CURRICULUM VITAE

**BRET ALAN MOORE**

**D.V.M., Ph.D.**

**CONTACT INFORMATION**

Address (Work): College of Veterinary Medicine

University of Florida

2015 SW 16th Ave

Gainesville, FL 32608

United States

**ACADEMIC EDUCATION AND TRAINING**

Undergraduate education Degree obtained: Bachelor of Science (B.S.) in Biology

2006 – 2010 GPA 3.73*, magna cum laude*

Specialization: Neurobiology/Physiology

Purdue University, College of Science

150 N. University Street

West Lafayette, IN 47907, United States

Graduate education Degree obtained: Philosophy Doctor (Ph.D.)

2010-2014 GPA 4.00, *summa cum laude*

Specialization: Comparative Vision & Visual Ecology

Purdue University, Department of Biological Sciences

915 State Street

West Lafayette, IN 47907, United States

2011- 2015 Degree obtained: Doctor of Veterinary Medicine (D.V.M.)

GPA 3.67, c*um laude,* Class Rank 8 of 77

Purdue University, School of Veterinary Medicine

625 Harrison Street

West Lafayette, IN 47907, United States

Post-graduate education

2015-2016 Rotating Internship

Veterinary Specialty Hospital of San Diego

10435 Sorrento Valley Road

San Diego, CA 92121, United States

2016-2020 Resident in Comparative Ophthalmology

UC Davis School of Veterinary Medicine

1 Garrod Drive

Davis, CA 95616, United States

2020-Present Assistant Professor

College of Veterinary Medicine

University of Florida

2015 SW 16th Ave

Gainesville, FL 32608

United States

**AWARDS AND HONORS**

2019 ACVO Resident Manuscript Award, Basic Science Category

“**Moore BA,** et al. Identification of novel genes required for normal development of eye structure and function by high-throughput screening of mouse knockouts. *Nature Communications Biology*; 1: 236. doi:10.1038/s42003-018-0226-0 (2018)”.

2018 ACVO Resident Manuscript Award, Case Report Category

“**Moore BA,** et al. A population study of common ocular abnormalities in C57BL/6N *Rd8* mice. *Investigative Ophthalmology and Visual Science;* 59: 2252-2261 (2018)”.

2015 ACVO Student Comparative Ophthalmology Award

IDEXX Award for Proficiency in Clinical Pathology

American College of Veterinary Radiology Senior Student Award

2014 The Society of Phi Zeta, Omicron Chapter, Honor Society of Veterinary Medicine, Inducted Spring 2014

William W. Carlton for Aptitude in Veterinary Pathology Award

2011-2014 Dean’s List

**GRANTS AND SCHOLARSHIPS**

2012 Merial-NIH Veterinary Scholar Research Fellowship

Veterinary Scholars Fellowship

2010 Ross Graduate Fellowship, Purdue University, United States NESCENT Graduate Fellowship, Duke University, United States

2009 Quantitative Physiology Scholarship Program, Purdue University, United States

**PROFESSIONAL EXPERIENCE AND TRAINING**

*Post-doctoral training:*

Aug. 2016-July 2020 University of California Davis, School of Veterinary Medicine

*Resident in Comparative Ophthalmology*

Sept. 28-Oct. 2, 2015 University of Madison-Wisconsin, School of Veterinary Medicine, 2015 Linden Drive, Madison, WI. Department of Ophthalmology: Dr. Ellison Bentley & Dr. Paul Miller

Sept. 21-Sept. 25, 2015 University of California-Davis, School of Veterinary Medicine, Ophthalmology, 1 Garrod Drive, Davis, CA: Dr. Steven R. Hollingsworth & Dr. David J. Maggs

June 2015-June 2016 Veterinary Specialty Hospital of San Diego

*Rotating Intern*

* Primary case responsibility on emergency service
* Case management and training with internal medicine, surgery, anesthesia, neurology, ophthalmology, and clinical pathology

*Veterinary and doctoral training:*

Oct. 27-Nov. 17, 2014 Universidade Federal do Parana, Department of Veterinary Medicine, Curitiba, Parana, Brazil. Ophthalmology Department, Dr. Fabiano Montiani-Ferreira.

