lecture, 50 mins, virtual due to COVID-19)
5. **Michigan State University**, College of Veterinary Medicine Research Seminar: East Lansing, Michigan. (May 25<sup>th</sup>, 2016) “*A Novel Inherited Feline Glaucoma Model: Translational Research Challenges and Opportunities*” (Oral Presentation 45 min)
6. **North Texas Eye Research Institute**, University of North Texas Health Science Center at Fort Worth Visual Sciences Program Visiting Professor Seminar Series (May 9<sup>th</sup>, 2016) “*A new spontaneous glaucoma model for translational research: challenges and opportunities*” (Invited Speaker, 50 min oral presentation)
7. **ACVO 44<sup>th</sup> Annual Meeting** (November 8<sup>th</sup>, 2013) Puerto Rico. Invited presentation: “*Much Ado About Ophthalmology – A round up of Research in Molecular Mechanisms in Glaucoma*”. Oral presentation (15 mins)
8. **The 16<sup>th</sup> Annual Vision Research Symposium “Animal Models of Ophthalmic and Vision Disorders”**, Center for Vision Research, University of Florida (October 28<sup>th</sup>, 2013), Gainesville, FL. Speaker “*A Spontaneous Feline Model for Glaucoma Research*”(40 minutes, oral presentation)
9. **Comparative Ocular Pathology Society Annual Meeting**, Madison, WI (September 26<sup>th</sup>-28<sup>th</sup>, 2013) “*It’s Worse Than it Looks: Feline Conjunctival Surface Adenocarcinoma*”. Oral Presentation (15 minutes)
10. **ACVO 43rd Annual Meeting** (October 19<sup>th</sup>, 2012), Portland, OR. “*Much Ado About Ophthalmology- Current Concepts in Ophthalmic Research*”. INVITED Oral Presentation (15 minutes)

**Regional / State/ University Invited Research Presentations**

1. **Department of Ophthalmology and Visual Sciences, George Kambara Symposium**, University of Wisconsin-Madison (April 12th, 2019) “*Neuroinflammation and degeneration in the optic nerve head in a genetic feline model of glaucoma*” (oral presentation, 15 minutes)
2. **Department of Ophthalmology and Visual Sciences Grand Rounds, University of Wisconsin-Madison** (December 8th, 2017) “*Primary Congenital Glaucoma: Going with the Flow*” (oral presentation, 30 minutes; Science of Disease Series)
3. **School of Veterinary Medicine, University of Wisconsin-Madison Research Day**. (October 14<sup>th</sup>, 2016) “*Adventures in Glaucoma: Fighting for Sight in Veterinary and Human Patients*”(15 mins , invited presentation)

4. **University of Wisconsin School of Medicine and Public Health, Department of Ophthalmology and Visual Sciences, Spring Vision Science Research Symposium** (April 10<sup>th</sup>, 2015) (oral presentation) "One Health: Lessons from Feline and Canine Glaucoma Models" (Invited Presentation; 15 minutes)
5. **McPherson Eye Research Institute** (March 20<sup>th</sup>, 2015) (oral presentation, 10 minutes) "Thinking outside the Cell: Extracellular Matrix in Glaucoma" (Invited Contributor to "MERI at a Glance" Symposium)
6. **Research Seminar, Glaucoma Research Group, University of Wisconsin-Madison** (March 3<sup>rd</sup>, 2015) (oral presentation) "...And Now For Something Completely Different: Angle Closure Glaucoma in the Basset Hound" (50 minutes)
7. **Research Symposium** (presentation to Director of National Eye Institute, National Institutes of Health, Dr Paul Sieving ) University of Wisconsin Madison (April 14<sup>th</sup> 2014). "Softening the blow? Axons, Astrocytes and the Lamina Cribrosa in a Feline Glaucoma Model" (20 minutes)
8. **Research Seminar**, Glaucoma Research Group, University of Wisconsin-Madison (April 1<sup>st</sup>, 2014) "The lamina cribrosa region in spontaneous feline glaucoma" (30 minutes)
9. **Department of Ophthalmology and Visual Sciences Grand Rounds**, University of Wisconsin-Madison (March 7<sup>th</sup>, 2014) "Thinking outside the cell: Microfibrils and glaucoma susceptibility" (20minutes)
10. **Department of Ophthalmology and Visual Sciences Grand Rounds**, University of Wisconsin-Madison (August 16<sup>th</sup>, 2013) "Beyond IOP: Studies of Glaucoma Pathophysiology in a Spontaneous Model" (20minutes)
  
11. **Research Seminar, Department of Surgical Sciences**, School of Veterinary Medicine, University of Wisconsin-Madison (February 13<sup>th</sup>, 2013) "Glaucoma in Cats – Why Does it Matter?" (1 hour)
12. **Ophthalmology Research Colloquium, Department of Ophthalmology and Visual Sciences**, University of Wisconsin School of Medicine and Public Health (February 12<sup>th</sup>, 2013) "Raining Cats and Dogs: The Role of Spontaneous "Large" Animal Models in Glaucoma Research" (1 hour)
13. **Iowa State University, Neuroscience Seminar Series** (November 10<sup>th</sup>, 2010) "Towards structure-function correlations in feline models of degenerative optic nerve disease" (1 hour)
14. **UW Eye Research Institute Seminar Series** (April 13th, 2010) "Animal Models of Eye Diseases:Mouse/ Retinoblastoma and Feline /Glaucoma" (with Dr Akihiro Ikeda, Medical Genetics)
15. **UW Madison, Glaucoma Research Group Seminar** (April 6th, 2010) "Towards Structure-Function Correlations in Feline Glaucoma"
16. **Research Seminar, Indiana University School of Optometry**, Bloomington, IN (April 7<sup>th</sup>, 2006) "A new "large eye" model for glaucoma research?" (1 hour)
17. **Ophthalmology Research Colloquium, Department of Ophthalmology and Visual Sciences**, University of Wisconsin-Madison School of Medicine and Public Health, Madison, WI (September 2<sup>nd</sup>, 2005) "Primary Glaucoma in the Siamese Cat: A New "Large Eye" Model for Glaucoma Research" (1 hour)

#### Other Invited Lectures & Seminars

**Covance / Ocular Services on Demand LLC, Instructor, Webinar** (October 24th, 2012) "Optical Coherence Tomography in Non-Clinical Drug Development" (>90 participants, international)

#### Other Participation in Professional Scientific Meeting Programs

Session Moderator "Glaucoma: Neuroinflammation and neurodegeneration Poster Session, ARVO Annual Scientific Meeting, Salt Lake City, UT (May, 2025)

Session Moderator, Neuroinflammation and Neurodegeneration I Paper Session, ARVO Annual Scientific Meeting, Seattle, WA (May 7<sup>th</sup> , 2024)

Session Moderator, Trabecular Meshwork II Poster Session, ARVO Annual Scientific Meeting, New Orleans, LA (April 26<sup>th</sup>, 2023)

Session Moderator, Pharmacology / Cellular Mechanisms Paper Session, ARVO Annual Scientific Meeting, Denver, CO (May 3<sup>rd</sup>, 2022)

Session Moderator: Trabecular Meshwork Society 20<sup>th</sup> Annual Meeting, San Diego, CA (December 11<sup>th</sup>, 2021)

Invited Speaker / Panelist; Glaucoma section Live networking session: Association for Research in Vision and Ophthalmology (ARVO) Annual Scientific Meeting, [Virtual due to Covid-19 ; May 1-7,2021)  
Session Moderator, Pharmacology and Cell Therapies for Glaucoma Live Paper Discussion Session, ARVO Annual Scientific Meeting, [Virtual due to Covid-19 ; May 2,2021)  
Session Moderator: Trabecular Meshwork Society Virtual Seminar Series. March 10, 2021 (Duke University)  
Session Moderator, Animal Imaging Poster Session, ARVO Annual Scientific Meeting, Vancouver, BC, Canada (April 28th, 2019)  
Session Moderator , ISER/BrightFocus 2017 Glaucoma Symposium, Atlanta, GA (October 5-8, 2017)  
Session Moderator (Glaucoma), Spring Research Symposium, DOVS, UW-Madison (April 1<sup>st</sup>, 2016)  
Session Chairperson, ECVO Annual Scientific Meeting, Helsinki, Finland (May 2015)  
Session Chairperson, ECVO Annual Scientific Meeting, Berlin, Germany (May 2011)  
Session chairperson, ECVO Annual Scientific Meeting, Versailles, France (May 2008)  
Session chairperson, ECVO Annual Scientific Meeting Porto, Portugal (June 2005)  
Session chairperson, BSAVA Annual Meeting, Birmingham UK (April 1999)

D. **Research Support** (All amounts represent total award in US Dollars unless otherwise stated)  
**ACTIVE**

1. NIH 1R21EY037150-01A1 (MPI, McLellan, Mao) 08/01/2025-7/31/2027  
NIH (NEI) \$ 438,966

**TITLE: *Targeting TGFB-mediated IOP dysregulation in a large animal model of glaucoma***

Major Goals: Our goal is to provide initial proof of concept for a novel therapeutic approach to glaucoma, that will target progressive TGF $\beta$ 2-associated aqueous outflow pathway pathology in a feline model of early onset glaucoma due to LTBP2 mutation. This project builds on a previously reported strategy of CRISPR interference to suppress the pathologic TGF $\beta$  signaling that is a common feature in glaucomatous eyes. (\$221,028 total costs allocated to UW-Madison)

Role: Contact PI

2. Glaucoma Research Foundation 03/01/2026-02/28/2027  
Shaffer Grant \$55,000

**Title: *Mouse models to study LTBP2 in trabecular meshwork***

Major Goals: Our overarching goal is to address critical knowledge gaps regarding the role of LTBP2 in aqueous humor outflow pathway physiology and pathology. Our objectives are to validate and characterize novel mouse conditional Ltp2 k-os we have developed, delineating the effects of altered Ltp2 expression in the TM during development and during aging, on TM structure and function as well as IOP and glaucoma phenotypes.

Role: PI

3. NIH R21 EY034373-01A1 02/01/23-1/31/2026 (NCE)  
NIH (NEI) \$427,625

**Title: *The role of LTBP2 in glaucoma***

Major Goals: The objectives of this proposal are to identify and localize the effects of altered LTBP2 expression in the trabecular meshwork and distal outflow pathways during eye development and in adult eyes *in vivo, in situ and in vitro*. As PI of this grant proposal, I developed the overall concept, and all funds were awarded to my research group.

Role: PI

4. Morris Animal Foundation 3/1/2023-2/28/2026 (NCE)  
Established Investigator Grant \$74,891

**Title: *Delineating Age-Related Neuropathology and Correlations with Behavioral Abnormalities in Feline Cognitive Dysfunction Syndrome***

Major Goals: To determine associations between quantitative neuropathological features of the aging feline brain and owner-reported behavior changes consistent with cognitive dysfunction in cats.

Role: Principal Investigator (Co-I's Cameron, Bendlin and Crawford) As PI of this grant proposal, I developed the overall concept with input from an interdisciplinary, interinstitutional team of collaborators and the majority of the funds were awarded to my research group.

5. Resident Research Award (Oikawa) 01/01/2025 – 12/31/2026  
**Vision for Animals Foundation**  
Role: Mentor / PI  
**TITLE: *Evaluating a novel topical EP2 receptor agonist as a treatment for feline glaucoma*** \$7500

Major Goals: This veterinary ophthalmology research project will determine the safety, IOP-lowering efficacy and tolerability in cats with glaucoma, of topical treatment with an EP2 receptor agonist that has been FDA-approved in humans. I am the supervising PI and Mentor on this project.

**6. Bright Focus Foundation (Oikawa , McLellan [mentor/PI])** 07/01/2023-06/30/2026

National Glaucoma Research Post-Doctoral Fellowship Program

\$150,000

Role: Mentor / Sponsoring PI

**Title: Modulation of neuroinflammation in glaucoma by GLP-1R agonist**

Major Goals: The objectives of this proposal are to determine the effects of a GLP-1R (Glucagon-like peptide 1 receptor) agonist on neuroinflammation in spontaneous glaucoma *in vivo*, while delineating myeloid cell molecular profiles perturbed glaucoma in the visual pathway in a translationally-relevant, inherited animal model of spontaneous glaucoma.

**7. NIH P30 EY01665-01 (Nickells)** 09/2023-03/2028

NIH (NEI)

\$3,110,000

**Title: Core Grant for Vision Research**

Major Goals: The major goal of this core grant is to provide funding for three core services for the Visual Sciences Community on the UW-Madison campus: 1) Omics 2) Pathology and Imaging 3) Animal and Eye Organ Culture. 4.8 calendar months of effort of a Researcher position in my lab is supported by this award with a small budget for supplies and 0.2 calendar months of my effort as module co-Director.

Role: co-Director of the Animal Models and Eye Organ Culture Module.

#### **Completed Support:**

**8. Canine Health Foundation (CHF)/ American Kennel Club Oak Grant** 3/1/2018-2/29/2025(NCE)

Role: principal Investigator

**The Genetics of Primary Angle Closure Glaucoma in the Siberian Husky** \$121,740

Major Goals: Our objective is to elucidate the genetic basis of primary angle closure glaucoma (PACG) in Siberian Huskies through complementary genomic approaches of GWAS and whole genome sequencing. These studies will expand on preliminary findings generated by a recently funded Companion Animal Fund Award for initial genotyping of normal and affected Huskies.

*As PI of this grant proposal, I developed the overall concept with input from colleague Dr. Muir based on preliminary data generated by colleague Dr. Teixeira. All funds are requested for my research group.*

**9. McPherson Eye Research Institute (Mathu; McLellan PI)** 01/2024-01/2025

**Walsh Graduate Student Support Initiative**

\$12,000

Major Goals: This competitive award provides one year of support for tuition remission for graduate student, Virginia Mathu (CBMS graduate program, PhD candidate)

Role: PI, Major Professor

**10. Alzheimer's Disease Research Center\_(Cameron, Crawford & Bendlin, MPI)** 04/01/2023-03/31/2025

**Developmental Program Award (intramural)**

\$150,000

funded by P30-AG062715 (NIA)

***TITLE: Defining pathologic and molecular correlates of a spontaneous feline model of dementia***

The goal of this project is to determine the extent to which feline cognitive dysfunction syndrome (FCDS) recapitulates key clinical and pathologic features of Alzheimer Disease and Vascular Dementia, as a foundation for future studies that explore FCDS as a model of human dementia. My lab will assist in this interdisciplinary, junior-senior partnership with molecular pathologic studies, including immunolabeling and in situ hybridization, using antibodies and RNAscope probes validated in our lab for feline brain tissue. This will require 0.12 cal months' effort. Approximately \$16,000 will be assigned to my lab for personnel costs and a limited supplies budget.

Role: Co- Investigator / Mentor to junior faculty investigators

**11. McPherson Eye Research Institute (McLellan PI)** 01/2025-12/31/2025

Grant Summit Award \$10,000

***TITLE: Novel Mouse Models to Elucidate the Role of LTBP2 in Trabecular Meshwork***

Major Goals: This award supports mouse breeding and initial characterization of mouse phenotype while awaiting outcome of extramural grant proposal review

Role: PI

**12. UW DOVS Funds Distribution Committee** (McDowell, PI) (04/01/2024- 12/31/2025)  
(Research Project Application) \$33,700

Role: Co-I

***Development of Ltbp2 floxed mouse strains***

Major Goals: The goal of this proposal is to generate a Ltbp2 floxed mouse strain on both the C57BL/6J and SJL/J genetic background, B6.Ltbp2fl/fl and SJL.Ltbp2Lfl/fl mice. These mice will then be used in a larger NIH R21 proposal to generate and characterize glaucoma phenotypes in Ltbp2 conditional TM-specific knockout mice by breeding with TM specific Cre mice B6(129S4)-Mgptm1.1(cre)Borr/J, as well as using Ad5.Cre to selectively knockdown Ltbp2 in the TM in the Ltbp2 floxed mice on the SJL/J background

**PENDING RESEARCH SUPPORT :**

1. Veterinary Pharmacology Research Grant (McLellan) 01/15/2026-01/14/2027  
AVMF/VPRF \$29,983

***TITLE: Evaluating IOP lowering efficacy and tolerability of novel prostaglandin receptor agonists and formulations for treatment for feline glaucoma***

Major Goals: This study seeks to establish optimal dosing strategy, safety and efficacy of a novel EP2 receptor agonist for the treatment of feline glaucoma

Role: PI

2. American Kennel Club Canine Health Foundation (McLellan) 05/01/2026-04/30/2028  
Oak Grant \$194,801

***Title: Unravelling complex genetics of primary angle closure glaucoma in the Entlebucher Mountain Dog.***

Major Goals: This study takes a novel pangenome WGS approach to identifying genetic variants that contribute to the development of primary glaucoma, a complex genetic disease with high prevalence in this numerically small breed.