Aug. 25-Oct. 6, 2014 Comparative Ocular Pathology Laboratory of Wisconsin (COPLOW), School of Veterinary Medicine, 2015 Linden Drive, Madison, WI. Dr. Richard R. Dubielzig & Dr. Leandro Teixeira

Aug. 2011-May 2015 Purdue University Veterinary Teaching Hospital, West Lafayette IN

*Student of* *Veterinary Medicine, mixed animal track*

**PUBLICATIONS (40)**

\*Current H-Factor - 14

*Scientific Publications in Refereed Journals (38):*

1. Strobel SM, **Moore BA**, Freeman KS, Murray MJ, Reichmuth C. Adaptations for amphibious vision in sea otters (*Enydra lutris*): structural and functional observations. *Journal of Comparative Physiology A*; 206: 767-782 (2020).
2. Mansour TA, Woolard K, Ancona D, Vernau KL, Thomasy SM, Sebbag L, **Moore BA**, Knipe M, Cowan T, Aguilar M, Titus Brown C, Bannasch DL. Whole genome sequencing for mutation discovery in a single case of lysosomal storage disease (MPS type 1) in the dog. *Scientific Reports*; 10: 6558. doi:10.1038/s41598-020-63451-4 (2020).
3. Somma AT,Seabra N, **Moore BA,** Sato M, Lange RR, Montiani-Ferreira F. Antimicrobial activity of topical dyes used in clinical veterinary ophthalmology. *Veterinary Ophthalmology*; doi:10.1111/vop.12746 (2020).
4. Kravetz de Oliveira J, Bortolini M, Schaller M, Schuchmann RK, **Moore BA**, Montiani-Ferreira F. The Ophthalmic health and refractive state of working dogs in South Brazil. *Open Veterinary Journal*; 10: 22-30 (2020).
5. **Moore BA**, Robertson J, Tarbert DK, Good KL, Paul-Murphy JR. A novel surgical technique for enucleation in rabbits to reduce the risk of intra- and post-operative orbital hemorrhage. *Veterinary Ophthalmology*, doi: 10.1111/vop.12737 (2020).
6. **Moore BA**, Gjeltema J. Once in a blue moon: Lipid keratopathy and intrastromal hemorrhage in a Mission golden-eyed tree frog (*Trachycephalus resinifictrix*). *Veterinary Ophthalmology*; doi: 10.1111/vop.12722 (2019).
7. Tyrrell LP,Teixeira LBC, Dubielzig RR, Pita D, Baumhardt P, **Moore BA**, Fernandez-Juricic E. A novel cellular structure in the retina of insectivorous birds. *Scientific Reports*; 9: 15230 (2019).
8. Munevar C, **Moore BA**, Gleeson M, Ozawa SM, Paul-Murphy J, Murphy CJ, Leonard BL. Acremonium and Trichosporon fungal keratoconjunctivitis in a leopard gecko (*Eublepharis macularius*). *Veterinary Ophthalmology*; doi:10.1111/vop.12700 (2019).
9. Somma A, Coimbra CM, Lange R, **Moore BA**, Montiani-Ferreira F. Reference values for selected ophthalmic diagnostic tests in two species of microchiroptera bats (*Artibeus lituratus* and *Anoura caudifer*). *Veterinary Ophthalmology*; 23: 61-66 (2019).
10. **Moore BA**, Flenniken AM, Clary D, Moshiri AS, Nutter LMJ, Berberovic Z, Owen C, Newbigging S, Adissu H, Eskandarian M, McKerlie C, Thomasy SM, Kent Lloyd KC, Murphy CJ, Moshiri A. Genome-wide screening of mouse knockouts reveals novel genes required for normal integumentary and oculocutaneous structure and function. *Scientific Reports*; 9: 11211(2019).
11. Ferriera TAC, Saldanha A, Fornazari G, **Moore BA**, Montiani-Ferreira F. The use of sulfur hexafluoride microbubbles for contrast-enhanced ocular ultrasonography of the *pecten oculi* in birds. *Veterinary Ophthalmology*; 22: 423-429 (2018).
12. Gleeson MD, **Moore BA**, Edwards SG, Stevens S, Childress AL, Wellehan Jr. JFX, Robertson J, Murphy CJ, Hawkins MG, Paul-Murphy J. A novel herpesvirus associated with chronic superficial keratitis and papillary conjunctivitis in a great horned owl (*Bubo virginianus*). *Veterinary Ophthalmology*; 22: 67-75 (2019).
13. **Moore BA**, Maggs DJ, Kim S, Motta MJ, Bandivadekar R, Tell LA, Murphy CJ. Clinical findings and normative ocular data for free-living Anna’s (*Calypte anna*) and Black-chinned (*Archilochus alexandri*) Hummingbirds. *Veterinary Ophthalmology*; 22: 13-23 (2019).
14. **Moore BA,** Leonard BC, Sebbag L, Edwards SG, Cooper A, Imai DM, Straiton E, Santos L, Reilly C, Griffey SM, Bower L, Clary D, Mason J, Roux MJ, Meziane H, Herault Y, International Mouse Phenotyping Consortium, McKerlie C, Flenniken AM, Nutter LMJ, Berberovic Z, Owen C, Newbigging S, Adissu H, Eskandarian M, Hsu C-W, Kalaga S, Udensi U, Asomugha C, Bohat R, Gallegos JJ, Seavitt JR, Heaney JD, Beaudet AL, Dickinson ME, Justice MJ, Philip V, Kumar V, Svenson KL, Braun RE, Wells S, Cater H, Stewart M, Clementson-Mobbs S, Joynson R, Gao X, Suzuki T, Wakana S, Smedley D, Seong JK, Tocchini-Valentini G, Moore M, Fletcher C, Karp N, Ramirez-Solis R, White JK, de Angelis MH, Wurst W, Thomasy SM, Flicek P, Parkinson H, Brown SDM, Meehan TF, Nishina PM, Murray SA, Krebs MP, Mallon A-M, Lloyd KCK, Murphy CJ, Moshiri A. Identification of novel genes required for normal development of eye structure and function by high-throughput screening of mouse knockouts. *Nature Communications Biology*; 1: 236. doi:10.1038/s42003-018-0226-0 (2018).

*\*Selected Media Coverage:*

*- https://www.sciencedaily.com/releases/2018/181221142516.htm*

1. **Moore BA**, Murphy CJ, Marlar AJ, Dubielzig RR, Teixeria LBC, Ferrier WT, Hollingsworth SR. Presumed photoreceptor dysplasias in peregrine and peregrine hybrid falcons. *Journal of Wildlife Diseases*; 55: 325-334 (2018).
2. **Moore BA,** Roux MJ, Sebbag L, Cooper A, Edwards SG, Leonard BC, Imai DM, Griffey SM, Bower L, Clary D, Kent Lloyd KC, Herault Y, Thomasy SM, Murphy CJ, Moshiri A. A population study of common ocular abnormalities in C57BL/6N *Rd8* mice. *Investigative Ophthalmology and Visual Science;* 59: 2252-2261 (2018).
3. Tyrrell LP, Goller B, **Moore BA**, Altshuler D, Fernandez-Juricic E. The orientation of visual space from the perspective of hummingbirds? *Frontiers in Neuroscience*; 12: 16 (2018).
4. Rozman J, Rathkolb B, Oestereicher MA….Moshiri A, **Moore BA**, Kent Lloyd KC, McKerlie C, Masuya H, Tanaka N, Flicek P, et al. Identification of novel genetic elements in metabolism by high-throughput mouse phenotyping. *Nature Communications*; 9: 288 (2018).
5. **Moore BA**, Paul-Murphy J, Adamson KL, Dubielzig RR, Kern T, Gonzoles B, Wolff P. Murphy CJ. Lipoidal corneal degeneration in aged falcons. *Veterinary Ophthalmology*; 21: 332-338 (2018)*.*
6. Somma AT,Seabra N, **Moore BA,** Sato M, Lange RR, Montiani-Ferreira F. The eye of the Azara’s agouti (*Dasyprocta azarae*): morphological observations and selected ophthalmic diagnostic tests. *Journal of Zoo and Wildlife Medicine*; 48: 1108-1119 (2017).
7. **Moore BA**, Duffy DL, Heng HG, Lim CK, Miller ME. What’s Your Diagnosis? - Canine proliferative villonodular synovitis and cranial cruciate disease. *Journal of the American Veterinary Medical Association*; 251: 1241-1243 (2017).
8. **Moore BA**, Paul-Murphy JR, Tennyson AJD, Murphy CJ. Blind free-living kiwi offer a unique window into the evolution of vertebrate vision. *BMC Biology*, 15: 85 (2017).