Role: PI (co-PI, B. Davis, TAMU)

3. NIH R21EY038543 (McDowell, McLellan; MPI) 09/01/2026-08/31/2028

(NEI)	\$414,305
<b>TITLE: <i>Novel Mouse Models to Elucidate the Role of LTBP2 in the outflow pathway</i></b>	
Major Goals: Our goal is to develop and characterize TM-specific conditional <i>Ltbp2</i> knockout mice and characterize the glaucoma phenotype on different genetic backgrounds as a means to delineate the role of <i>Ltbp2</i> on outflow pathway structure and function, independent of ciliary zonule pathology.	
Role: MPI	
4. Morris Animal Foundation Established investigator Award	03/01/2026-02/28/2029 \$214,971
<b>Title: <i>Biomarkers of Feline Cognitive Dysfunction Syndrome: Correlations with Behavioral Abnormalities and Neuropathology</i></b>	
Major Goals: This project is a continuation of D23FE-025 which seeks to further develop biomarkers with diagnostic potential in Feline Cognitive Dysfunction Syndrome (FCDS), while also delineating morphological and molecular drivers of neuronal and functional loss in FCDS cases (high behavioral scores) and controls (low behavioral scores) and correlation between neuropathologic features and plasma biomarker concentrations. Our overarching goal is to facilitate early diagnosis and targeted therapeutic intervention for FCDS, to improve quality of life for senior cats and their owners.	
5. Research to Prevent Blindness (McLellan) Stein Innovation Award	01/01/2025-12/31/2027 \$300,000
<b>TITLE: <i>Advancing Gene Therapy to Preserve Retinal Ganglion Cells in a Large Animal Glaucoma Model</i></b>	
Major Goals: to optimize a gene therapy approach to protect retinal ganglion cells from dying as a result of glaucoma, harnessing BCLX, a natural antagonist of apoptotic BAX using a unique animal model of glaucoma.	
Role: PI	
<b>NOT FUNDED Revision and resubmission planned July 2026 (only one submission per 2 years allowed)</b>	
6. University of Wisconsin Companion Animal Fund School of Veterinary Medicine Research grant	04/01/2026-09/30/2027 \$22,915
<b>Title: <i>Efficacy and Tolerability of Novel EP2 Receptor Agonist Formulations in Normal and Glaucomatous Cats</i></b>	
Major Goals: The goals of the project are to assess the IOP-lowering efficacy and tolerability in cats of novel sustained release formulations of Omidenepag isopropyl with prolonged ocular surface contact times to develop more effective medical treatment strategies for cats with glaucoma.	
Role: PI	
7. BrightFocus Foundation National Glaucoma Research Award	07/01/2026-06/30/2027 \$150,000
<b>Title: <i>Associations between glaucoma and Alzheimer's disease: Probing the eye-brain connection in optic neuropathy</i></b>	
Major Goals: Glaucoma is a leading cause of vision loss, while Alzheimer's disease (AD) causes relentlessly progressive dementia in the elderly. Patients with glaucoma appear to be at higher risk of developing dementia, potentially accelerating progression of both conditions. This project will examine the effect of glaucoma on pathology in vision and memory centers in the brain of male and female mice. We hypothesize that glaucoma and AD act synergistically to modulate or intensify neuroinflammation, AD- like pathology, and neurodegeneration, accelerating progression of functional decline in both diseases. Our results will provide mechanistic insight into the interaction between glaucoma and AD, and may ultimately inform enhanced medical care to slow disease progression and prolong quality of life in elderly glaucoma patients.	
Role: PI	

**COMPLETED RESEARCH SUPPORT**

13. **Siberian Husky Club of America, Siberian Husky Health Trust** **04/01/2021** **\$67,400**  
Secured designated Gift to University of Wisconsin Foundation  
Role: Principal Investigator (Muir, Co-PI)  
**TITLE: Breed specific de novo genome assembly for the Siberian Husky**  
The goal of this project is to develop a breed specific reference genome assembly as a resource for ongoing and future studies of the genetic basis of disease in this breed.

14. **Canine Health Foundation (CHF)/ American Kennel Club Oak Grant** **9/1/2021-8/31/2024 (NCE)**  
Role: Principal Investigator  
**TITLE: The Genetics of Primary Angle Closure Glaucoma in the Entlebucher Mountain Dog** **\$29,951**  
Major Goals: Our objective is to elucidate the genetic basis of primary angle closure glaucoma (PACG) in Entlebucher Mountain Dogs through a whole genome sequencing approach. These studies will leverage existing whole genome sequences and clinical data, with addition of further cases and controls. As PI of this grant proposal, I developed the overall concept with input from colleague and co-PI Dr.Muir based on preliminary data generated by colleague and co-I, Dr. Teixeira.

15. **NIH 1R21AG074395 (NIA)** **(09/1/2021-8/31/2024; NCE)**  
NIH (NIA)  
Role: Principal Investigator **\$414,306**  
**Disease Mechanisms at the Intersection of Glaucoma and Alzheimer's Disease**  
Major Goals: To delineate disease mechanisms shared by glaucoma and Alzheimer's Disease using co-morbid mouse models of these two diseases. *As PI of this grant proposal, I developed the overall concept, and all funds were awarded to my research group.*

16. **UW DOVS Funds Distribution Committee** **(05/01/2024- 12/31/2024)**  
(Research Project Application)  
Role: Principal Investigator **\$ 13,744**  
Serum neurofilament light chain as a neurodegeneration biomarker in glaucoma  
Major Goals: This project will address two aims: 1) to establish if concentrations of Neurofilament light chain (Nfl) circulating in serum, can distinguish between cats with glaucoma and age-matched normal cats, and 2) to determine the correlations between glaucoma structural and functional metrics and concentration of Nfl circulating in serum.

17. **Career Starter Grant (Oikawa)** **07/01/2022-06/30/2024 (NCE)**  
Knights Templar Eye Foundation **\$70,000**  
**TITLE: Neuroinflammation in pediatric glaucoma**  
Major Goals: To determine the role of neuroinflammation in early life glaucoma, during a critical stage of development of the visual system in which myeloid cells are known to play an important role. This proposal will support the career development of Post-doc, Kazuya Oikawa. The ultimate goal is to determine whether this immune cell population represents a feasible therapeutic target in pediatric glaucomas.  
Role: Preceptor / Mentor / co-PI to post-doctoral mentee

18. **UW DOVS Funds Distribution Committee** **(10/01/2022- 9/30/2023)**  
(Research Project Application)  
Role: Principal Investigator **\$27,700**  
Region-specific molecular pathology in glaucomatous optic neuropathy  
Major Goals: this project extends previous work in our lab that highlighted local / regional differences in cellular and molecular pathology in the optic nerve head in glaucoma by completing laser capture microdissection of optic nerve head tissues from cats with glaucoma for downstream molecular profiling.

19. **UW Office of the Vice Chancellor for Research and Graduate Education** 07/01/2023 -06/30/2024  
 Fall Research Competition \$77,845  
 Role: Principal Investigator  
 The Role of LTBP2 in Glaucoma.  
 Major Goals: This proposal seeks to identify and localize the effects of altered LTBP2 expression in the trabecular meshwork and distal outflow pathways during eye development and in adult eyes *in vivo*, *in situ* and *in vitro*.  
 \*\*This funding serves as “insurance” in case of delay in funding, or decision by NEI not to fund grant R21 EY034373-01A1 below.

20. **NIH 1R01EY027396-01A1 (NEI)** (09/30/2017-06/30/2022L NCE – 06/2023)  
 Role: Principal Investigator \$1,874,698  
 Therapeutic Inhibition of Optic Nerve Head Gliosis and Fibrosis in Glaucoma  
 Our goal in this application is to limit damage to the optic nerve by repurposing an existing “multi- functional” drug to complement existing glaucoma treatments. By delineating its effects on the optic nerve head *in situ* while determining its therapeutic benefits *in vivo*, within a clinically relevant treatment window in an appropriate model, our studies will accelerate translation of this promising new combinatorial strategy to preserve vision in patients diagnosed with glaucoma.  
 As PI of this grant proposal, I developed the overall concept, all preliminary data were generated in my laboratory and all funds were awarded to my research group.

21. **R01 EY027396 (NEI /NIA)** 07/01/2020-06/30/2021  
 NIH (Alzheimer’s-focused administrative supplement) \$188,133  
 Role: Principal Investigator  
**Shared risk and pathology in Alzheimer’s disease and glaucoma**  
 This administrative supplement provides additional funds to examine the effect of glaucoma progression on Alzheimer’s disease pathology in the eye and brain of felines with glaucoma, to enhance our understanding of the interactions of these two diseases.

22. **Companion Animal Fund (intramural)** (07/01/2018-06/30/2022)  
 Role: Principal-Investigator (Teixeira and Muir, co-Is) \$10,100  
**Genetics of Primary Angle Closure Glaucoma in the Siberian Husky**  
 Our overall goal is to elucidate the genetic basis of primary angle closure glaucoma (PACG) in Siberian Huskies through complementary genomic approaches of GWAS and whole genome sequencing. This pilot project provides funding for high density SNP genotyping.  
 As PI of this grant proposal, I originated and developed the overall concept with input from colleague Dr.Muir, based on preliminary data generated by colleague Dr. Teixeira. All funds were awarded to my research group.

23. **Vision for Animals Foundation** VAF2020-5 02/02/2020-02/01/2022  
 Resident Research Fund \$4,995  
 Role: Co Investigator / Co-Mentor (Yang (resident), PI)  
**Evaluating the therapeutic potential of a novel modified prostaglandin analog as a treatment for feline glaucoma.**  
 The goals of this extramurally funded Resident research project are to determine the efficacy of latanoprostene bunod in reducing intraocular pressure in cats, while describing its structural and functional effects on the feline distal aqueous humor outflow pathway and episcleral venous pressure.  
 I contributed to concept development; co-mentored trainee and junior clinical faculty member in study design and proposal writing, and provide training and oversight for this project in my laboratory.

24. **UW Department of Ophthalmology and Visual Sciences Internal Grant Competition** (07/01/2020- 06/30/2022)  
(Research to Prevent Blindness)  
Role: Principal Investigator (Nickells, Co-PI) \$47,500  
***Advancing neuroprotective gene therapy approaches in glaucoma***  
The purpose of this study is to optimize gene delivery for efficient transduction, and long-term transgene expression, in the cat eye, as a first step in a path to translation of BclX transgene therapy as a neuroprotective strategy in a highly relevant animal model of glaucoma. In collaboration with co-PI, Dr Rob Nickells who proposed the conceptual framework, I was responsible for study design and proposal preparation, and my laboratory will conduct all of the in vivo work proposed.

25. **Translational Basic Pilot Awards Program** 09/01/2020-12/31/2021  
**University of Wisconsin Institute for Clinical & Translational Research** \$50,000  
Role: Principal Investigator (Nickells, Co-PI)  
***Advancing neuroprotective gene therapy approaches in glaucoma***  
The goal of this project is to develop and optimize approaches to deliver gene therapy to retinal ganglion cells to limit loss of these neurons by apoptosis in glaucoma. The proposed work will complement and match funds available from DOVS / RPB, enabling us to translationally advance this work into animals with glaucoma.

26. **McPherson Eye Research Institute** (01/01/2021- 12/31/2021)  
Grant Summit Program \$10,000  
***Mechanisms of Neurodegeneration Linking glaucoma and Alzheimers.***  
These funds provided support for additional pilot studies to support an NIH research grant resubmission (which was ultimately successful).  
Role: Principal Investigator

27. **NIH 1R21EB025513-A1 (NIBIB / NEI)** (05/01/2018-08/31/2021)  
Role: Principal Investigator (MPI, Rogers) \$393,879.  
***Enhanced backscattering instrument for assessing optical biomarkers of glaucoma***  
The goal of this proposal is to build and validate a novel polarimetric light scattering instrument and demonstrate its ability to measure a novel scleral biomarker of glaucoma susceptibility. I identified engineer Dr. Rogers as a co-PI and collaborator and will be responsible for providing tissue samples and an animal model with which to test our hypothesis that optical back-scattering properties of the sclera differ between normal and glaucomatous subjects and provide a useful biomarker for susceptibility to disease progression. As Co-PI, I contributed to concept development, co-authored the proposal and funds awarded will be divided approximately equally between our two research groups.

28. **Marfan Foundation Early Investigator Grant** (07/01/2017-06/30/2020)  
Role: Principal Investigator \$75,000  
***Delineating pathology of the aqueous outflow pathway in animals with LTBP2 mutation***  
The goal of this project is to characterize the effects of *LTBP2* mutation on morphology of the trabecular meshwork and distal aqueous outflow pathways in these rodent and feline microfibrillopathy models that manifest glaucoma and ectopia lentis.  
*As PI of this grant proposal, I developed the overall concept, generated all preliminary data in my laboratory and all funds were awarded to my research group.*

29. **National Multiple Sclerosis Society (RG-1501-02876)**  
Co-investigator (Duncan, PI) 10/1/15-9/30/18

(McLellan salary support only, 4% effort) (\$763,050)  
***Remyelination in a model of global demyelination and its promotion in a novel animal model.***  
My role in this project is to determine that remyelination can be identified by non-invasive means including Visual Evoked Potentials (VEP) and OCT and if remyelination failure leads to axon loss detected by these modalities in a large animal model of demyelinating disease.  
As Co-Investigator, I provided some preliminary data input in study design. I will be responsible for conduct and oversight of these non-invasive structural and functional in vivo studies, and of analyses and interpretation of VEP and OCT data in my laboratory. Salary support for my effort only is provided.

30. **Bright Focus Foundation National Glaucoma Research Award** (07/01/2016-06/30/2019)  
Principal Investigator \$150,000

***TGF- $\beta$  and glaucoma progression in a spontaneous model***

The goal of this project is to determine the effect of AT1 receptor blocking therapy on optic nerve structure and gene expression in a spontaneous model of glaucoma.  
As PI of this grant proposal, I developed the overall concept, generated all preliminary data in my laboratory and all funds were awarded to my research group.

31. **NIH 3R01EY027476- (PI: Gibson)** (10/01/2017-04/30/2019)  
**Washington State University (Subaward supplement)** \$102,996 (to McLellan lab)  
Subaward Principal Investigator

***Rapalogue Therapy in Heritable and Vigabatrin-Induced GABA Metabolic Disorders.***

This subaward is for studies addressing two new sub-aims to determine effects of a novel therapy on retinal structure and function in a mouse experimental model of vigabatrin toxicity and in a genetic model of a heritable metabolic disorder.

As subaward PI, I contributed to the study design and development of the R01 administrative supplement request that funds this subaward. I will be responsible for model generation and the conduct of testing of visual function and structure in my laboratory. The subaward amount listed represents the funds awarded to my research group.

32. **Companion Animal Fund (intramural)** (07/01/2016-06/30/2018)  
Co-Investigator (PIs: Bentley, Newbury; Co-Is Brandt, Bernard) \$13,100

***Genomic, phylogenetic and recombinational characterization of feline herpesvirus field isolates using deep-sequencing technology.***

I originated the concept for this project, contributed to subsequent concept development and drafted this research proposal (which was submitted as backup to an unfunded proposal that I submitted as PI to the Winn Feline Foundation). My laboratory contributed additional funds, resources and supplies necessary for the conduct of virus isolation in Dr. Brandt's laboratory by a Resident mentee (Dr. Lewin).

33. **Novel Methods Pilot Awards Program** (07/01/2017-06/30/2018)  
University of Wisconsin Institute for Clinical & Translational Research \$50,000  
Co-Principal Investigator (Rogers, Co-PI)

***Optical scattering as a novel biomarker for glaucoma susceptibility.***

The goal of this grant is to build a light scattering instrument suitable for preclinical use and refine and validate scleral tissue optical back-scattering properties in a feline glaucoma model, as a novel biomarker of glaucoma susceptibility. Recognizing the likely importance of extracellular matrix properties of the eye in determining glaucoma susceptibility, I identified engineer Dr. Rogers as a co-PI and collaborator. My lab will be responsible for providing tissue samples and an animal model with which to test our hypothesis that optical back-scattering properties differ between normal and glaucomatous subjects and provide a useful biomarker for disease progression.

*As Co-PI, I contributed to concept development, co-authored the proposal and funds awarded are divided equally between our two research groups.*

34. **University of Wisconsin Graduate School Fall Competition** (intramural) (07/01/2017-06/30/2018)  
Principal Investigator \$58,251  
***Therapeutic Inhibition of Optic Nerve Head Gliosis and Fibrosis in Glaucoma***  
This competitive award supports graduate student effort in these ongoing studies in my lab of optic nerve head fibrosis in glaucoma.  
*As PI, I originated and developed this proposal, generated all preliminary data and all funds are awarded to my lab.*

35. **Companion Animal Fund (UW Foundation)** 07/2015-06/2017  
Principal Investigator \$14,300  
***Angiotensin Receptor Blockers as a novel therapeutic approach for glaucoma in cats: A pilot study***  
As PI of this grant proposal, I developed the overall concept, generated all preliminary data in my laboratory and all funds were awarded to my research group. Results of this study provided preliminary data in support of a successful R01 application.

36. **ICare Oy (Finland)** (Industrial Partnership) (01/01/2017-03/31/2017)  
Principal Investigator \$17,269  
Calibration and validation of the Icare TV011 Vet Device for use in dogs, cats, horses and rabbits. This award provided an industry supported study to validate and calibrate a new prototype tonometer, and compare its accuracy and precision to other commercially available tonometers, for measuring intraocular pressure in a range of common domestic species. *All funds were awarded to my lab. Two publications arising from this work are in preparation.*

37. **Lions Eye Bank of Wisconsin Gift of Sight Discovery Fund** (04/01/2016-03/31/2017)  
Principal Investigator \$50,000  
***Seeing things from a different angle: Aqueous outflow pathway development as a novel target for therapy primary congenital glaucoma***  
The objective of this proposal is to identify, as potential therapeutic targets, key pathways responsible for early postnatal development of the aqueous outflow vessels in our spontaneous model of inherited primary congenital glaucoma. As PI, I developed the overall concept, generated all preliminary data in my laboratory and all funds were awarded to my research group. Results of this study provided preliminary data in support of successful applications to the Marfan Foundation and Vision for Animals Foundation and provided a basis for ongoing collaborative clinical pilot studies in human patients.

38. **WISELI / The Office of the Provost, UW-Madison**  
**Vilas Life Cycle Professorship** 11/01/2015-10/31/2016  
Principal Investigator \$32,284  
***Defining TGF beta signaling pathways in the glaucomatous optic nerve head in tissues and in vitro***  
Following unforeseen vivarium closure and consequent need for relocation of my lab, this award provided partial funding for a researcher position, to support continuation of my efforts to define the role of TGF beta signaling in glaucomatous optic neuropathy in a spontaneous feline model of glaucoma.

39. **NIH Research Infrastructure Programs** (2014-2015)  
Principal Investigator (Program Director) 1S10 OD018221-01 \$210,000  
**Shared Instrumentation Grant**  
***Spectral domain optical coherence tomography instrument for multi-modal imaging***  
As PI / Program Director of this grant proposal, I originated and developed this proposal, recruited other investigators to a campus user group, gathered and collated their research profiles and imaging needs, generated and assembled additional preliminary data in my laboratory and wrote the successful proposal. On award of grant funds, I navigated purchase and installation of the instrument, which is maintained in my lab and for which I am responsible for direction

and oversight of its use. The instrument has been used on at least 8 extramurally funded projects by investigators spanning 5 departments, as well as a number of pilot studies to date.