\*Selected Media Coverage:

- https://www.newscientist.com/article/2148263-new-zealands-iconic-kiwi-birds-may-be-losing-their-sight/

- https://www.nzherald.co.nz/nz/news/article.cfm?c\_id=1&objectid =11926462

- https://www.stuff.co.nz/science/97402188/old-kiwi-going-blind--but-theyre-surviving-in-the-wild

- https://www.tvnz.co.nz/one-news/new-zealand/wild-kiwi-population-found-going-blind-but-surviving

- https://www.spektrum.de/news/werden-die-kiwis-blind/1505275

- https://sbyireview.com/2017/10/09/free-living-blind-bird-population-observed-for-the-first-time/

1. de Moraes W, Ferreira TAC, Somma AT, Cubas ZS, **Moore BA**, Montiani-Ferreira F. Doppler ultrasonography of the *pectinis oculi* artery in Harpy Eagles (*Harpia harpyja*). *Open Veterinary Journal*; 7: 70-74 (2017).
2. **Moore BA**, Teixeira LBC, Sponsel WE, Dubielzig RR. The consequences of avian ocular trauma: histopathological evidence and implications of acute and chronic disease. *Veterinary Ophthalmology*; 20: 496-504 (2017).
3. **Moore BA**, Tyrrell LP, Pita D, Bininda-Emonds ORP, Fernandez-Juricic EF. Does retinal configuration make the head and eyes of foveate birds move? *Scientific Reports*, 7: 38406 (2017).
4. Leigue L, Montiani-Ferreira F, **Moore BA**. Antimicrobial susceptibility and minimal inhibitory concentration of *Pseudomonas aeruginosa* isolated from septic ocular surface disease in different animal species. *Open Veterinary Journal*; 6: 215-222 (2017)*.*
5. Fornazari GA, Montiani-Ferreira F, de Barros Filho IR, Somma AT, **Moore B**. The eye of the Barbary sheep or Aoudad (*Ammotragus lervia*): Reference values for selected ophthalmic diagnostic tests, morphologic and biometric observations. *Open Veterinary Journal*; 6: 102-113 (2017).
6. **Moore BA**, Yoo Innfarn, Tyrrell LP, Benes B, Fernandez-Juricic E. FOVEA: a new program to standardize the measurement of foveal pit morphology. *PeerJ*, 4: e1785 (2016).
7. Pita D, **Moore BA**, Tyrrell LP, Fernandez-Juricic E. Vision in two cyprinid fish: Implications for collective behavior. *PeerJ*; *3: e1113* (2015).
8. **Moore BA**, Pita D, Tyrrell LP, Fernandez-Juricic E (2015). Vision in avian emberizid foragers: maximizing both binocular vision and fronto-lateral visual acuity. *Journal of Experimental Biology*;281: 1347-1358 (2015).
9. Baumhardt PE, **Moore BA**, Doppler M, Fernandez-Juricic E. Do American goldfinches see their world like passive prey foragers? A study on visual fields, retinal topography, and sensitivity of photoreceptors. *Brain, Behavior and Evolution*; 83: 181-198 (2014).
10. Gutierrez-Ibanez C, Iwaniuk AN, **Moore BA**, Fernandez-Juricic E, Corfield JR, Krilow JM, Kolominsky J, Wylie DR. Mosaic and concerted evolution in the visual system of birds. *PLoS ONE*; 9(3): e90102 (2014).
11. Tyrrell LP, **Moore BA**, Loftis C, Fernandez-Juricic E. Looking above the prairie: localized and upward acute vision in a representative grassland bird. *Scientific Reports*; 3: 3231 (2013).
12. **Moore BA**, Doppler M, Young JE, Fernandez-Juricic E. Interspecific differences in the visual system and scanning behavior of three forest passerines that form heterospecific flocks. *Journal of Comparative Physiology A*; 199: 263-277 (2013).