40. **Fight For Sight** (2014-2015)  
Principal Investigator (\$20,000)  
Grant-in-Aid

**Whole genome expression profiling of the optic nerve head in a spontaneous model of congenital glaucoma**

As PI, I developed the overall concept, generated all preliminary data in my laboratory and all funds were awarded to my research group. Results of this RNAseq study provided a basis for a graduate student's thesis work in my lab, as well as subsequent successful applications to the BrightFocus foundation and NEI (R01).

41. **Vision for Animals Foundation** (2013-2014)  
Resident Research Award (\$4,145)

Co-Investigator / Mentor (with Erin M. Scott, PI and Andras M. Komaromy, Co-I)

**Active and latent TGF-β2 concentrations in the aqueous humor of dogs with open angle glaucoma**

I originated this proposal and was responsible for concept development for this extramurally funded Resident research project. I mentored trainee in study design and proposal writing and provide training and oversight for this project.

42. **Translational Type I Research Pilot Program Award** (2012-2014)

University of Wisconsin Institute for Clinical & Translational Research (\$49,983)  
Principal Investigator

**Structure, function and gene expression in a feline model of pediatric glaucoma.**

As PI, I originated, developed and wrote this proposal during the last year of my K08 Career Development program. All of the work was conducted by my laboratory. This study provided support for many in vivo studies, as well as a tissue resource that served as the basis for a subsequent Fight for Sight proposal, and subsequent successful applications to the BrightFocus Foundation and NEI (R01).

43. **Clinician-Scientist Career Development Award (K08)** (2008-06/30/2014, 1yr NCE)  
NIH / NEI K08 EY018609 (\$864,280)

Principal Investigator.

**Structural and Functional Characterization of a Novel Model for Glaucoma Research**

As PI, I originated and developed this proposal. All preliminary data were independently generated during my tenure as an Assistant Professor at Iowa State University and I assembled the interdisciplinary team of experienced mentors in support of this proposal.

44. **Comparative Ophthalmic Research Laboratories** (2012-2013)  
Pilot research funds (\$10,000)

Co-Investigator (TM Nork, Principal Investigator)

**Development of New Animal Models of Branch Retinal Vein Occlusion.**

As Co-PI, I co-authored this proposal that secured funds to attempt to establish a large animal model that fully recapitulates key features of branch retinal vein occlusion in human patients.

45. **Research to Prevent Blindness** (2009-2010)  
Principal Investigator (\$9,855)

Non-restricted grant to the Dept of Ophthalmology and Visual Sciences, UW-Madison

**To characterize recently identified form of recessively inherited, primary congenital glaucoma in cats**

As PI, I originated and developed this competitive proposal for funds to support my career development research project aimed at characterizing structure and function in a novel feline model of congenital glaucoma.

46. **Companion Animal Fund Research Award** (2009-2011)  
Co-Principal Investigator, with Dr Ellison Bentley  
UW-SVM (UW-Foundation) (\$10,357)  
***Effect of selected topical ophthalmic medications on IOP, anterior segment anatomy and aqueous humor outflow in normal and glaucomatous cats.***  
As co-PI, I developed the overall concept, generated preliminary data in my laboratory and all funds were awarded for my laboratory studies (then based in Dr. Paul Kaufman's laboratory). These studies provided a foundation for both ongoing studies in my laboratory and evidence based recommendations for the treatment of glaucoma in cats in a veterinary clinical setting. These results gave rise to numerous trainee publications

47. **Rapid Response Initiative Grant** (2009-2010)  
Principal Investigator (\$36,825)  
University of Wisconsin, Eye Research Institute.  
***3D analysis of Spectral Domain OCT images in Feline models of optic neuropathies***  
As PI, I originated this proposal and forged a new extramural collaboration with Dr. Mona Garvin, PhD, University of Iowa. This study funded OCT imaging studies in cats with glaucoma that provided a basis for development of and validation of novel automated OCT analysis algorithms by our collaborators.

**Research Support Prior to Appointment at UW-Madison:**

BAI Innovation Fund, Battelle Platform Project Grant, State of Iowa. (\$1,500,000)  
**High-Throughput Animal Model Facility and Animal Model Development**  
Co-investigator, with Dr Michael Anderson (University of Iowa) and Dr Max Rothschild (Iowa State University), Principal Investigators.  
As co-Investigator, this state award provided me with limited per diem support for the development of my feline glaucoma research colony at Iowa State University.

**Center for Integrated Animal Genomics Research Support Grant**, Iowa State University  
Co-Principal Investigator (with Dr N. Matthew Ellinwood) (\$25,000)

***Research support for large animal research colonies***  
As co-Investigator, this intramural award provided me with support for the development of my feline glaucoma research colony at Iowa State University.

**Glaucoma Research Foundation**, San Francisco, CA. (\$32,000)  
**Molecular and functional characterization of a novel, spontaneously occurring animal model of congenital glaucoma**  
Co- Investigator, with Dr Markus Kuehn, University of Iowa (PI).  
As Co-Investigator, I recruited Dr Kuehn as a collaborator and PI, to initiate studies aimed at the genetic characterization of a unique form of congenital glaucoma in cats that I had recently identified in a group of my veterinary clinical patients at Iowa State University.

**Donald L and Elaine Sime Faculty Development Fund, Special Research Award,**  
Iowa State University, Ames, IA (\$3,000)  
**Matrix metalloproteinases and their tissue inhibitors in normal and diseased canine cornea.**  
Principal Investigator  
As PI, I originated and authored this proposal to conduct pilot studies on the role of MMPs and TIMPs in canine corneal "melting ulcers".

**Retinal Pigment Epithelial Dystrophy - the significance of antioxidants and the potential role of lipoprotein abnormalities in the formation of lipopigment.**

Co-Principal Investigator, with P.G.C. Bedford

Nestec (Friskies) Research Ltd., Switzerland.

(£30,000)

*Co-authored proposal with my major professor while a graduate student*

**Retinal Pigment Epithelial Dystrophy in Guide Dog Breeds.**

Co- Investigator, with P.G.C. Bedford

The Guide Dogs for the Blind Association, UK.

(£58, 933)

*Co-authored proposal with my major professor while a graduate student.*

**Clinical Research Investigations completed with no or minimal financial support**

The effect of topical corticosteroid application on intraocular pressure and trabecular meshwork protein expression in normal and glaucomatous cats

Clinical and histopathological features of feline conjunctival surface adenocarcinoma

Clinical and histopathological features of canine orbital rhabdomyosarcoma

Retinal detachment in the Bichon Frise following phacoemulsification cataract surgery

The influence of the white coat effect on canine intraocular pressure

A retrospective study of primary corneal squamous cell carcinoma in dogs

A longitudinal study of feline uveal melanosis and melanoma

A study of the conjunctival bacterial flora of normal domestic rabbits (*Oryctolagus cuniculus*)

A study of ultrasonographic findings in dogs with retrobulbar disease.

A study of the diagnostic value of aqueous humor cytology in canine and feline intraocular disease

Determination of the concentration of sodium fusidate in feline tear fluid and ocular tissues following topical application of fusidic acid

**Other Research Activities**

**Consulting Activities:**

2006-present Member, Comparative Ophthalmic Research Laboratories (CORL)

2006-2019 Consultant, Ocular Services on Demand (OSOD).

CORL represents a collaborative team of internationally recognized vision scientists founded on providing world-class vision research support for industry. The CORL team, based at UW-Madison, unites the expertise of veterinary and physician ophthalmologists and pathologists as well as basic scientists encompassing molecular biology, cell biology, pharmacology, chemical engineering, material science, physiological optics, electrophysiology, ocular toxicology, and clinical ophthalmology. CORL provides a unique top to bottom service with a goal of helping industry partners find research solutions in vision science. My involvement in several CORL and OSOD projects has contributed to the development of several novel therapeutics, including a novel anti-inflammatory treatment for uveitis.(Research Publication Section 2B, #8). Additionally, funds generated by CORL consultation and collaborative research efforts have been used to enhance development of faculty, trainee and research programs.

**Inventions:**

A feline model for glaucoma research has been registered as an invention with the Wisconsin Alumni Research Foundation (WARF: P110032US01) and is available through licensing agreements for glaucoma research and testing of new glaucoma treatment strategies. (<https://www.warf.org/technologies/research-tools/animal-models/summary/feline-model-of-glaucoma-p110032us01.cmsx>)

US Patent Pending: PCT/US21/56010 "ANTI-APOPTOTIC VECTOR AND METHOD OF USING THE SAME" Anti-apoptotic gene therapy for neurodegeneration in glaucoma with co-inventors R. Nickells and R. Donahue.

A genetic test for glaucoma risk in Entlebucher mountain dogs (registered as an invention with the Wisconsin Alumni Research Foundation).

### 3. TEACHING

#### A. Personal Teaching Statement

I have sustained a passion for education throughout my career and my ongoing accomplishment in teaching has not diminished with the shift in my career focus from teaching to research and administration. I am committed to the advancement of knowledge in comparative ophthalmology and vision science and recognize the importance of disseminating that knowledge through publication, traditional didactic and case-based classroom, laboratory and clinical teaching of students; through structured training of residents, graduate students and post-docs, and the provision of continuing education to veterinarians and physicians. My **key objectives in teaching** are to: 1) inspire students and trainees by transferring enthusiasm and nurturing a life-long love of learning; 2) motivate students and trainees to do the best that they can, by illustrating the impact that they will have on the lives of others; 3) enable students and trainees, not just by transferring knowledge necessary to be a competent scientist and/or clinician, but by encouraging development of clinical, scientific and life skills they will need to be resilient, effective and fulfilled in their chosen career path; and 4) model professional, ethical behavior, and alternate paths since progress through life and career is seldom linear.

**Classroom Teaching:** Student evaluations of my classroom teaching have remained strong post-promotion. I have continued to adopt new learning technologies applied to formative assessment, encouraging self-assessment and self-reflection, including well-received web-based and in-class problem-based learning and short quizzes (e.g. Kahoot, Slido and TopHat). From 2020-2023, I served as module director in the Diseases and Physiology of the Mammalian Visual System (Ophthalm 750) graduate seminar course, for the final module: "Translational Vision Research". The Covid-19 pandemic necessitated wide-ranging changes in our curriculum delivery. For example, five pre-recorded lectures were delivered virtually in the VM3 "Comparative Ophthalmology" (SurgSci 542) course and in the graduate level Diseases and physiology of the Mammalian Visual System (Ophthalm 750) course in 2020 and 2021, before shifting back to in-person delivery. Two newly hired assistant professors in my section sought didactic teaching opportunities and I relinquished my four-lecture contribution to the didactic component of SurgSci 938-542) in 2021. However, in spring 2022, I took over three lectures on glaucoma (using a flipped classroom format – 2 hours of asynchronous pre-recorded mini-lectures and 1 hour of synchronous case-based discussions and formative quizzes), from a recently retired colleague. After promotion to Associate professor, emphasis in my teaching activities shifted from classroom instruction, to mentor teaching of students and post-doctoral and clinical trainees. Service and leadership commitments have substantially impacted my distribution of effort since July 2021. **Clinical Teaching:** Prior to 2020, I devoted 12 wks/yr to clinical service and taught an average of 4 students/wk. The clinical veterinary ophthalmology 2-wk rotation (SurgSci 741) is required of UW-Madison students following the Companion Animal "track" in their senior year and is recognized by students for its high level of organization, relevance, respectfulness and preparation of resources. In 2020, we were forced to pivot to virtual rotations, to which I contributed case study materials. From 2020, my clinic weeks and therefore clinic instruction has reduced to 6 weeks per year. During each on-clinic day, I am also responsible for hands-on clinical training and supervision of veterinary ophthalmology residents, as well as up to two more clinical trainees, e.g. interns, or residents from other clinical services. **Continuing Education (CE):** I am a popular CE speaker, recognized nationally and internationally for expertise in clinical areas including canine and feline glaucoma, hereditary eye disease and ophthalmic imaging. Since promotion, I have presented CE lectures, workshops and teaching labs to up to 2000 practicing veterinarians and physicians and trainees /yr, including serving as course director, responsible for course syllabus development, for CE programs with multiple instructors. **Mentor Teaching:** I strive to support a diverse and inclusive community in the health sciences and vision sciences by providing thoughtful mentorship to undergraduates, post-baccalaureate research and clinical interns, veterinary professional students, graduate students, residents and post-doctoral fellows, early career vision scientists, and clinician-scientists. I recognize the importance of advocating for and mentoring women and marginalized students and fellow professionals, an area in which I continue to seek opportunities for growth. In 2016 I was nominated for a UW-Madison award for excellence in mentoring of undergraduate students in research. Each year in my lab, I typically mentor 6-10 undergraduate students, in addition to veterinary student research scholars; veterinary ophthalmology residents, and 2-3 graduate students and post-docs. I have served as major Professor for 5 graduate students (three MS, two

PhD) who have successfully completed their CBMS graduate programs, and currently mentor a DVM, PhD post-doctoral trainee, and two graduate students (CBMS PhD Program). I take great pride in all of my mentees' successes in presentations and publications, and in securing scholarships, research fellowships and awards, and their successes in professional and graduate programs. I currently serve as the Faculty Advisor for UW-Madison's pre-optometry club. More than 25 former undergraduate student mentees, several of whom are first generation college graduates, are now serving their communities as health professionals (as optometrists, physicians, surgeons, physician assistants, dentists, or veterinarians [including as veterinary ophthalmologists and as veterinary anatomic and clinical pathologists]. Several former resident mentees now hold faculty positions at academic institutions throughout the USA and Europe. There can be no higher impact way to advocate for parity in access to higher education, opportunities and healthcare; the highest possible ethical standards applied to the use of animals in research, and animal and human health and welfare, than by teaching and mentoring the next generation of researchers, clinicians and educators.

**B. Summary of Teaching Activities / Formal Courses Taught**(\*Professor of Record / Course Co-ordinator)

Course name (number)	Format (credits)	Years taught	# Lectures/ Labs	Total hrs /yr	Learners / yr	Audience
<b>CLASSROOM TEACHING</b>						
Vet Ophthalmology (SurgSci-542) "Understanding the Fundus"; "Diseases of the Fundus I"; "Diseases of the Fundus II" and "Optic Nerve and Vitreous". "Glaucoma"	Lecture (2 credits)	2008-2020 2022-	4 3	4 3	75-88 ~96	VM-3
Intro to Vet Research (MedSc-v675)	Lecture (1 credit)	2013-ongoing	1-2	1-2	12-20	VM-1-2
Biology of Vision (Inter L&S101) <i>Evolution of the Eye: "Seeing in the dark and in the light"; "A bug-eyed birds-eye view" and "How does seafood see food?"</i>	Lecture (3 credits)	2015-2019	3	3	15	Under-graduate
Vet Ophthalmology (SurgSci-542) "Small Animal Diagnostics: Clinical Examination of the Eye"; "Ophthalmic Surgery"	Laboratory	2013-ongoing	4	6-12	75-96	VM-3
Vet Ophthalmology (SurgSci-542) "Large Animal Diagnostics: Clinical Examination of the Eye"	Laboratory	2008-2015, 2017-2019, 2021-2022	1	2	~30	VM3
Diseases and physiology of the Mammalian Visual System (Ophthalm 750) *Module Director, "Translational Vision Research"	Seminar	*2020-2022 2023-ongoing	5 1	5 1	~5-10	Graduate / post-doc
Research Ethics and Career Development (DSS 938-812)	Seminar	2021	1	1-2	24	Graduate/ post-doc
<b>CLINICAL TEACHING</b>						
Comparative Ophthalmology Rotation (SurgSci-741)	DVM degree Training (2 credits)	2008-2019 2020-2023	NA NA	400 240	~30 ~24	VM4
Comparative Ophthalmology Residency Program (see separate summary table)	Clinical training	2008-2023	NA	~300	2-3	Residents
	Journal Club	2008-2023	40	40	2-6	Residents, Interns
	Lectures (OCT, ERG)	2008-2021	2	2	2-6	Residents, Interns
Continuing Education Provision (See Detailed list of Invited Lectures in "Supporting Documentation" section D2)	(summary)					
	CE Lectures & work-shops	2013-2022	~10	~10-12	~600	Veterinary Specialists, trainees, practitioners
<b>MENTOR TEACHING</b>						
*Path-Bio 990 (CBMS graduate program research credits, IND-045)	See separate summary of all graduate students mentored (as major professor)					
* Directed Study Ophthalmology & SurgSci-699 (Independent research)	See separate summary of undergraduate and VM students mentored					
VM Student Advising	See separate summary					

The following courses were taught prior to appointment at UW-Madison:

VCS 399	Ophthalmology (~10 lectures)	Iowa State University
VCS 440	Introduction to Clinics	Iowa State University
VCS 449	Ocular Surgery Lab (2 labs)	Iowa State University
VCS 451	Surgery Elective	Iowa State University
VCS 397	Examination Techniques (1 lab)	Iowa State University
VCS 469	Ophthalmology Rotation	Iowa State University
VCS 479	Ophthalmology Elective	Iowa State University
VCS/BMC 339	Clinical Foundations (1 lab)	Iowa State University
VMPM 378	Clinical Case Study (1 seminar)	Iowa State University
*VMD 422	Ophthalmology (15 lectures, 2 labs)	University of California, Davis
VMD 449L	Equine Elective (1 lab)	University of California, Davis
*	Ophthalmology (10 lectures)	Royal Veterinary College, London
	Equine Elective (1 lecture, 1 lab)	Royal Veterinary College, London
	Pharmacology Elective (1 seminar)	Royal Veterinary College, London
*	Ophthalmology Rotation	Royal Veterinary College, London
*	Ophthalmology Elective (1 semester/yr)	Royal Veterinary College, London