*\*Selected for Journal of Comparative Physiology A: Celebrating 90 Years (1924-2014) Anniversary edition.*

1. **Moore BA**, Kamilar JM, Collin SP, Bininda-Emonds ORP, Dominy NJ, Hall MI, Heesy CP, Johnsen S, Lisney TJ, Loew ER, Moritz G, Nava SS, Warrant EF, Yopak KE, Fernandez-Juricic E. A novel method for comparative analysis of retinal specialization traits from topographic maps. *Journal of Vision*; 12(12): 1-24 (2012).
2. **Moore BA,** Baumhardt P, Doppler M, Randolet J, Blackwell BF, DeVault TL, Loew ER, Fernández-Juricic E. Oblique color vision in an open-habitat bird: spectral sensitivity, photoreceptor distribution, and behavioral implications. *Journal of Experimental Biology*; 215: 3442-3452 (2012).

*\*Media Coverage: http://jeb.biologists.org/content/215/19/iii.full*

1. Ullmann JFP, **Moore BA**, Temple S, Fernandez-Juricic E, Collin SP. The retinal wholemount technique: a window to understanding the brain and behavior. *Brain, Behavior and Evolution*; 79(1): 26-44 (2011).

\**Editor’s Choice Award, December 5, 2011*

1. Fernandez-Juricic E, **Moore BA**, Doppler M, Freeman J, Blackwell BF, Lima SL, DeVault TL. Testing the terrain hypothesis: Canada geese see their world laterally and obliquely. *Brain, Behavior and Evolution*; 77: 147-158 (2011).

*Book Chapters (1):*

1. **Moore BA**, Tyrrell LP, Kamilar JM, Collin SP, Bininda-Emonds ORP, Dominy NJ, Hall MI, Heesy CP, Johnsen S, Lisney TJ, Loew ER, Moritz G, Nava SS, Warrant EF, Yopak KE, Fernandez-Juricic E (2017). Structure and Functions of Regional Specializations in Vertebrate Retinas. In: *Evolution of Nervous Systems*, 2nd Edition (Eds. Kaas JH, Striedter G). Elsevier B.V.

*Theses (1):*

1. **Moore BA**. A Multidimensional approach to comparative avian visual systems. *Ph.D. thesis*, Purdue University, Department of Biological Sciences. Awarded 2014.

*Manuscripts currently in review or revision (5):*

1. Sampaio M, Faria NV, **Moore BA**, Russ HH, Mell PAA, Montiani-Ferreira F. Effects of topical use of preservative benzalkonium chloride and cyclosporine in rabbit conjunctiva: an immunohistochemical study. In revision at *The Ocular Surface*.
2. Fornazari GA, Saldanha A, Lange RR, Froes T, **Moore BA**, Monitiani-Ferreira F. Window collisions by birds in the South of Brazil: Epidemiologic factors, radiographic and necropsy findings. In review at *Journal of Avian Medicine and Surgery*.
3. Freitas HM, Somma AT, **Moore BA**, Montiani-Ferreira F. Retrospective and prospective study of progressive retinal atrophy in dogs presented to the veterinary hospital of the Federal University of Parana (UFPR). In review at *Open Veterinary Journal*.
4. Carvalho CM, Rodarte-Almeida ACV, **Moore BA**, Borges BP, Machado MTS, Galera PD. The eye of the ring-tailed coati (*Nasua nasua*): anatomical and physiological contributions to clinical ophthalmology. In review at *Veterinary Ophthalmology*.