**a) Mentor Teaching of Residents and Clinical Fellows in Veterinary and Comparative Ophthalmology**

(§ mentor for research project; \*responsible supervising Diplomate)

Resident	Board Certification	Year	Current Position
§Dr Rebecca Elks	DVOphthal (RCVS)	2003	Private Specialty Practice, UK
§*Dr Christine Watté	Diplomate ECVO	2010	Head of Ophthalmology, University of Bern, Switzerland
§Dr Denise Moore	RCVS Residency completed		Private Specialty Practice, UK
Dr Kathryn Good	Diplomate ACVO	2002	Clinical Professor, Service Chief, UC-Davis
Dr Stephanie Beaumont	Diplomate ACVO	2003	Private Specialty Practice, TX
Dr Susette Aquino	Diplomate ACVO	2005	Private Specialty Practice, MI
§*Dr Kelly Sigle	Diplomate ACVO	2006	Private Specialty Practice, NC
Dr Renee Carter	Diplomate ACVO	2007	Professor, Louisiana State University
Dr Sinisa Grozdanic	Diplomate ACVO	2009	Private Specialty Practice (previously Assist Prof, ISU)
Dr Simon Pot	Diplomate ACVO/ECVO	2010	Professor, Univ. of Zurich, Switzerland
Dr Kathern Myrna	Diplomate ACVO	2013	Assoc. Professor, University of Georgia
§Dr Filipe Espinhera	Diplomate ACVO	2013	Private Specialty Practice, Sydney, Australia, Formerly Assistant Professor, Cornell University
§Dr Cherlene Delgado	Diplomate ACVO	2014	Private Specialty Practice, FL
§Dr Erin Scott	Diplomate ACVO	2015	Associate Professor, Cornell University Formerly Texas A & M University
§Dr Allyson Gosling	Diplomate ACVO	2016	Private Specialty Practice, WA; currently London, UK
§Dr Andrew Lewin	Diplomate ACVO	2018	Assoc Professor, University of Tennessee Formerly Assist Prof., Louisiana State University
§Dr Becky Telle	Diplomate ACVO	2021	Private Specialty Practice, NY, NY Formerly Assistant Clinical Professor, Mississippi State
§*Dr Kevin C. Snyder	Diplomate ACVO	2021	Private Specialty Practice, AK
§ Dr Vanessa Yang	Diplomate ACVO	2022	Clinical Assistant Professor, Tufts University
Dr Taylor Opgenorth	Diplomate ACVO	2024	Private Specialty Practice, St Louis, MO
Dr Jennifer Heyward	Diplomate ACVO	2025	Clinical Assistant Professor, Tufts University
Dr Allison Ludwig			Current Resident
§Dr Kazuya Oikawa			Current Resident
Dr Memi Pearsall			Current Resident

**Mentoring of Clinical Interns and Pathology Fellows:**

<b>Intern/Fellow</b>	<b>Year</b>	<b>Current Position</b>
§Billie Beckwith-Cohen DVM, PhD DACVO	2013-2014	Associate Researcher, Michigan State University
§Silvia Pryor, DVM, DACVO	2013-2014	Veterinary specialty practice, Irvine, CA
Alexis Dubin, DVM, DACVO	2013-2014	Veterinary specialty practice, Rocklin, CA
Brian Leonard, DVM, PhD, DACVO	2012-2013	Associate Professor (Ophthalmology) UC-Davis
§Andrea Minella, DVM, PhD, DACVO	2017-2018	Veterinary Specialty Practice, NY, NY
§Daniel Rothschild, DVM, PhD	2021-2022	Current Ophthalmology Resident, Virginia-MD
§Michael Jimmerson, DVM	2022-2023	Ophthalmology Resident.

**b) Mentor Teaching of Post-doctoral Trainees**

Kara R. Vogel, PhD	T32 Vision Science Training Program- NIH	Jan 1, 2019-Dec 31, 2019
Kazuya Oikawa, BVSc, PhD		Jan 2020-Dec 2021

**Visiting Post-doctoral Research Scholars Hosted by Lab:**

*Rebecca Sappington, PhD	Wake Forrest University	June 2023
*Alex Huang, MD, PhD	Doheny Eye Research Institute, UCLA	Aug 8-11, 2017
Jessica Burn, DVM	Michigan State University, East Lansing, MI	Aug 9-12, 2017
Alexandre Sobrinho, DVM, MSc	UNESP, Jaboticabal, SP, Brazil	April –Aug 2017
Youngwoo Park, DVM, PhD	Seoul National University, South Korea	Sep 2014-Aug 2015
Jaesang Ahn, DVM, PhD	Seoul National University, South Korea	Sep 2014-Aug 2015
Kangmoon Seo, DVM, PhD	Seoul National University, South Korea	Aug 2009-Aug 2010

\*[ UW McPherson Eye Research Institute Visiting Scholar Award, August 9-12, 2017 ]

**c) Mentor Teaching of Graduate students****Involvement in Graduate Research Programs**

Trainer, Comparative Biomedical Sciences Graduate Program, Division of Biological Sciences, University of Wisconsin-Madison	2014 -current
Trainer T32 Veterinary Medical Training Program	2016-current
Trainer and Steering Committee member T32 Vision Science Training Program	2018-current
Academic Committee, Comparative Biomedical Sciences Graduate Program, Division of Biological Sciences, University of Wisconsin-Madison	2020 -current
Faculty Member, Graduate College, Iowa State University	2003-2006
Internal review Committee, Post-Graduate Annual Progress Evaluations, Masters/PhD candidates, Royal Veterinary College, University of London, England	1999-2000
External examiner, MSc Thesis (Ophthalmology / Cell Biology), University of Manchester, England	1999

**Member of Graduate Thesis Committees:**

2016-2017	Member, Thesis Committee, Margaret Maes (Cellular and Molecular Pathology Graduate Program), University of Wisconsin-Madison, PhD (awarded May 2017) Post-Doc, Johns Hopkins Medicine
2015-2018	<b>Major Professor</b> , Sara Adelman (Comparative Biomedical Sciences Graduate Program), University of Wisconsin-Madison (DVM /MS; awarded May 2018) ACVO Residency, UC, Davis
2017-2018	<b>Major Professor</b> , Kevin C. Snyder (Comparative Biomedical Sciences Graduate Program), University of Wisconsin-Madison (MS awarded August 2018) ACVO Diplomate, AK
2014-2021	<b>Major Professor</b> , Kazuya Oikawa (Comparative Biomedical Sciences Graduate Program), University of Wisconsin-Madison (PhD awarded January 2021) Post-doc, Current ACVO Resident, UW-Madison
2018-2019	<b>Major Professor</b> , Kore Chan (Comparative Biomedical Sciences Graduate Program), University of Wisconsin-Madison (MS awarded July 2019; DVM May 2021) Current ACVO Resident, University of Tennessee
2015-2021	Member, Thesis Committee, Ryan Donahue (Cellular and Molecular Pathology Graduate Program), University of Wisconsin-Madison (PhD awarded February 2021) Post Doc, Harvard
2018-2021	Member, Thesis Committee, Allison Ludwig (DVM/PhD program), University of Wisconsin-Madison (thesis defended successfully August 2021; DVM, PhD graduation 2023) Current ACVO Resident UW-Madison
2020-2024	<b>Major Professor</b> , Odalys Torné Escudé (Comparative Biomedical Sciences Graduate Program), University of Wisconsin-Madison (PhD awarded May 2024) Post-doc, Spain
2020-2022	Member, MS Thesis Committee, Nicole Muench (Cellular and Molecular Pathology Graduate Program), University of Wisconsin-Madison
2020-2024	Member, Thesis Committee, Emma Geiduschek (Neuroscience Training Program), University of Wisconsin-Madison (PhD awarded May 2024)
2021-	Member, Thesis Committee, Tania Sharmin (Comparative Biomedical Sciences Graduate Program), University of Wisconsin-Madison.
2022-	Member, Thesis Committee, Michele Salzman (Comparative Biomedical Sciences Graduate Program), University of Wisconsin-Madison.
2022-	<b>Major Professor</b> , Virginia Mathu, BS (PhD, Comparative Biomedical Sciences Graduate Program), University of Wisconsin-Madison
2024-	<b>Major Professor</b> , Anjali Rai, BPharm, MSc, (PhD, Comparative Biomedical Sciences Graduate Program), University of Wisconsin-Madison

#### **d) Mentor Teaching of Veterinary Students, Counseling and Advisement**

##### **Laboratory / Clinical Research Mentoring:**

1. **Nicholas Bexfield, BVetMed, Ophthalmology Research elective project** (1 semester) 1999 (PhD, DSAM, DipECVIM-CA, FSBiol, former Wellcome Trust Fellow, Cambridge University, UK; European Specialist in Small Animal Internal Medicine; Current Position: Clinical Professor in Small Animal Medicine and Oncology, School of Veterinary Medicine and Science, University of Nottingham UK.) PRESENTED
2. **Sarah Cooper, BVetMed (Hons), Ophthalmology Research elective project** (1 semester) 1999 (CertVOpthal, Current Position: Private Referral Practice, Suffolk, UK) PRESENTED , PUBLISHED
3. **David R Mason, BVetMed (Hons), Ophthalmic Imaging Research elective** (1 semester) 1999 (DipACVS, Current Position: Private Referral Practice, Las Vegas, NV, USA) PRESENTED, PUBLISHED
4. **Rachel Allbaugh, Clinical and Research Advisor** 2002-2005 (DVM,2005, MS, DipACVO, previously Kansas State University, Assistant Professor; current position Professor of Veterinary Ophthalmology, Iowa State University) PRESENTED

5. <b>Betsy Elsmo: Merck-Merial Summer Research Scholar</b> (DVM 2013; DACVP 2016; Current: Anatomic Pathologist/Associate Prof Clinical Diagnostic track, Wisconsin Veterinary Diagnostic Laboratory) <b>PUBLISHED</b>	June-August 2009
6. <b>Jessica McDonald: Merck-Merial Summer Research Scholar</b> ( DVM 2013; DACVO 2017; Current Position: Private Specialty Practice, Minnesota) <b>PUBLISHED</b>	May-August, 2010
7. <b>Jessica Lovstad: Merial Summer Research Scholar</b> (DVM 2014; Zoological Medicine Resident, Lincoln Park Zoo, Chicago; MSCI Graduate Program, Northwestern Univ; Assoc Vet Zoo, Rhode Island) <b>PRESENTED</b>	May-August, 2011
8. <b>Alaina Moon Summer Research Scholar</b> (DVM 2014; DACVIM 2018; Current Position: Private Specialty Practice, WA) <b>PUBLISHED</b>	June- August, 2012
9. <b>Travis Strong, VM4 student, clinical research project</b> (DVM 2012, DACVO 2019, Private Practice, Ontario, Canada) <b>PUBLISHED</b>	2011-2012
10. <b>Ryan Dashek, Summer Research Scholar</b> PRESENTED (MS CBMS graduate program 2016; DVM 2017 UW Madison; Residency in Laboratory Animal Medicine, PhD University of Missouri, Assist Prof)	May-August, 2013
11. <b>Kevin Snyder Research Assistant PUBLISHED. MS Independent Research; Surg Sci 699</b> (DVM class of 2016; MS 2018 and ACVO Resident, UW-Madison, DACVO 2021)	May-Sept; 2013,2014 2015-2016
12. <b>Sarah Adelman Summer Research Scholar PUBLISHED, MS</b> <b>Mentored research / CBMS graduate program</b> <b>Independent Research, Surg Sci-699</b> (DVM class of 2018; MS 2018, CBMS graduate program, ; Ophthalmology Residency, UC, Davis)	May-August, 2014 June 2015-Sept 2016 2017-2018
13. <b>Megan Koester Summer Research Assistant</b> (DVM class of 2018, Private Practice, Wisconsin)	May – August, 2015
14. <b>Richard Dulli Summer Research Scholar</b> PRESENTED (Co-mentor Prof. Curtis Brandt; DVM class of 2020,DACVP (Clin Path), Clin Assist Prof, U Florida)	May-August, 2017
15. <b>Shaile Gherke Summer Research Scholar</b> PUBLISHED (DVM class of 2020; Rotating Internship, Tufts University, 2020-2021 Ophthalmology Residency , Michigan State University)	May-August 2017
16. <b>Kore Chan Fight for Sight Summer Research Fellow PUBLISHED, MS</b> (MS, 2019; DVM Class of 2021, Internship Cornell University, Ophthalmology Specialty Intern, Virginia, Private Practice)	May-August 2018
17. <b>Monica Kim, Summer Research Scholar PUBLISHED</b> (DVM Class of 2022)	May-August 2019
18. <b>Jake Nilles Research Assistant</b> PUBLISHED Independent Research; Surg Sci 699 (DVM 2019; Rotating Internship, Michigan State University 2019-2020, Ophthalmology Research Fellow, NCSU, 2020-2021)	2018-2019
19. <b>Hannah Terhaar</b> PUBLISHED Independent Research, Surg Sci 699 (DVM 2019; DACVO Ophthalmology Residency, University of Colorado) Private Referral Practice in MN	2018-2019
20. <b>Andy Smith Summer Research Scholar</b> PUBLISHED (DVM 2023, Rotating Internship Michigan State University, ACVO Residency ISU)	2020 -2021
21. <b>Erika Mueller Summer Research Scholar</b> PRESENTED, Manuscript in Preparation (DVM student UW Madison)	May -August 2022
22. <b>Macy Peterson Research Assistant</b> (DVM 2024, Zoological Medicine Internship)	2020-2023

23. Grace Adams Summer Research Scholar      Manuscript in preparation      May-August 2024  
 24. Hayden Zaluckyj Summer Research Scholar PUBLISHED, 2<sup>nd</sup> manuscript in preparation May – August 2025

**Academic Advising:**

1. Lindsey Rieger-Keller: Adviser: VM1 -2      2004-2006  
     (DVM 2008; current position: Veterinarian, Private Practice, IA)
2. Michelle (Pinney) Burgmeier: Adviser VM1-2      2004-2006  
     (DVM 2008; current position: Veterinarian, Private Practice, IA)
3. Leah Theis : Adviser: VM1-2      2004-2006  
     (DVM 2008; current position: Veterinarian, Private Practice, IA)
4. Julianna Miller: Adviser: VM1-2      2004-2006  
     (DVM 2008 [Magna Cum Laude]; current position Veterinarian; children's book author)
5. Courtney Randall : Adviser: VM2-4      2004-2006  
     (DVM 2006; current position: Veterinarian, Private Practice, CA)
6. Lissa Ong (Current Associate Veterinarian, North Geelong, Victoria, Australia)      DVM 2018
7. Katrina Vandberg      DVM 2018
8. Sarah RossMiller (Small Animal Intern, University of Minnesota)      DVM 2019
9. Tiffani Turinski      DVM 2019
10. Alisia Weyna (DACVP Anatomic Pathologist, UW Madison)      DVM 2019
11. Leah (Statz) Secord (Associate Veterinarian, LA practice, Wisconsin)      DVM class of 2022
12. Danielle Heider      DVM class of 2023
13. Natalie Schmidt      DVM class of 2023
14. Marissa Schmidt      DVM class of 2023
15. Alexis Toh      DVM class of 2023
16. Taylour Erickson      DVM class of 2024
17. Alyssa Haertl      DVM class of 2024
18. Courtney Nelson      DVM class of 2024
19. Rita Serpa Sock da Cunha      DVM class of 2025
20. Brenna Wetherbee      DVM class of 2025

**Mentor Teaching of Undergraduate Students in Research:**

*At UW-Madison, as Associate Scientist (2008-2013):*

<b>Student Name</b>	<b>Training Pro-gram / Course</b>	<b>Research Project</b>	<b>Dates</b>	<b>Post-graduate Degree /Current Position</b>
1.Kola Xiong	Bio152-699	OCT artifacts in cats	2009	DDS 2015, Marquette University; General Dentist, Hastings, MN
2.Anna Koeck (Rabinovich)	Bio 152-699	Keratometry in normal and glaucoma cats	2009	OD 2014, Illinois College of Optometry, Practicing Optometrist, Hartland, WI
3.Galen Heyne ( <i>Deceased</i> )	Laboratory Assistant	Analysis of ERG parameters	2009-2010	MS – UW Madison; DVM 2019, UW-Madison, Practicing general veterinarian, WI
4.Jeremy Kemmerling	Bio152-699	Validation of tonometers in cats	2009-2010	OD 2015, Western University of Health Sciences, Practicing Optometrist, WI
5.Ashley Finch	699	OCT-derived optic nerve head parameters	2009-2010	OD 2015, Illinois College of Optometry, Practicing Optometrist, WI
6.Caitlyn Kuehn	699	Effect of latanoprost on IOP in cats	2010-2011	BS UW-Madison, CCNY Creative Writing MFA student, NY, Winner Felice Buckvar Prize for Nonfiction, 2017

7.Laura Ramsey	Bio 152-699	Effect of tropicamide on IOP in cats	2009-2010	MS / PA, Pacific University, 2017 Practicing PA – Denver, CO
8.Elyse Bruns (nee Kleifgen)	699	Detection of early retinal glaucomatous damage by OCT	2011	OD (High Distinction) 2016, Michigan College of Optometry; Current Practicing Optometrist, WI
9.Jessica Churchill	699 (Capstone)	Axial length of eye in feline glaucoma	2012	MD Eastern Virginia Medical School, 2017; Orthopedic Surgery Residency, Cleveland Clinic. Shoulder/ Elbow Surgeon Denver, CO

At UW-Madison, 2013- present:

Student Name	Training Program / Course	Total Credits	Dates	Post-graduate Degree /Current Position
1.Owen Bowie	Bio152 Ophth699 699 (Capstone)	7 2	2013 2014	MPH UWM 2017/ MCW MD 2024
2.Vincent Yaccarino	Ophth 699	2	2012-2013	MCW MD 2019 Residency, UW-Health Physical Med & Rehabilitation. Fellowship Interventional Pain Management U Minn,
3.Rachel Obrock (nee Sossaman)	Ophth 699 Hilldale Scholar	4 3	2013 2014	Southern College of Optometry, OD 2018 Practicing Optometrist, OH
4.Andrea Voss	Ophth 699 (Capstone)	2	2013	University of Florida DVM 2017 DACVECC, Practicing in Waukesha, WI
5.Lauren Brucker (nee Rutkowski)	Bio 152-699 699 (Capstone)	6 4	2015 2016	MPH Tufts University Senior Healthcare Consultant, WI
6. Alex Shimony	Ophth 699	4	2014 2015	Washington University St Louis: MS Applied Health Behavior Research; MD; Pediatrics Residency
7.Melanie Loppnow	URS	-	2014-2015	BS Computer Science and Biomedical Engineering, 2018; Masters Dual Degree BME /Technology Innovation Management, Carnegie Mellon 2020. Boston Scientific, Minneapolis.
8.Adam Hoefs	URS	-	2014-2015	BS 2018; JD UW -Madison
9.Mary Mohr	Ophth 699	2 4	2014-2016	PhD Medical Univ of SC Current Research Scientist, AZ
10.Daniel Shinsako	Bio 152-699 Ophth 699	2	2015-2016	University of Illinois, DVM 2021; Current Surgery Residency UIUC CVM
11.Zachary Makal	Bio 152-699 Ophth 699	5 2 2	2015 2016 2017	BS December 2017; OD 2022, Southern College of Optometry, Practicing Optometrist, WI
12.Gopika Senthilkumar	URS	-	2015-2016	BS 2019; PhD 2024, current MD/PhD program Medical College of Wisconsin
13.Sarah Neufcourt	URS (Posse Scholar)	-	2015-2016	BS 2020 (environmental systems engineering); Project Engineer, LA
14.Sarah El-Meanawy	Bio-152-699	2	2016	Pre-med, BS 2019; MD program UW SMPH
15.Jacob Lindemann	URS Bio152-699 Ophth 699	- 2	2016-2017	BS 2020, MCW, MD 2024 Current surgery Resident, Loyola Univ

		2 Cap-stone	2019-2020	
16. Colton Wickland	URS Ophth 699	2	2016-2019	Pharm-Tox Program, BS 2019 ; Middle School Teacher
17. Nickolas Chen	Bio 152-699 Ophth 699	2 7	2016-2019	Pre-med, BS 2019, MCW, MD 2025
18. Brad Whalgren	Ophth 699	6	2017-19	Pre-vet, BS 2019, UW-Madison DVM 2023
19. Suzanne Falkowski (nee Phalen)	Ophth 699	2	2017	Pre-optometry; BS 2017; OD 2022, Southern College of Optometry. Practicing optometrist, WI
20. Shawna Gloe	Bio-152-699 Ophth 699	6	2016 2017	Pre-med, BS 2019, Research Associate 2019-2021, MCW MD 2025
21. David Sun	Ophth 699 Biochemistry summer scholar	2	2017 2017	BS 2019; Software Engineer (Meta)
22. Kiley Brauer	Bio 152- 699	3	2018-2019	Pre-vet; BS 2020, UW-Madison, DVM Class of 2024; Surgical Internship
23. Abby Rothering	Bio 152-699	2	2018-2019	Pre-vet, BS 2019, UW-Madison, DVM Class of 2024
24. Brenna Wetherbee	Bio-152-699 Capstone	5	2018-2020	Pre-vet, BS 2020, UW-Madison, DVM Class of 2025; Equine practice Wisconsin
25. Ryan Lopez	Bio 152-699	2	2018-2019	BS 2021
26. Hannah Walleck	Bio 152-699	2	2019-2020	BS, 2020; Illinois College of Optometry, OD class of 2025; Resident in Pediatric Optometry Kansas City, MO
27. Olivia Coffey	URS	2	2019-2020	BS 2023; Johns Hopkins, MSPH , women's health, class of 2025
28. Austin Sabbar	URS	2	2019-2020	BS 2023
29. Virginia Mathu	Ophth 699 Capstone	3	2020	BS 2020, Research Intern McLellan lab, Admitted to CBMS PhD program 2022
30. Chloe Mitro	Ophth 699	7 total	2019-2022	BS , Associate Chemist, Arrowhead Pharmaceuticals
31. Kelly Koch	Ophth 699 Capstone	3 2	2020-2021-2022	Pre-PA, BS 2022, MPH UW Madison 2025 Effects of latanoprostene bunod on IOP in normal cats and cats with glaucoma
32. Soumika Gaddameedi	Ophth 699	3	2020-2021	BS 2021; Development Professional, Environmental Conservation
33. Yasmin Nur	Ophth 699	2	2020-2021	BS 2022, MS Design + Innovation 2024
34. Katherine Lown	Ophth 699	2	2020-2022	BS UW-Madison
35. Kristina Shi	Ophth 699	3	2020-2021	BS UW Madison OD Student SUNY Optometry
36. Cade Van Horn	Ophth 699	2	2021-2022	MS Program Biomedical Engineering UW Production Scientist, Promega
37. Brandy Wang	Ophth 699	2	2021-2022	BS 2022
38. Addison Lueke	Bio 152-699	2	2022-2024	Honors Program, Hilldale Research Scholarship PhD Student, Cell & Molecular Biology, Colorado State University

39. Sara Marquez	Bio 152-699	2	2022-2024	BS, Pre-law
40. Rylee Lux	Ophth 699	2	2022-2024	BS UW-Madison 2024, Current Emergency Room Technician UWHealth
41. Andrew Young	URS	2	2022-2024	BS
42. Rebecca Burkhalter	URS Ophth 699	2	2022-2024	URS, Current Graduate program in Nursing student, UW-Madison
43. Emma Grindstaff	URS Bio152, Ophth 699	2 2	2022-2024	URS
44. Sam Larsen	Ophth 699	2	2022-2023	BS 2024. Current OD Program, Illinois College of Optometry
45. Mason K. Thao	Ophth 699	2	2023-2025	Hilldale Research Scholarship BS 2025, Pre-Orthoptics, Research Technician
46. Mitchell Switalski	URS	2	2023-2025	URS, BS 2025, Pre-Med, Research Technician, Mayo Clinic, Rochester, MN
47. Walid Lakdari	URS, Bio 152	2	2023-2024	URS
48. Nick Frankel	URS, Bio 152	2	2023-2025	URS
49. Ben Kragerud	Ophth 699	2	2023-2024	BS 2024; Research Intern, May-Nov 2024 McLellan Lab; Pre-PA
50. Shquipe Ashiku	Ophth 699	2	2024-2025	Pre-Med
51. Selina Yang	Ophth 699	2	2024-2025	Pre-Vet

## 2025-2026: Faculty Advisor, UW-Madison Pre-Optometry Club

### Post-doctoral Trainees

Kara R. Vogel, PhD	T32 Vision Science Training Program- NIH  (Current Assistant Scientist, UW Madison)	Jan 1, 2019-Dec 31, 2019 Jan 2020-Dec 2021
Kazuya Oikawa, BVSc, PhD	Knights Templar and BrightFocus Foundation (current ACVO residency combined post-doc program, UW-Madison)	April 2021- ongoing

### Visiting Post-doctoral Research Scholars Hosted by Lab:

*Rebecca Sappington, PhD	Wake Forest School of Medicine	Jun 6-10, 2023
*Alex Huang, MD, PhD	Doheny Eye Research Institute, UCLA	Aug 8-11, 2017
Jessica Burn, DVM	Michigan State University, East Lansing, MI	Aug 9-12, 2017
Alexandre Sobrinho, DVM, MSc	UNESP, Jaboticabal, SP, Brazil	April –Aug 2017
<b>Youngwoo Park, DVM, PhD</b>	<b>Seoul National University, South Korea</b>	<b>Sep2014-Aug 2015</b>
<b>Jaesang Ahn, DVM, PhD</b>	<b>Seoul National University, South Korea</b>	<b>Sep 2014-Aug 2015</b>
Kangmoon Seo, DVM, PhD	Seoul National University, South Korea	Aug 2009-Aug 2010

\*[ UW McPherson Eye Research Institute Visiting Scholar Award]

### Awards to Mentees (2013-post-tenure)

2013 Merial / NIH Summer Research Scholarship, Ryan Dashek

2013 Hilldale Undergraduate Research Fellowship, Rachel Sossaman

**2013 ACVO Veterinary Student Award, Jessica McDonald**

2013 Vision for Animals Foundation, Resident Research Award, Erin Scott

2014 Harvey Meyerhoff Excellence Award for Leadership, Service and Scholarship, Rachel Sossaman

**2014 SVM Phi Zeta Research Day, Zoetis Award for Best Summer Scholars Poster, Ryan Dashek**

**2014 SVM Phi Zeta Research Day, Zoetis Award for Best House Officer Research Poster, Erin Scott**

2014 Merial / NIH Summer Research Scholarship, Sara Adelman

**2014-19 Japan Student Services Organization (JASSO) Post-graduate Fellowship, Kazuya Oikawa**

**2015 ACVO Dr Paul Dice Memorial Award for Best Published Case Report by a Resident, Erin Scott**

**2015 UW-Madison SVM, 1 year Mentored Research Program, Sara Adelman**

**2016 McPherson Eye Research Institute, Walsh Travel Award, Kazuya Oikawa**

**2016 UW-Madison Graduate School Travel Award, Kazuya Oikawa**

**2016 ACVO Veterinary Student Award, Kevin Snyder**

**2017 Vision for Animals Foundation, Resident Research Award, Mary Rebecca Telle**

2017 UW Madison Biochemistry Summer Research Scholarship, David Sun

2017 Fight for Sight Undergraduate Summer Fellowship, David Sun (rescinded due to duplicate award)

**2017 ISER / BrightFocus FastTrack Travel Award, Kazuya Oikawa**

2017 Merial / NIH Summer Research Scholarship, Richard Dulli

2017 Merial / NIH Summer Research Scholarship, Shaile Gehrke

**2018 ACVO Veterinary Student Award, Sara Adelman**

**2018 Fight for Sight Summer Student Fellowship, Kore Chan (national award)**

**2018 Boehringer Ingelheim Research Award for Graduate Veterinarians, Andrew Lewin (national award)**

**2018 The Comparative Biomedical Sciences Graduate student travel award, Kazuya Oikawa**

**2018 ACVO Resident Award for Best Research Manuscript, Mary Rebecca Telle (national award)**

**2018 McPherson Eye Research Institute Annual Poster Session, Honorable mention Best Trainee Poster presentation, Kazuya Oikawa**

**2019 The Comparative Biomedical Sciences Graduate student travel award, Kore Chan**

**2019 Post-doctoral Research Trainee, Kara R. Vogel PhD (Vision Science T32 Program)**

**2019 ARVO Science Communication Training Fellowship, Kara R. Vogel PhD (international, competitive program)**

**2019 DOVS Trainee Travel Award, Kazuya Oikawa**

**2019 SVM Phi Zeta Research Day, Zoetis Award for Best Student /Summer Scholars Poster, Jake Nilles**

**2019 SVM Phi Zeta Research Day, Zoetis Award for Best House Officer Research Poster, Kevin Snyder**

**2019 ACVO Veterinary Student Award, Jake Nilles**

2019 Merial / NIH Summer Research Scholarship, Monica Kim

**2019 McPherson Eye Research Institute, Kenzi Valentyn Trainee Vision Research Grant, Kazuya Oikawa**

**2019 ISER / BrightFocus Foundation Glaucoma Symposium travel fellowship, Kazuya Oikawa (one of five trainees selected for podium presentation; top ranked abstract) (national award)**

**2019 Comparative Biomedical Sciences Dissertator Completion Fellowship, Kazuya Oikawa**

**2020 UW Graduate School, Student Research Grants Competition – Conference Presentation, Kazuya Oikawa**

**2020 ACVO Veterinary Student Award, Shaile Gehrke**

**2020 Merial / NIH Summer Research Scholarship, Andy Smith**

2020 **McPherson Eye Research Institute Trainee Support Award, Kara Vogel**

2021-23 **La Caixa Fellowship (Spain), Odalys Torné Escudé (Spanish national program)**

2021 **ARVO Travel Award, Odalys Torné Escudé (international award)**

2021 **ARVO Travel Award, Kazuya Oikawa (international award)**

2021 **McPherson Eye Research Institute, Kenzi Valentyn Trainee Vision Research Grant, Kara Vogel**

2021 **ACVO Veterinary Student Award, Kore Chan**

2021 **ISER / BrightFocus Foundation Glaucoma Symposium travel fellowship, Kazuya Oikawa (international, postponed to 2022)**

2021 **ISER / BrightFocus Foundation Glaucoma Symposium travel fellowship, Odalys Torné Escudé (international, postponed to 2022)**

2022 **Merial / NIH Summer Research Scholarship, Erika Mueller**

2022 **ARVO Travel Award, oral presentation, Kazuya Oikawa**

2022 **ARVO Travel Award, poster presentation, Odalys Torne**

2022 **Knights Templar Eye Foundation Career Starter Grant, Kazuya Oikawa**

2022 **Midwest Eye Research Symposium, Best poster award, Virginia Mathu**

2023 **Hilldale Undergraduate Research Fellowship, Addison Paige Lueck**

2023 **BrightFocus Foundation National Glaucoma Research Postdoctoral Fellowship, Kazuya Oikawa**

2023 **Comparative Biomedical Sciences Graduate Program Travel Award, Virginia Mathu**

2023 **Comparative Biomedical Sciences Graduate Program Travel Award, Odalys Torne**

2023 **McPherson Eye Research Institute, Distinguished Paper Award, Kazuya Oikawa**

2024 **McPherson Eye Research Institute, Walsh Graduate Student Support Initiative award, Virginia Mathu**

2024 **Comparative Biomedical Sciences Graduate Program Travel Award, Odalys Torne**

2024 **Hilldale Undergraduate Student Research Fellowship, Mason Thao**

2024 **Promega DOORS (Diversification of our Research Scientists) scholarship Mason Thao (rescinded, accepted Hilldale fellowship)**

2024 **Merial / NIH Summer Research Scholarship, Grace Adams (VM1-2)**

2024 **Graduate Student Trainee, UW-Madison Vision Science T32 Program, Virginia Mathu BS**

2024 **Vision for Animals Foundation, Resident Research Award, Kazuya Oikawa**

2025 **SVM Phi Zeta Research Day, Zoetis Award for Research Excellence by a House Officer, Kazuya Oikawa**

2025 **DOVS Trainee Travel Award, Kazuya Oikawa**

2025 **Graduate Student Trainee, UW-Madison Vision Science T32 Program, Virginia Mathu BS**

2025 **Merial / NIH Summer Research Scholarship, Hayden Zaluckyj (VM1-2)**

2025 **ISER / BrightFocus Foundation Glaucoma Symposium travel fellowship, Virginia Mathu**

2025 **ISER / BrightFocus Foundation Glaucoma Symposium travel fellowship, Anjali Rai**

2025 **McPherson Eye Research Institute, Kenzi Valentyn Trainee Vision Research Grant, Virginia Mathu**

**C. Student Feedback:** Vet Ophthalmology SurgSci 938-542. (Scale 1- 5: 5=best; 2020:virtual/ data not available[NA] )

Question (n= number of respondents)	2014 (n=15)	2015 (n=14)	2016 (n=47)	2017 (n=30)	2018 (n=16)	2019 (n=15)	2020, 2021
1. The required / recommended reading was an important and useful addition to the lectures and/or labs	4.25	4.75	4.15	4.83	4.22	3.91	NA
2. The instructor clearly presented learning objectives	4.31	4.29	4.64	4.72	4.63	4.73	"
3. The instructor's preparation and organization of topics was helpful in developing my understanding of the material	3.77	4.21	4.67	4.63	4.56	4.53	"
<b>ORGANIZATION AGGREGATE</b>	<b>4.06</b>	<b>4.32</b>	<b>4.54</b>	<b>4.73</b>	<b>4.47</b>	<b>4.39</b>	<b>NA</b>
4. Course objectives were fulfilled by course content and delivery	4.23	4.36	4.64	4.76	4.69	4.60	NA
5. The lectures were presented clearly and in a manner which facilitated learning	3.92	4.21	4.61	4.73	4.44	4.40	"
6. The handouts were valuable aids to learning	3.92	4.21	4.59	4.63	4.67	4.57	"
7. The audio-visual aids enhanced my knowledge and understanding	4.33	4.36	4.86	4.67	4.63	4.62	"
8. The instructor made good use of examples and illustrations	4.46	4.29	4.83	4.77	4.56	4.53	"
9. The instructor's style of presentation was stimulating and interesting	4.54	4.36	4.77	4.77	4.63	4.67	"
10. The instructor was enthusiastic about teaching	4.62	4.64	4.97	4.87	4.81	4.73	"
11. The instructor was an effective teacher	4.31	4.29	4.72	4.76	4.56	4.53	"
<b>PRESENTATION AGGREGATE</b>	<b>4.29</b>	<b>4.34</b>	<b>4.75</b>	<b>4.74</b>	<b>4.62</b>	<b>4.58</b>	<b>NA</b>
12. The instructor was clearly knowledgeable in the topics	4.77	4.79	4.97	4.67	4.88	4.73	NA
13. The instructor clearly relates lecture concepts to clinical examples	4.69	4.57	4.89	4.6	4.69	4.6	"
14. The instructor was able to answer questions completely and concisely	4.54	4.5	4.86	4.83	4.56	4.6	"
<b>KNOWLEDGE AGGREGATE</b>	<b>4.67</b>	<b>4.62</b>	<b>4.9</b>	<b>4.7</b>	<b>4.71</b>	<b>4.64</b>	<b>NA</b>
15. The instructor was helpful and willing to discuss difficult areas	4.54	4.42	4.74	4.73	4.75	4.73	NA
16. The instructor's explanations of difficult points clarified the problems I had with them	4.08	4.44	4.7	4.87	4.83	4.69	"
17. The instructor seemed receptive to other ideas and viewpoints	4.33	4.58	4.67	4.67	4.75	4.62	"
18. The instructor's ability to communicate was satisfactory	4.42	4.57	4.76	4.63	4.63	4.67	"
<b>INTERPERSONAL SKILLS AGGREGATE</b>	<b>4.38</b>	<b>4.48</b>	<b>4.71</b>	<b>4.73</b>	<b>4.74</b>	<b>4.68</b>	<b>NA</b>

**Instructor Evaluation****(Clinical Ophthalmology Rotation, only one review received in past 2yrs)****McLellan, Gillian****Ophthalmology (938-741) 08/19/2019-09/01/2019**

Question	08/19/2019-09/01/2019		
	Sam- ple Count	Sample Sum	Mean
1. The instructor provided adequate supervision and direction.	1	5	5.00
2. The instructor was helpful in developing my clinical skills.	1	5	5.00
3. Clinical techniques were explained and discussed thoroughly.	1	5	5.00
4. The instructor was knowledgeable in his/her speciality area.	1	5	5.00
5. The instructor was able to thoroughly answer my clinical questions.	1	5	5.00
6. The instructor was receptive to other ideas and viewpoints.	1	5	5.00
7. The instructor's ability to communicate was satisfactory.	1	5	5.00
8. The instructor's comments on my clinical performance were constructive.	1	5	5.00
9. The instructor provided a good example for the development of interpersonal skills with clients, faculty, and staff.	1	5	5.00
<b>All Questions Combined</b>	<b>9</b>	<b>45</b>	<b>5.00</b>
<b>Evaluations Submitted</b>	<b>1</b>		

10. Please comment on good aspects of the instructor.

I thoroughly enjoyed working with you! You're so knowledgeable and willing to teach. Great personality and fun to be around. I will definitely miss this rotation and am seriously considering ophthalmology as a specialty!