*Books and book chapters in preparation (10):*

1. Meekins J, **Moore BA**. Ophthalmology of Xenarthra: armadillos, anteaters, and sloths. In *Exotic and Wild Animal Ophthalmology*, 1st Edition (Eds. Montiani-Ferreira F, **Moore BA**, Ben-Shlomo G). Springer Nature, London, UK.
2. Wiggans T, **Moore BA**. Ophthalmology of Gekkota: geckos. In *Exotic and Wild Animal Ophthalmology*, 1st Edition (Eds. Montiani-Ferreira F, **Moore BA**, Ben-Shlomo G). Springer Nature, London, UK.
3. **Moore BA**, Arianne Pontes Oria, Fernandez-Juricic E. Ophthalmology of Psittaciformes: Parrots. In *Exotic and Wild Animal Ophthalmology*, 1st Edition (Eds. Montiani-Ferreira F, **Moore BA**, Ben-Shlomo G). Springer Nature, London, UK.
4. **Moore BA**, Fernandez-Juricic E. Ophthalmology of Passeriformes: Songbirds. In *Exotic and Wild Animal Ophthalmology*, 1st Edition (Eds. Montiani-Ferreira F, **Moore BA**, Ben-Shlomo G). Springer Nature, London, UK.
5. **Moore BA**, Hawkins M, Montiani-Ferreira F, Fernandez-Juricic E. Introduction to Avian Ophthalmology. In *Exotic and Wild Animal Ophthalmology*, 1st Edition (Eds. Montiani-Ferreira F, **Moore BA**, Ben-Shlomo G). Springer Nature, London, UK.
6. Freeman KS, Ben-Shlomo G, McMullen R, Strobel SM, **Moore BA**. Ophthalmology of Afrotheria: Aardvarks, elephant shrews, tenrecs, hyraxes, elephants, manatees, and duogongs. In *Exotic and Wild Animal Ophthalmology*, 1st Edition (Eds. Montiani-Ferreira F, **Moore BA**, Ben-Shlomo G). Springer Nature, London, UK.
7. **Moore BA**, Montiani-Ferreira, Gardener A. Ophthalmology of Strisores: nightjars, nighthawks, oilbirds, potoos, frogmouths, swifts, and hummingbirds. In *Exotic and Wild Animal Ophthalmology*, 1st Edition (Eds. Montiani-Ferreira F, **Moore BA**, Ben-Shlomo G). Springer Nature, London, UK.
8. Shivaprasad H, Montiani-Ferreira, **Moore BA**. Ophthalmology of Galloanserae: waterfowl, screamers, and poultry. In *Exotic and Wild Animal Ophthalmology*, 1st Edition (Eds. Montiani-Ferreira F, **Moore BA**, Ben-Shlomo G). Springer Nature, London, UK.
9. Corsi F, Guandalini A, Rossi Jr. JL, Montiani-Ferreira F, **Moore BA**. Ophthalmology of Felidae. In *Exotic and Wild Animal Ophthalmology*, 1st Edition (Eds. Montiani-Ferreira F, **Moore BA**, Ben-Shlomo G). Springer Nature, London, UK.
10. Montiani-Ferreira F, **Moore BA**. Ophthalmology of Raptors. In *Exotic and Wild Animal Ophthalmology*, 1st Edition (Eds. Montiani-Ferreira F, **Moore BA**, Ben-Shlomo G). Springer Nature, London, UK.
11. Montiani-Ferreira F, **Moore BA**, Ben-Shlomo G (Eds). *Exotic and Wild Animal Ophthalmology*, 1st Edition. Springer Nature, London, UK.