11. Suggestions for instructor improvement:

Continue to teach students and make sure they get to the most they possibly can out of a rotation. You're a GREAT teacher!

**D. Supporting documentation:**

**2] Invited Presentations**

**International Continuing Education Presentations**

1. **Congreso Veterinario de Colombia (CVDC) (August 6-8, 2025; Pereira, Colombia)** Invited Speaker, main conference program (3 hours x 700 participants) "Understanding the Fundus ; Is That Normal?"; "Glaucoma in cats: They aren't just small dogs!"; The Aging Eye: What to look for in our older patients"; Forum Panelist (2hours, 30+ participants) "What's New in glaucoma: are you up to date? ; **Sociedad Colombiana de Oftalmología Veterinaria** specialist sessions (2 hours x 40-100 participants) Invited Speaker " Optic Nerve Disease: A Break in the Eye-Brain Connection" and "Imaging the Eye and Orbit: from "Eye Phone" to Cross Sectional Imaging".

2. **The 19th William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology (June 2-20, 2025; North Carolina State University – Virtual only)** Course Tutor / Lecturer. Oral Presentations (3 pre-recorded lectures,4hrs): “Tonometry”; “Funduscopic Interpretation”; “OCT and Advanced Fundus Imaging” plus quiz and synchronous seminar (Kahoot/Zoom 1hr).
3. **The 18<sup>th</sup> William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology (July 2nd, 2024; UC-Davis, Davis, CA)** Course Tutor / Lecturer. Oral Presentations (4hrs): “Tonometry”; “Funduscopic Interpretation”; “OCT and Advanced Fundus Imaging”.
4. **The 17<sup>th</sup> William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology (May 12-July 10, 2023; UC-Davis, Davis, CA – Virtual only)** Course Tutor / Lecturer. Oral Presentations (3 pre-recorded lectures,5hrs): “Tonometry”; “Funduscopic Interpretation”; “OCT and Advanced Fundus Imaging” plus quiz and synchronous seminar (Kahoot/Zoom 2hrs).
5. **European College of Veterinary Ophthalmologists Annual Scientific Meeting (May 18 – 21, 2023; Rhodes, Greece)** Invited Speaker (CE day and Masterclass; 3hrs: total): “Guiding ethical research in veterinary ophthalmic studies” ; “The importance of recognizing and mitigating pain in ocular studies in animals” and “Do no harm: regulations, ethical approval and reporting of studies involving animals”.
6. **Society for Comparative Ocular Pathology Annual Conference (March 31<sup>st</sup>-April 1<sup>st</sup>, 2023) (Virtual)**. Invited oral presentation and Question and Answer Session ( 1 hour, via Zoom) “ Discussion of Canine Primary Angle Closure Glaucoma”
7. **The 16th William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology.** (June 23<sup>rd</sup>, 2022, Davis, CA). Course Tutor / Lecturer. Oral Presentations with participatory quizzes (5 hours: 3 lectures): “Tonometry”; “Funduscopic Interpretation”;”OCT and Advanced Fundus Imaging” in this 3 week course for veterinary ophthalmology residents and advanced practitioners. [ In person]
8. **CBOV (Brazilian Congress of Veterinary Ophthalmology )** (November 17<sup>th</sup> -18<sup>th</sup>, 2021) Foz do Iguacu, Brazil (Invited Speaker: 2 recorded lectures and 1 live round table Q&A session; “Glaucoma Genetics: a path to new treatments”, and “Feline Glaucoma: the “sneak thief” of vision”). [participated virtually in this in-person congress, due to Covid-19 restrictions on travel]
9. **SCIVAC- Rimini Web (Italian Society for Companion Animal Veterinarians) Annual Meeting** (May 25<sup>th</sup>-May 28<sup>th</sup>,2021) Rimini, Italy(6 lectures with Q&A, 2 interactive case presentations; 8 hours total): “Not Just a Red Eye! Clinical Signs and Diagnosis of Glaucoma”; “Glaucoma in Dogs: Treatment, Prophylaxis and Prevention”; “Glaucoma in Cats: The Sneak Thief of Vision”; “Seeing the Unseen: Imaging of the Orbit and Globe”; “Interpreting Fundus Lesions: Make Ophthalmoscopy Your Superpower”; “Advances in Ophthalmic Imaging from “EyePhone” to OCT” [Conference held virtually due to COVID-19]
10. **The 15th William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology.** (May 31<sup>st</sup>- June18th, 2021, Davis, CA). Course Tutor / Lecturer. Oral Presentations (5 hours: 3 lectures): “Tonometry”;

“Funduscopic Interpretation”; “OCT and Advanced Fundus Imaging”. [ Course moved to online vs in-person instruction due to Covid-19 prepared and recorded lectures and added 2 hour virtual quiz and seminar using Kahoot, Slido and Zoom ]

11. **ARVO Glaucoma Section Live Networking Session:** “Mentoring for Diversity, Equity and Inclusion”. Presenter / Panelist (1 hour virtual format in Zoom due to Covid-19)
12. **ARVO ADVANCE Research Career Development Conference** (Feb 25-26, 2021) Experts Session Virtual Table host / discussion: “Conducting research with animals is not what you think: Advocating for animals and science” 1 hour (virtual format with Zoom breakout rooms, due to Covid-19)
13. **The 14<sup>th</sup> Biannual William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology.** (June 21st, 2020, Davis, CA). Course Tutor / Lecturer. Oral Presentations (5 hours: 3 lectures): “Tonometry”; “Funduscopic Interpretation”; “OCT and Advanced Fundus Imaging”. [ Course moved to online vs in-person instruction due to Covid-19 prepared and recorded lectures and added 2 hour virtual quiz and seminar using Kahoot and Zoom ]
14. **The 15<sup>th</sup> Annual Beijing Small Animal Veterinary Association Congress / International Society of Veterinary Ophthalmology** 2019 Conference ( September 16<sup>th</sup>- 18<sup>th</sup>, 2019, Beijing, People’s Republic of China). Invited Speaker (2 lectures: 2.25 hours): “*Ophthalmic Imaging from Orbit to OCT*”; “*Glaucoma in Dogs and Cats – clinical signs, causes and treatment*”.
15. **The 13<sup>th</sup> Biannual William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology.** (June 22nd, 2018, Raleigh, NC). Course Tutor / Lecturer. Oral Presentations (5 hours: 3 lectures): “Tonometry”; “Funduscopic Interpretation”; “OCT and Advanced Fundus Imaging”.
16. **Korean Veterinary Ophthalmology Society:** Seoul, South Korea (August 26<sup>th</sup>, 2017) Invited Lecturer. Oral Presentations (**4 hrs** total lectures, 2 lectures inclusive of consecutive translation) “*Feline Glaucoma – a Cat is NOT a Small Dog*” and “*Electroretinography: Light Shall Prevail Over Darkness*”.
17. **World Veterinary Congress:** Incheon, South Korea (August 28<sup>th</sup>-31<sup>st</sup>, 2017) Invited Lecturer. Oral Presentations (**6 hours**: 6 lectures x 45 minutes) “*Ophthalmic Imaging: Seeing the Unseen*”; “*Tools and Tricks in Glaucoma Diagnosis: From Clinical Signs to Tonometry*”; “*Advances in Glaucoma Genetics and Pathology – What Do They Mean?*”; “*Understanding the Fundus: Is That Normal or Abnormal?!*”; “*Technological Advances in Fundus Imaging: New Horizons*; “*A Basic Toolkit for the Diagnosis and Treatment of Equine Eye Disease*”.
18. **Annual Nordic Eye Meeting, Norwegian Society for Veterinary Ophthalmology.** (August 25<sup>th</sup>-27<sup>th</sup>, 2016, Bergen, Norway) Invited Lecturer. Oral Presentations (**6.5 hours**: 8 lectures): “*What’s the cause – understanding glaucoma pathophysiology*”; “*Behind the angle – imaging the anterior segment*”; “*Tonometry A-Z*”; “*Glaucoma case studies*”; “*Feline glaucoma – a cat is not a small dog*”; “*Feline glaucoma – which drugs to use?*”; “*Advances in glaucoma genetics – light at the end of the tunnel?*”; “*Glaucoma therapy – new targets and frontiers*”.
19. **The 12<sup>th</sup> Biannual William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology.** (June 17<sup>th</sup>, 2016, Raleigh, NC). Course Tutor / Lecturer. Oral Presentations (**5 hours**: 3 lectures): “Tonometry”; “Funduscopic Interpretation”; “OCT and Advanced Fundus Imaging”

20. **European College of Veterinary Ophthalmologists Annual Scientific Meeting: Masterclass in Ophthalmic Imaging.** (May 22<sup>nd</sup>, 2016) (1hr 15mins lecture; 3 hours interactive case study workshop) "Optical Coherence Tomography and Advanced Fundus Imaging"

21. **Association Francaise des Vétérinaires pour Animaux de Compagnie (French Companion Animal Veterinary Association).** (January 15<sup>th</sup>, 2016, Paris, France) **Imagerie en Ophthalmologie** (Keynote speaker, 1 day course on Ophthalmic Imaging: (2 hours: 2 lectures) "High Frequency Ultrasound Imaging of the Eye" and "Advanced Imaging of the Fundus".

22. **The 11<sup>th</sup> Biannual William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology.** (June 2014, Raleigh, NC). Course Tutor / Lecturer. Oral Presentations (5 hours: 3 lectures): "Tonometry"; "Funduscopic Interpretation"; "Advanced Fundus Imaging"

23. **Congresso Medvep de Especialidades Veterinárias.** (24th-27th July, 2013; Bento Gonçalves, Rio Grande do Sul, Brazil) "The Challenges of Managing Glaucoma in Cats"; "Advances in Glaucoma Diagnostics"; "Electroretinography: Light Shall Prevail Over Darkness" (3 hours: 3 x 50 mins lectures)

24. **British Small Animal Veterinary Association Annual Congress** (April 4<sup>th</sup>-5<sup>th</sup>, 2013; Birmingham, UK) Continuing Education Lectures : "Ophthalmic Imaging", "Electroretinography: when it is useful and how to perform it", "Glaucoma" (3hrs, 3 x 45 mins lectures)  
Seminar: "Masterclass in Ophthalmic Imaging" (Small group session, advanced level seminar, 3 hrs)

25. **British Association of Veterinary Ophthalmologists Annual Spring Meeting (April 3<sup>rd</sup>, 2013; Birmingham, UK)** "Glaucoma diagnostics: old school and modern marvels"; "A cat is not a small dog: the challenges of feline glaucoma management"; "Diagnosis is in the eye of the beholder: interpretation of funduscopic findings" (3Lectures, 3 hrs)

26. **The 10<sup>th</sup> Biannual William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology.** (June 2012, Raleigh, NC). Course Tutor / Lecturer. Oral Presentations (3 lectures: 5 hours): "Tonometry"; "Funduscopic Interpretation"; "Advanced Fundus Imaging"

27. **World Small Animal Veterinary Association Annual Conference** (October 14<sup>th</sup>-17<sup>th</sup>, 2011) Jeju, Korea. "The differential diagnosis of "Red Eye" in dogs. So many diseases – so little time!", "Glaucoma in dogs and cats: recognizing the signs and determining the cause" and "Light at the End of the Tunnel? What's New (and Old) in the Management of Glaucoma" (3 Invited Continuing Education lectures, 3 hours)

28. **ECVO Annual Meeting** (May 19<sup>th</sup> -22<sup>nd</sup>, 2011) Berlin, Germany. 1 hr Continuing Education Lecture: "A cat is not a small dog: The Feline Glaucomas"  
3 hour Masterclass : "Glaucoma Diagnostics: Beyond Gonioscopy and Tonometry" and "Cases that neither you nor I will ever forget" (Canine and Feline Glaucoma Case Studies)

29. **The 9<sup>th</sup> Biannual William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology.** (June 2010, Raleigh, NC). Course Tutor / Lecturer. Oral Presentations (4 lectures: 7 hours): "Tonometry"; "Funduscopic Interpretation"; "Aqueous Humor Dynamics"; "Glaucoma Pathogenesis in Animals".

30. **The 8<sup>th</sup> Biannual William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology.** (June, 2008. Madison, WI) Course Tutor "Laboratory animal examination" and "Gonioscopy" (Lab instruction, 3 hours and 4 hours respectively)

31. **ECVO /ESVO /SOVI /ISVO International Veterinary Ophthalmology Meeting** (May 30<sup>th</sup>-June 3<sup>rd</sup>, 2007) Genova, Italy. Guest Speaker (2 lectures: 3 hours) : Seminars - "Glaucoma – Current Concepts in Pathophysiology" and "What's new in the Management of Glaucoma"
32. **British Association of Veterinary Ophthalmologists Annual Weekend Meeting** (Nov 11-13, 2005) Birmingham, UK. Guest Speaker (6 hours: 8 lectures) : "Glaucoma-Current Concepts in Pathophysiology", "Feline Glaucoma", "What's New in the Management of Glaucoma", "Ophthalmic Tips", "Tales of the Unexpected", "Letter from America", "Nutrition and the Eye" and "What's New in Equine Uveitis".
33. **British Small Animal Veterinary Association Continuing Education Course in Ophthalmology** (November 17 – 19, 2000) Speaker / Course Tutor (7 hours)
34. **Danish Society for Veterinary Ophthalmology Annual Meeting** - (April 16-17, 1999) Copenhagen, Denmark. Guest Lecturer (5 hours)
35. **British Small Animal Veterinary Association Annual Congress** - (April 1999) Birmingham, UK Speaker, Advanced Veterinary Nursing Programme, "Ocular Emergencies" (1 hour)
36. **European School of Advanced Veterinary Studies - Ophthalmology Residential Course** University of London, UK. September 7-18, 1998. Lecturer on "Slit Lamp Biomicroscopy" / Practical class tutor (5 hours)
37. **British Veterinary Nursing Association - Diploma in Advanced Veterinary Nursing (Surgical) - Annual Residential Course.** (1995-1998) Royal Veterinary College, University of London . "Aspects of Ophthalmic Surgery". (1 hour / year)
38. **Alpine Veterinary Ophthalmology Meeting**- Lenzerheide, Switzerland (March 1996) Invited Speaker, 3 day residential course in ophthalmology (5 hours)

**National Invited Continuing Education Presentations:**

1. **ACVO Applied Ophthalmology for General Practitioners.** Continuing Education Lecture Minneapolis, MN (September, 29<sup>th</sup>, 2018) "Understanding the Fundus: is THAT Normal?!" (Invited Oral Presentation; 1 hour, published proceedings)
2. **115th Penn Annual Conference** Philadelphia, PA (March 11th-12th, 2015) Invited Speaker (4 hours: 4 lectures): "Red Eye in Dogs: So Many Diseases, So Little Time!"; "Glaucoma: How do you Recognize it? Why Does it Happen? What Do You Do?"; "Ophthalmic Imaging: Seeing the Unseen"; "Understanding the Fundus: is THAT Normal?" (Oral lectures;published proceedings)
5. **ACVO 43rd Annual Meeting** (October 19th, 2012), Portland, OR. "Much Ado About Ophthalmology- Current Concepts in Ophthalmic Research". INVITED Oral Presentation (15 minutes)

**Local / State / UW-Madison Continuing Education Presentations**

1. **Department of Ophthalmology and Visual Sciences, Resident Basic Science Lecture Series**, University of Wisconsin-Madison (December,13th, 2019) Optic Nerve Anatomy, Physiology and Biomechanics. (Oral presentation, 1 hour). Audience: Residents.

2. **Department of Ophthalmology and Visual Sciences, Resident Basic Science Lecture Series**, University of Wisconsin-Madison (June 1<sup>st</sup>, 2018) Optic Nerve Anatomy, Physiology and Biomechanics. (Oral presentation, **1 hour**). Audience: Residents.
3. **Department of Ophthalmology and Visual Sciences Grand Rounds**, University of Wisconsin-Madison (December 8th, 2017) "Primary Congenital Glaucoma: Going with the Flow" (oral presentation, **30 minutes**; Science of Disease Series). Audience: faculty, physicians, residents/fellows, students
4. **Practical Equine Ophthalmology, University of Wisconsin-Madison** (November 2nd, 2014) Continuing Education Course: "What's in your truck: A basic toolkit for Equine Ophthalmic Examination, Diagnostics and Therapeutics"; "Equine Intraocular disease. Is there more than ERU.... and is there anything new?"; "Placement of a sub-palpebral lavage tube in the standing horse" ( Oral Presentations: 3 lectures in 2 hours, Lab instruction x 2.5 hours) **\*COURSE DIRECTOR\***
5. **Mid-Western Veterinary Ophthalmology Society Annual Weekend Meeting**, St Louis, MO. (February 4th-5th, 2006) "Corneal Squamous Cell Carcinoma in the Dog – a Case Report and Review"(15mins)
6. **Iowa Veterinary Medical Association Winter Conference**, Ames, IA (February, 2004) "Equine Ophthalmic Examination, Diagnostics and Therapeutics" and "Diagnosis and Management of Equine Corneal Disease" (2 hours)
7. **Student Chapter of the Veterinary Emergency and Critical Care Society**, Iowa State University (March 10th, 2004) - "Ophthalmic Emergencies". (1 hour)

**Other Invited Presentations:**

8. **UW Madison School of Veterinary Medicine First-Gen Faculty & Clinicians Career Panel**. (April 11, 2022) [Panel member] Discussion session with those who share similar first-gen identities.
9. **UW Madison, Research Animal Resources Lecture** (2017): "Fractious Felines and Cute Kitties. Working with Cats in a Research Environment". Research summary and CE for Veterinary Staff and Animal Research Technicians.UW-Madison School of Veterinary Medicine.(1 hr)
10. **Professor R.R. Dubielzig Retirement Event** (August 2014) "Richard Redd Dubielzig: Encomium for An Heroic Journey".
11. **Iowa State University, ADVANCE program** (November 10th, 2010) "Keeping an Eye on the Ball: Juggling Clinics, NIH, Twins, Teaching, and Tomatoes" (1 hour; seminar and discussion) **[Supported by the ADVANCE program at ISU, funded by the NSF, seeks to increase the representation and advancement of women in academic science and engineering.]**
12. **UW Madison, Laboratory Animal Resources Lecture** (August 19th, 2009): "Fractious Felines and Cute Kitties. Working with Cats in a Research Environment". Research summary and CE for Veterinary Staff and Animal Research Technicians.(50 minutes)

**Other Participation in Professional Continuing Education Programs**

Course director / Principal tutor IMPROVE / Royal Veterinary College *Modular CE course in Ophthalmology* - (1998 - 2000)

Program co-ordinator BrAVO / ECVO / ESVO / ISVO Joint 2 day Meeting - (April 1997)

British Association of Veterinary Ophthalmologists – Meeting Program coordinator (1995 -1999 )

### 3] Teaching grants and awards

#### ***UW McPherson Eye Research Institute Visiting Scholar Award, August 9-12, 2017***

Funds were awarded through this competitive program to host Dr. Alex Huang MD, PhD, Department of Ophthalmology, Doheny and Stein Eye Institutes, David Geffen School of Medicine, University of California-Los Angeles. Dr Huang instructed personnel from several UW-Madison labs as well as two visiting scholars, from Michigan State University and from Sao Paulo State University, Brazil in a new imaging technique for large animal eyes using the Heidelberg Spectralis OCT instrument in the McLellan lab. I co-ordinated Dr Huang's visit and produced an itinerary that included two x 3 hour small-group laboratory wetlabs / workshops; a Glaucoma Research Group Seminar, and a DOVS Grand Rounds clinical CE lecture for faculty, residents, fellows and local physicians.

#### ***Nominee, Award for Mentoring Undergraduates in Research and Scholarly Activities***

University of Wisconsin-Madison.

**2016**

#### ***Student Scholars and Leaders Recognition Ceremony, Iowa State University,***

Recognition of Exceptional Faculty Support.

**2004 & 2005**

### **4] Other Documentation of Teaching Merit:**

#### **Contributions in course and curriculum development:**

UW Madison SVM Curriculum Design - Organizational Structure Working Group (previously PREPARE Graduates Task Force )

**2021 - ongoing**

As a Module Director, contributed to the development of a new graduate level course in Vision Science (OPHTHALM 750). Fully responsible for syllabus of final module (Translational Vision Science) of this course, delivery of 1 lecture and 2 seminar / discussion sessions

As member of McPherson Eye Research Institute Education Committee, helped explore and develop a First year Interest Group (FIG) course on The Biology of Vision

Contributed to development of special senses module during transition to a multi-disciplinary, modular, systems-based curriculum at Royal Veterinary College, University of London. (Responsible for Ophthalmology component).

Developed program for Department of Surgical Sciences Teaching Retreat, October 2024

#### **Preparation of instructional materials**

**Powerpoint presentation, objective test and paper discussion outlines prepared for Introduction to the mammalian visual system \*Module Director, "Translational Vision Research" (Ophthalm 750):**

UW-Madison Seminar series in support of Vision Science graduate program (4 seminars and 2 paper discussions; responsible for both paper discussions and 1 seminar / lecture and assignment and scoring of end of module assessment quiz)

**Course notes, powerpoint presentations, objective tests and formative assessment materials, e.g. on-line quizzes and case studies produced for ophthalmology lecture course (SurgSci-542):**

UW-Madison. (Lecture notes and supporting materials revised and updated annually through 2020, then new materials produced, including recorded mini-lectures and new notes and case studies for teaching glaucoma as a new topic in flipped classroom format in 2022: examples of learning objectives , suggesting reading lists, lecture

summaries, lecture notes and a sample presentation provided on request)

[Prior to UW-Madison Appointment, prepared instructional materials for veterinary ophthalmology courses at Royal Veterinary College, University of London; University of California-Davis; Iowa State University]

**Prepared powerpoint presentations and in-class worksheets for 3 seminars on Evolution of the Eye for First Year Interest Group (FIG) Course: The Biology of Vision.** Inter L&S 101. (example of materials for one seminar provided, including copy of presentation and corresponding worksheet questions designed to promote critical thinking during seminar)

**Produced Video materials for Surg Sci 542 (VM3 Comparative Ophthalmology course)**

**Produced Case Review materials for topic rounds during VM4 Comparative Ophthalmology clinical rotation (SurgSci-741)**

**Teaching Institutes and programs attended prior to UW-Madison Appointment:**

**Iowa State University**

College of Veterinary Medicine, Iowa State University  
Curriculum Retreat, June 2004.

***Center for Excellence in Learning and Teaching, Iowa State University***

Seminar: "Teaching Tips from Faculty". September 22<sup>nd</sup>, 2004.

Teaching partners program, 2004-2005

Teaching Seminar. August 19<sup>th</sup>, 2003. Sessions attended included: "Strategies for Active Student Learning"; "How Do I Know My Students Are Learning?" (formative assessment techniques); "Enhancing Critical Thinking", and "Teaching and Evaluating Oral Communication".

**Royal Veterinary College Staff Development Seminars 1995-2000 :**

Refreshing Clinical and Small Group Teaching

Effective Small Group Teaching

Assessing Students Working in Groups

Teaching, Learning and Assessment in Clinical Veterinary Science - an Overview of Issues and Problems

Lecturing Skills

Designing and Using Objective Tests

Active Learning in Lectures and the Use of Interactive Handouts

## SECTION 4: SERVICE & LEADERSHIP

### [A] Personal statement

As a practicing veterinary ophthalmologist, I am committed to the global advancement of comparative ophthalmology and veterinary practice. I was selected to participate in AAVMC's Leadership Academy in 2019-2020. In 2021 I was appointed co-Chair of the Department of Surgical Sciences, and I have served as sole Chair of this Dept. from July 2022. Additionally, in the 2022-23 academic year, I served as co-Chair of UW-Madison's Biological Sciences Divisional Committee (a committee which carries responsibilities including making recommendations for tenure of faculty with appointments spanning Biological and Health Sciences), and subsequently Chaired the University's Divisional Committee Review Council. Throughout my career, I have embraced **servant leadership across my activities in support of my profession, teaching, mentorship and research**.

1) clinical service (to which I devoted 25% effort 2008- 2019, before reducing my clinical effort to 6 weeks per year in 2020); 2) clinical research and scholarship; 3) editorial and review service, and 4) leadership roles at UW-Madison and in professional organizations including both the American College of Veterinary Ophthalmologists (ACVO) and the European College of Veterinary Ophthalmologists (ECVO). In 2020, I was appointed to Chair the ACVO's newly established Task force on Diversity and Inclusion and helped design an AAVMC-circulated demographic and well-being survey for specialty-trained veterinarians. I was an active member of the ACVO Basic Science Course organizing committee from 2013-2025 and in December 2023 completed my second term as an appointed member of the Vision for Animals Foundation (VAF) Board of Directors. The VAF provides funding for grants in support of research to eliminate blinding and painful ocular diseases in animals. As ECVO President (2012-2014), I led Europe's certifying organization for Specialists in Veterinary Ophthalmology, restructuring the organization's standing committees via amendments to the Constitution and Bylaws. I intensified efforts to harmonize training of hereditary eye disease examiners throughout Europe under a single ECVO-regulated scheme. I had executive responsibility for finances, planning and organization of annual scientific meetings (>400 attendees from >30 countries) in Barcelona (2013), London (2014) and Helsinki (2015). As ECVO Past-President, I was appointed to Chair an ad hoc ECVO Code of Conduct Committee and authored a Professional Code of Conduct adopted by ECVO in 2016. Since 2021, I have served on the ECVO Clinical Research and Ethics Committee.

Through an NIH Shared Instrumentation Grant, for which I was Program Director, I established a multimodal ophthalmic imaging facility for use in animal models. This serves as a component of the Department of Ophthalmology and Visual Sciences Vision Research Core, for which I am now module co-director for the "Animal Models and Eye Organ Culture" module. I continue to oversee day-to-day operations of facilities that have been used by multiple research groups on >15 NIH-funded projects. The ability for researchers to perform non-invasive structural and functional testing permits longitudinal studies reduces the numbers of animals used in research. Through an NIH Shared Instrumentation for Animal Research (SIFAR) grant awarded to UW-Madison in 2019, I also oversaw the purchase and installation of a confocal laser capture microdissection microscope.

I lead regularly scheduled SVM, Department of Surgical Sciences (DSS) and Department of Ophthalmology and Visual Sciences (DOVS) Executive Committee and strategic planning initiatives. I have served on a number of DOVS committees, including the Research Financial Analysis Committee (RFAC) and the Research Working Group, I have engaged with MERI Advisory Board and prospective donors; participated in seminars and symposia, and, since 2014, have served on the MERI Leadership Committee, which oversees all operations (e.g., fundraising, education, research and outreach activities) of this >200 member inter-disciplinary, inter-institutional community of scholars and researchers. I have been granted membership of two UW-Madison philanthropic societies, the Bascom Hill and the Middleton Societies, in recognition of support of the UW Foundation, SVM and SMPH. I have also served on the Editorial Board of the journals *Veterinary Ophthalmology* and *eLife*, and as an ad hoc reviewer for over 20 journals including *PLoS*, *Investigative Ophthalmology and Visual Science* (with recognition as an exceptional reviewer), *Experimental Eye Research*, *Translational Vision Science and Technology* and the *Journal of Glaucoma*, as well as several veterinary journals. Additionally, I have served on grant review panels for the National Institutes of Health (including recently completed term of service on the PED2 standing study section); BrightFocus Foundation; UW Institute for Clinical and Translational Research; Association for Research in Vision and Ophthalmology (ARVO) David Epstein Award; and the American Kennel Club's Canine Health Foundation. I have chaired platform sessions at several international meetings. As member and ultimately Chair of the ARVO Animals in Research Committee (ARC) I contributed to a revised Statement for the Use of Animals in Ophthalmic and Vision Research and a Toolkit for Researchers using Animals in Research. As chair of the ARC publications sub-committee I was responsible for revising the ARVO Toolkit for Conducting Secure Biomedical Research Involving Laboratory Animals. This member-only toolkit provides strategies for communicating with the public and protecting lab personnel and their work involving laboratory animals. I also worked with the ARC and ARVO's Advocacy and Outreach Committee to develop a 1-page document on the Use of Animals in Vision Research, and served as ARVO's Delegate to AAALAC, serving on the Town Hall Planning Committee for that organization. I have been recognized as a Fellow of ARVO, in recognition of my contributions to that organization and to research in vision and ophthalmology. Lastly, I have participated in advocacy and outreach for vision research, ethical use of animals in research and ophthalmology, UW-Madison, veterinary medicine, veterinary education and veterinary research through ARVO / NAEVR, NABR/FBR, and the SVM/ AAVMC, both locally and nationally, including meetings in DC and at State Capitols.

## **[B] University Service**

### Committee Appointments:

(\* indicates Chair. Assignments held at UW-Madison during and after probationary period are bolded)

#### **Departmental:**

<b>*Chair, Department of Surgical Sciences</b>	2022-present
<b>*Co-Chair, Department of Surgical Sciences</b>	2021-2022
<b>Member, Comparative Ophthalmology (DSS) Faculty Search Committee</b>	2018-2019
<b>Research Financial Analysis Committee, DOVS, UW-Madison</b>	2017-2020
<b>Research Working Group, DOVS, UW-Madison</b>	2008-present
<b>Glaucoma Research Group, UW-Madison, member</b>	2006-present
<b>Member, DOVS Glaucoma Research Faculty (Vision Scientist) Search Committee</b>	2018
Veterinary Clinical Sciences, Clinical Research Committee, ISU	2004-2006
Communications sub-Committee, Queen Mother Hospital, Royal Veterinary College	1999-2000

#### **College / School of Veterinary Medicine/ School of Medicine & Public Health:**

<b>Selection Committee, Dr. Bernard C. Easterday Professorship in Infectious Disease</b>	2024
<b>Selection Committee, Ruth M. Skaar Chair in Veterinary Medicine</b>	2022
<b>SVM Research Committee</b>	2021-present
<b>SVM CBMS Academic Advisory Committee</b>	<b>2021-present</b>
<b>Core Director: multimodal ophthalmic imaging / Animal Models Module</b>	2014-present
<b>Biomedical Research Model Services Faculty Advisory Committee (SMPH)</b>	2018- 2022
<b>Mentoring committee Olachi Mezu-Ndubuisi, MD, OD</b> (Tenure track Asst Prof, Pediatrics)	2016-2021
<b>Mentoring committee Mrinalini Hoon, PhD</b> (Tenure Track Assistant Professor, DOVS)	2018-2024
<b>Mentoring Committee Alexane Durant</b> (Clinical Assistant Professor, DSS)	2018-2019
<b>*Mentoring Committee Susannah Sample</b> (Tenure Track Assistant Professor, DSS)	2019-2021
<b>Mentoring Committee J.P. Martens</b> (Tenure Track Assistant Professor, DMS)	2019-present
<b>Mentoring Committee Elizabeth (Betsy) Elsmo</b> (Clinical Diagnostic Track, WVDL)	2019-2024
<b>Mentoring Committee Colleen McDowell</b> (Tenure Track Assistant Professor, DOVS)	2019- 2024
<b>Mentoring Committee (K08) Freya Mowat</b> (Tenure Track Assistant Professor, DSS)	2020-2023
<b>Mentoring Committee Carrie Schroeder</b> (Clinical Assistant Professor, DSS)	2020-2024
<b>Mentoring Committee Alexa Burton</b> (Clinical Assistant Professor, DMS)	2021-present
<b>Mentoring Committee Ismail Zaitoun</b> (Assistant Professor, DOVS)	2023-present
<b>Comparative Biomedical Sciences Graduate Program, Academic Committee</b>	2020-present
<b>SVM PI Committee</b>	2020- 2023

SVM Student Scholars Research Awards Committee, UW-Madison	2014
Dean Search Committee, ISU	2003/2004
Faculty Advisor, Hills Pet Food Sales and Scholarship Committee, ISU	2003-2006

### **University**

<b>University of Wisconsin, McPherson Eye Research Institute (ERI), member</b>	2008-present
<b>University of Wisconsin, McPherson ERI, Education Committee</b>	2011-2014
<b>University of Wisconsin, McPherson ERI, Leadership Committee</b>	2014-present
<b>Institute for Clinical and Translational Research, UW-Madison, Member</b>	2008-present
<b>Wisconsin Advanced Imaging of Visual Systems Faculty Planning Committee Member</b>	2018-present
<b>UW-Madison Faculty Senate (Alternate), Department of Surgical Sciences</b>	2018-2021
<b>UW-Madison Biological Sciences Divisional Committee, Elected Member</b>	2020-2023
<b>UW-Madison Biological Sciences Divisional Committee (Appointed Vice-Chair)</b>	2021-2022
<b>*UW-Madison Biological Sciences Divisional Committee (Appointed Co-Chair)</b>	2022-2023
<b>UW-Madison Divisional Committee Review Council (Appointed member, Chair)</b>	2023-2024
<b>UW-Madison Dean Search Committee (Appointed member)</b>	2023-2024
<b>UW-Madison, Committee for Women in the University (Appointed Member)</b>	2024-present
<b>UW-Madison, Vice-Provost for Faculty Affairs Advisory Group (Appointed member)</b>	2025-present

### **[C] Professional Service**

#### **Committee & Review Panel Service: (\* indicates Chair)**

#### **Committee Service:**

Association for Research in Vision and Ophthalmology (ARVO)	
Animals in Research Committee, member	2016-2019
*ARVO, Chair: Animals in Research Committee, Publications sub-Committee	2017-2018
ARVO Animals in Research Committee, Chair Elect	2018-2019
*ARVO Animals in Research Committee Chair	2019-2021
ARVO Appointed Delegate to AAALAC International Board	2018-2021
ARVO Women's Leadership Program – Discussion panel member " Negotiation"	2022-present
ARVO Dr. David L Epstein Award Review Committee	2022-2024
AAALAC International, member Townhall Planning subcommittee	2020-2021
*Chair, ACVO Task Force on Diversity and Inclusion	2020-2021
ACVO Veterinary Ophthalmology journal task force on Animal Research Ethics	2019-2021
ACVO Basic Science Course Planning Committee, member	2013-2024
Vision for Animals Foundation Canine Glaucoma Consortium, member	2018-present
ACVO Veterinary Ophthalmology Journal Strategic Planning Task Force	2018-2019