*Additional current scientific collaborations and ongoing project development:*

Characterization of applied avian visual systems

Blumstahl A, Verhove J, McKie GA, Peterson JC, Murphy CJ, Baumhardt P, Goller B, Tyrrell LP, Fernandez-Juricic E.

* Characterization of Bald and Golden eagles’ visual systems in an effort to prevent fatal strikes on windmills
* Evaluation of the effects of laser scaring tactics on the visual system of birds
* Phylogeny and ecology of a novel photoreceptor structure that may provide select flycatcher species with ‘slow-motion’ vision
* The electrophysiologic relationship of one fovea to another in raptors

International Mouse Phenotyping Consortium

Lloyd KKC, Brown S, Moshiri A

* Coordinated and systematic genome-wide screening of single gene knockout mice for identification of the systemic and local effects of genetic deletion

International working group: Emerging questions in the evolution of vertebrate visual systems

Hall MI, Heesy CP, Kamilar JM,Collin SP, Bininda-Emonds ORP, Dominy NJ, Johnsen S, Fernandez-Juricic E, Lisney TJ, Loew ER, Moritz G, Nava SS, Warrant EF, Yopak KE.

National Evolutionary Synthesis Center (funded by NSF), Duke University, Durham, NC, USA

* The eye’s link to the development of our world today: the release of the vertebrate visual taxonomy.
* The relationship between visual resolution and size of the visual brain centers of fish.
* Survey of the construction of the visual field.
* On the comparison between visual resolution, sensitivity, and eye size.
* On the relationship between sexual dichromatism and activity patterns.

Prey detection in the American Robin: Which sensory modality prevails?

Lucas JR, Ronald K, Fernandez-Juricic E.

Purdue University, Department of Biological Sciences, West Lafayette, IN, USA.

Sea Otter Vision and Visual Ecology

Strobel SM, Reichmuth C

University of California – Santa Cruz, Department of Ecology and Evolutionary Biology, Santa Cruz, CA, USA.

Amphibian Vision and Optics

Bernal XE, Fernandez-Juricic E.

Purdue University, Department of Biological Sciences, West Lafayette, IN, USA.

Comparative vertebrate and invertebrate vision

Schwab, I.

University of California-Davis, School of Medicine, Sacramento, CA, USA.

Study of the visual systems of tropical manakins.

Day L.

University of Mississippi, University, MS, USA.

Hummingbird vision and its role in flight dynamics.

Altshuler D.

University of British Columbia, Vancouver, BC, Canada.

Comparative binocularity and associated visual brain centers.

Iwaniuk AN (Canada), Heesey CP, Hall MI.

Midwestern University, Department of Anatomy, Glendale, AZ, USA.