BrightFocus Foundation National Glaucoma Research Scientific Review Committee	2023-present
Clinical and Translational Science Award One Health Alliance (COHA)	2020-2022
Clinician-Scientist Grant Writing Coach	
International Society for Eye Research, Mentoring Program for Early Career Scientists	2022-present
European College of Veterinary Ophthalmologists (ECVO)	
*President (elected)	2012-2014
Past-President	2014-2016
ECVO Executive Secretary (elected)	2006-2010
ECVO Vice-President (elected)	2010-2012;
*Chair, ECVO <i>ad hoc</i> Code of Conduct Committee	2015-2016
ECVO Clinical and Research Ethics Committee	2021-present
External Advisory Board for Research and Graduate Studies, invited member (The Ohio State University College of Veterinary Medicine)	2024-present
ACVO <i>ad hoc</i> committee (appeal of adverse decision), member	2009
ACVO/ ECVO <i>ad hoc</i> committee on mutual recognition	2009-2012
Secretary, British Association of Veterinary Ophthalmologists (BrAVO)	1996-1998
Scientific program coordinator, BrAVO	1996-1999
British Small Animal Veterinary Association (BSAVA), Student Liaison Officer	1997-2000
BSAVA Members Services, Standing Committee	1997-2000
Registered Inspector, BSAVA Practice Standards Scheme	1998-2000
Adviser, RCVS Certificate in Veterinary Ophthalmology	1996-2008

**Grant Review Activities:**

<b>ARVO Dr. David L Epstein Award, Research Proposal Review Committee</b>	2022-2025
<b>Permanent Member, Pathophysiology of Eye Disease-2 (PED2) Study Section</b>	2021-2025
Appointed to NIH Brain Disorders and Clinical Neuroscience Integrated Review Group (3 study section meetings per year; assigned 8-12 proposals per meeting)	
<b>Member/ ad hoc reviewer BrightFocus Foundation Scientific Review Committee</b>	2023,2025
National Glaucoma Research Program	
<b>Reviewer, NIH ZEY1 VSN (06) (Mail in Review)</b>	
Translational Research Program to Develop Novel Therapies and Devices for the Treatment of Visual System Disorders (R24)	2019
<b>Reviewer, NIH ZRG1 BDCN-J (81) (Special Emphasis Panel)</b>	
Ocular Surface, Cornea, Anterior Segment Glaucoma and Refractive Error (3 panel meetings per year; assigned 8-13 proposals per meeting)	2019,2020
<b>Reviewer, NIH ZEY1 VSN (01) Study Section</b>	2018

<b>Reviewer, Type 1 Translational Research Pilot Project Grant Proposals,</b> UW-Madison Institute for Clinical and Translational Research	2012-16, 2018, 2021-22
<b>Reviewer, KL2 Scholars Program Proposals</b> for career development awards UW-Madison Institute for Clinical and Translational Research	2012, 2013
<b>Reviewer, Canine Health Foundation Oak Research Grants,</b> American Kennel Club	2017, 2022, 2025
<b>Reviewer, Clinical Research Grant Proposals, BSAVA Petsavers</b>	2003, 2014
<b>[McPherson Eye Research Institute Leadership Committee</b> also reviews grant proposals]	

**Journal Review Activities:**

(Number of manuscript reviews completed during 2014-2022; I decline invitations to review ~10 manuscripts /month typically suggesting junior colleagues and trainees / former trainees as alternate reviewers)

Years as Re-viewer	Journal Title	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2001-present	Veterinary Ophthalmology (number of additional manuscripts assigned / reviewed as Editorial Board Member)	6 (20)	3 (6)	3(4)	5(8)	9 (6)	4 (3)	3(2)	2(3)			2
2021-present	eLife (number of additional manuscripts assigned / reviewed as Board of Reviewing Editors Member)							(5)	(10)	(2)		
2009-present	Molecular Vision			1								
2011-present	Veterinary Record	1	0	0								
2013-present	Journal of Small Animal Practice	2	2									
2012-present	Journal Am. Vet. Med. Assoc	1	1									
2012-present	Clinical Ophthalmology											
2013-present	Canadian Journal of Vet. Res.	1	1									
2013-present	Canadian Vet Journal	1										
2014-present	American Journal of Vet. Res.	2	1					1				
2014-present	Invest. Ophthalmol Vis. Sci	1		2	2	1	1		1	1	1	8
2014-present	PLoS One	1	1				1					

2016-present	Journal of Glaucoma		1	4	3			1				2
2016-present	BMJ Innovations		1	1								
2016-present	J. of Zoo and Wild-life Medicine		2	1								
2017-present	Open Vet. Journal		0	2								
2017-present	Current Eye Research			1								
2018-present	Experimental Eye Research				1	3	2			1	1	2
2018-present	Documenta Ophthalmologica				2					2		
2018-present	Veterinary Medicine & Science				1							
2019-present	Journal of AALAS					1						
2019--present	Transl Vis Sci Technol					4	3					
2020 - present	Nature Scientific Reports						1					
2020-present	Molecular & Cellular Biochemistry						1					
2024	Journal of International Medical Research										1	
Total number of manuscripts reviewed / yr (excluding those reviewed as Editorial Board Member)		15	13	15	14	18	13	5	5 (13)	2 (2)	3	14

#### *Journal review Activities Prior to 2015*

2001-2012	<i>Veterinary Ophthalmology</i>
2009-2012	<i>Molecular Vision</i>
2011-2012	<i>Veterinary Record</i>
2012	<i>Clinical Ophthalmology</i>
2005	Ad Hoc Reviewer, Blackwell Professional Publishing, Textbook
2004	Ad Hoc Reviewer, <i>Lipids</i>
2003	Ad Hoc Reviewer, BSAVA PetSavers Research Awards
2000	Ad Hoc Reviewer, <i>Veterinary Dermatology</i>

#### **2) Appointment / Election to Office in Colleges / Organizations and Editorial Boards:**

Member, Editorial Board, <i>Investigative Ophthalmology and Visual Science</i> (appointed)	2025-present
Member, Board of Reviewing Editors, <i>eLife</i> (appointed)	2021-2024
Guidelines for Ethical Research in Veterinary Ophthalmology (GERVO) Working Group	2021-2023
Clinical Research Ethics Committee, European College of Veterinary Ophthalmologists	2021-present
Membership organization (ARVO) delegate, AAALAC International (appointed)	2019-2021
(Association for Assessment and Accreditation of Laboratory Animal Care)	
Member, Association of American Veterinary Medical Colleges Leadership Academy	2019-2020
Board Member, Vision for Animals Foundation (appointed)	2018-2024

<b>Editorial Board Member, Veterinary Ophthalmology (appointed)</b>	2009-2022
<b>Veterinary Ophthalmology, Journal Strategic Planning Task Force (appointed; ACVO)</b>	2018-2019
<b>Past President, European College of Veterinary Ophthalmologists (ECVO)</b>	2014-2016
<b>*President, European College of Veterinary Ophthalmologists (elected)</b>	2012-2014
Vice-President, European College of Veterinary Ophthalmologists (elected)	2010-2012
Executive Secretary, European College of Veterinary Ophthalmologists (elected)	2006-2010

### **3) Clinical Service:**

Between 2008 and 2019, I dedicated 25% (12 weeks per year) to clinical duties on UW Veterinary Care's comparative ophthalmology service but this clinical effort has reduced to about 12% (6 weeks per year) as other service and leadership obligations increased. This service provides referral appointments and consultations for dogs, cats, horses and other species, including birds, zoo animals and wildlife, with ophthalmic diseases. Examples of common ophthalmic diseases encountered in my clinical practice include ocular trauma, corneal ulcers, uveitis, glaucoma, eyelid disorders, cataract and inherited retinal degenerations. This clinical commitment was reduced in 2020 to 6 weeks per year (typically divided into 2-3 day blocks, and 6 weekends/year). During each period of clinic duty, I am typically the sole faculty member with overall responsibility for this "24-7" clinical service. I direct and supervise 2-3 Comparative Ophthalmology Residents; 4 senior veterinary students; veterinary ophthalmology technicians, and additional rotating interns or other trainees and clinicians shadowing our service. I examine each patient presented to the Comparative Ophthalmology service, either as outpatient appointments, or as consultations requested by other clinical services. I perform or directly supervise all surgical procedures, from orbital and eyelid plastic surgery, to complex micro-surgical procedures including cataract, glaucoma and corneal repair surgeries. In my clinical service, I am also responsible for veterinary student and clinical trainee education, delivered in a small group learning environment with a focus on experiential, problem-based learning that integrates theory into practice.

UW-Madison has a strong local, national and international reputation for excellence in provision of care for veterinary patients with ocular disease and for clinical research, scholarship and education, as evidenced by veterinary clinicians who visit our service from as far afield as South America, Europe, Asia and Australia, and by the frequent invitations that our faculty receive to participate in continuing education provision to other veterinary ophthalmologists as well as general veterinary practitioners (see teaching section 3). Our service routinely receives some of the highest evaluations of any UW Veterinary Care service from referring veterinarians and clients, due to our strong commitment to the efficient and compassionate provision of the highest quality ophthalmic care.

In my clinical role, my activities focus on advancing the science and practice of veterinary ophthalmology. As a clinician-scientist, I am alert to opportunities to leverage the clinical caseload as a living laboratory, and identify research opportunities that span a continuum from clinical veterinary patients to basic research, to translation of new strategies that benefit human and veterinary patients. My initial identification and subsequent development of a novel inherited form of feline congenital glaucoma is a prime example of the benefits that can be garnered from this approach. I have developed a strong reputation in my field for bridging the gap between basic science research and clinical applications. This is demonstrated by new evidence-based diagnostic and treatment regimens for canine and feline glaucoma and retinal diseases, founded on my research. Specifically:

- 1) Optical Coherence Tomography is being increasingly adopted globally, in veterinary ophthalmic specialty practices, for the diagnosis of retinal and anterior segment disease.
- 2) Canine retinal disease that was previously considered to represent a primary Retinal Pigment Epithelial Dystrophy is now recognized as an ocular manifestation of primary or secondary systemic vitamin E deficiency.
- 3) The extent to which the incidence of feline glaucoma has previously been underestimated is now appreciated, and rebound tonometry is now considered a clinical gold standard in the measurement of intraocular pressure in cats.
- 4) An evidence-based framework is now in place for medical management of cats with glaucoma.

The collaborative relationships I have fostered with colleagues ultimately result in more comprehensive care for our patients and clients and faster translation of basic science to clinical applications. These collaborations include efforts to identify the underlying genetic basis of canine primary angle closure glaucoma. Furthermore, in an example of reverse translation, based on my program of basic research exploring links between glaucoma and Alzheimer's disease in mouse models, I have established a program of collaborative clinical research in the area of feline cognitive dysfunction syndrome and have secured extramural funding as a PI, while mentoring junior faculty collaborators in their efforts to expand funding for this "team science" program, as their as a co-Investigator. In addition to research, mentor teaching and professional service outlined in prior sections, I provide continuing education to veterinary clinicians and am sought out as a speaker for my expertise in glaucoma, ophthalmic imaging, feline ophthalmology, genetic ocular disease and retinal disease, and have produced a very practical textbook targeted at trainees and busy general veterinary practitioners (BSAVA Manual, as detailed in the teaching section).

#### **4) Outreach Service:**

##### **Outreach Presentations:**

**Entlebucher Mountain Dog “Entlefest”** (July 29-30, 2013) Invited Continuing Education Presentation for Breeders and Owners. “Acute Angle Closure Glaucoma – Know Your Enemy!”

**UW-Madison Department of Ophthalmology and Visual Sciences, Advisory Board Meeting** (April 21<sup>st</sup>, 2016) “*Seeing things from a different angle: a chance to make things better in pediatric glaucoma*”

**North East Wisconsin Lions Convention** (November 7th, 2015, Green Bay, WI) “*Seeing things from a different angle: a chance to make things better in pediatric glaucoma*”.

**Madison-West Kiwanis** , Invited Speaker (September 21<sup>st</sup>, 2012) “*Glaucoma Research at UW Madison*”

**“Vision for the Future”**, (Department of Ophthalmology and Visual Sciences, UW-Madison; Donor Appreciation Dinner, September 19<sup>th</sup>, 2012) “*Glaucoma in Cats: Why it Matters*”

**Glaucoma Patient Support Group**, UW Hospital and Clinics, Invited Speaker (November 14<sup>th</sup>, 2012) “*Glaucoma in Cats: Why It Matters*”

**UW McPherson Eye Research Institute “Vision at the Zoo”** (Henry Vilas Zoo, Madison, WI, June, 19<sup>th</sup>, 2011) “*The Hedgehog, the Python and the Walking Stick*” (Community outreach event, with Dr. Richard R Dubielzig, Pathobiological Sciences, School of Veterinary Medicine)

**Volunteer Advisory Board, Dept of Ophthalmology and Visual Sciences**, University of Wisconsin School of Medicine and Public Health . (October 20<sup>th</sup>, 2009) “*Glaucoma in Cats: Why it Matters*”

**American Kennel Club, Canine Health Foundation Breeders Symposium.** Ames, IA. (November 17-18, 2007) Oral Presentation “Canine Ophthalmology – A Dog’s Eye View of Inherited Ocular Disease” (1 hour)

**Des Moines Obedience Training Club** (November 11<sup>th</sup>, 2004). “*A Dog’s Eye View*”.

##### **Other Outreach Service Activities:**

**Canine Inherited Eye Disease Clinics** (40-110 dogs for 30-100 owners/clinic, prior to Covid-19 pandemic this represented a minimum 160 dogs /year)

As a board-certified veterinary ophthalmologist, I donate my time to conduct eye examination clinics throughout Wisconsin on a volunteer basis. This important outreach activity provides education and service to breeders of pure-bred dogs from the state of Wisconsin and throughout the upper Midwest region. During these clinics I identify animals with evidence of inherited eye disease and counsel owners on the implications of these findings for the vision, overall health and suitability for breeding of their animals. By promoting use of animals free of clinical evidence of inherited disease in breeding programs, the overall health and welfare of the canine population will be improved. These clinics also afford an opportunity to identify novel canine inherited ocular disorders as potential models of human disease.

##### **2025:**

Western Waukesha Dog Training Club, Ixonia, WI, March 15, 2025

Badgerland Kennel Club, Jefferson, WI, June 1, 2025

Waukesha Kennel Club, Waukesha WI, July 26, 2025

Lakeland Dog Training Club, Cambridge WI, September 13, 2025

##### **2024:**

Western Waukesha Dog Training Club, Ixonia WI, March 16, 2024

Waukesha Kennel Club, Waukesha WI, July 27, 2024

Lakeland Dog Training Club, Cambridge WI, September 14, 2024

**2023:**

Western Waukesha Dog Training Club, Ixonia WI, March 11, 2023  
Waukesha Kennel Club, Waukesha WI, July 29, 2023  
Lakeland Dog Training Club, Cambridge WI, October 21, 2023

**2022:**

Western Waukesha Dog Training Club, Ixonia WI, March 19, 2022  
Lakeland Dog Training Club, Cambridge, WI, September 17, 2022

**2021:**

Lakeland Dog Training Club, Cambridge, WI, September 18, 2021

**2020:**

Waukesha Kennel Club Dog Show, Waukesha, WI, February 22, 2020  
Badgerland Kennel Club, De Forest, WI, July 11, 2020  
Lakeland Dog Training Club, Cambridge, WI, September 19, 2020

**2019:**

Western Waukesha Dog Training Club, Ixonia WI, March 16, 2019  
Great Lakes Belgian Tervuren Club, Janesville WI, March 8, 2019  
Waukesha Kennel Club Dog Show, Waukesha WI, February 9, 2019  
Lakeland Dog Training Club, Cambridge, WI, August 22, 2019

**2018:**

Siberian Husky Club of America Nationals Specialty, St Charles, IL, October 19, 2018  
Lakeland Dog Training Club, Cambridge, WI, August 1, 2018  
Western Waukesha Dog Training Club, Ixonia WI, March 17, 2018  
Waukesha Kennel Club Dog Show, Waukesha WI, February 10, 2018

**2017:**

Lakeland Dog Training Club, Cambridge, WI, August 1, 2017  
Badgerland Dog Show, Manitowoc, WI, April 1, 2017  
Western Waukesha Dog Training Club, Ixonia WI, March 18, 2017  
Waukesha Kennel Club Dog Show, Waukesha WI, February 11, 2017

**2016:**

Lakeland Dog Training Club, Cambridge, WI, July 21, 2016  
Badgerland Dog Show, Manitowoc, WI, April 2, 2016  
Western Waukesha Dog Training Club, Ixonia WI, February 27, 2016  
Waukesha Kennel Club Dog Show, Waukesha WI, February 13, 2016

**2015:**

Italian Spinone Nationals, Oconomowoc, WI, May 8, 2015  
Badgerland Dog Show, Manitowoc, WI, March 28, 2015  
Western Waukesha Dog Training Club, Ixonia, WI, March 14, 2015  
Waukesha Kennel Club Dog Show, Waukesha, WI, February 14, 2015

**2014:**

Manitowoc County Kennel Club, Manitowoc WI, March 29 and September 13, 2014  
Waukesha Kennel Club Dog Show, Waukesha WI, April 5, 2014  
Western Waukesha Dog Training Club, Ixonia WI, March 15, 2014

**2013:**

Manitowoc County Kennel Club, Manitowoc WI, September 14, 2013  
Western Waukesha Dog Training Club, Ixonia WI, March 8, 2013

Great Lakes Belgian Tervuren Club, Janesville WI, March 7, 2013  
Waukesha Kennel Club Dog Show, Waukesha WI, February 9, 2013

**2012:**

Fond du Lac County Kennel Club Dog Show, Fond du Lac WI, April 21, 2012  
Western Waukesha Dog Training Club, Ixonia WI, March 10, 2012  
Great Lakes Belgian Tervuren Club, Janesville WI, March 9, 2012  
Waukesha Kennel Club Dog Show, Waukesha WI, February 11, 2012