*Scientific Meeting Abstracts (27):*

1. Moshiri A, Higgins K, **Moore BA**, Imai D, Clary D, Lloyd KCK, McKerlie C, Adissu H, Berberovic Z, Eskandarian M, Flenniken A, Newbigging S, Nutter L. Idenfication of candidate ciliopathy genes by genome-wide screening of knockout mice with ocular and retinal phenotypes. The Association for Research in Vision and Ophthalmology Meeting, Baltimore, MD, USA (May 2020).
2. **Moore BA**, Tyrrell LP, Teixiera LBC, Dubielzig RR, Fernandez-Juricic E. A novel photoreceptor may enable new world flycatchers to see in ‘slow motion’. American College of Veterinary Ophthalmology Conference, Maui, HI, USA (November 2019).
3. Tavares-Somma A, Coelho-Ferreira TA, Moraes W, **Moore BA**, Montiani-Ferreira F. The eye of the harpy eagle (*Harpia harpyia*): biometry and reference values for selected ophthalmic diagnostic tests. European College of Veterinary Ophthalmologists, Antwerp, Belgium (May 2019).
4. **Moore BA**, Leonard BC, Sebbag L, Edwards SG, Cooper A, Imai DM, Reilly C, Roux MG, Thomasy SM, IMPC, Kent Lloyd KC, Murphy CJ, Moshiri A. Identification of novel genes required for normal development of eye structure and function by high-throughput screening of mouse knockouts. American College of Veterinary Ophthalmology Conference, Minneapolis, MN, USA (September 2018).
5. **Moore BA**, Kim S, Jalilian I, Motta M, Mukai M, Mizutani M, Murphy CJ, Thomasy SM. Effects of corneal collagen crosslinking on stromal wound healing using a rabbit phototherapeutic keratectomy model. The Association for Research in Vision and Ophthalmology Meeting, Honolulu, HI, USA (April 2018).
6. Moshiri A, **Moore BA**, Roux MJ, Sebbag L, Cooper A, Edwards S, Leonard B, Imai DM, Griffey S, Bower L, Clary D, Lloyd KCK, Herault Y, Thomasy SM, Murphy CJ. A population study of common ocular abnormalities in C57BL/6N Rd8 mice. The Association for Research in Vision and Ophthalmology Meeting, Honolulu, HI, USA (April 2018).
7. Moshiri A, **Moore BA**, KC Lloyd. Identification of genes required for eye function in knockout mice. Asian Mouse Phenotyping Consortium Meeting, Incheon, Korea (August 2017).
8. Moshiri A, **Moore BA,** Cooper A, Edwards SG, Leonard B, Sebbag L, Imai D, Tham A, Humpal D, Clary D, Thomasy SM, Reilly P, Roux M, Meehan T, Herault Y, Lloyd KC, Murphy CJ. Identification of novel genes required for eye function by coordinated and systematic genome-wide screening of mouse knockouts. The 50th Annual Retina Society Scientific Meeting, Boston, MA, USA (October 2017).
9. Iwaniuk AN, El-Andari R, Fernandez-Juricic E, **Moore BA**, Lisney TJ, Gutierrez-Ibanez C, Wylie DR. A comparative analysis of retinal ganglion cell numbers and optic tectum size in birds. The Society for Neuroscience Annual Meeting, San Diego, CA, USA (November 2016).
10. Moshiri A, **Moore BA,** Cooper A, Edwards SG, Leonard B, Sebbag L, Imai D, Tham A, Humpal D, Clary D, Thomasy SM, Reilly P, Roux M, Meehan T, Herault Y, Lloyd KC, Murphy CJ. Identification of novel genes required for eye function via systematic screening of knockout mouse lines by the International Mouse Phenotyping Consortium. The Association for Research in Vision and Ophthalmology Meeting, Baltimore, MD, USA (May 2017).
11. **Moore BA**, Teixeira LBC, Sponsel WE, Dubielzig RR. The consequences of avian ocular trauma: histopathological evidence and implications of acute and chronic disease. American College of Veterinary Ophthalmology Conference, Monterey, CA, USA (October 2016).
12. Somma AT, Seabra N, **Moore BA**, Monitiani-Ferreira F. The common agouti (*Dasyprocta azarae*) eye: morphological observations and selected ophthalmic diagnostic tests. American College of Veterinary Ophthalmology Conference, Monterey, CA, USA (October 2016).
13. Pita D, **Moore BA**, Tyrrell LP, Fernandez-Juricic E. Eye see what you did there: how vision shapes social behavior in minnows. Next Generation Scholars (NGS) outreach event. Purdue University, West Lafayette, IN, USA (November 2015).
14. Heng HG, Lim CK, Gutierrez-Crespo B, **Moore BA**, Guptill LF. Radiographic and computed tomographic appearance of atypical tracheal collapse in dogs. American College of Veterinary Radiology Meeting, Minneapolis, MN, USA (October 2015).
15. Fernández-Juricic E, Shoemaker AL, Nelson MM, **Moore BA**. What makes a head turn? Vigilance behavior is associated with biomechanical constraints and retinal configuration. International Society for Behavioral Ecology meeting, New York, NY, USA (July 2014).
16. Pita D, **Moore BA**, Tyrrell L, Fernandez-Juricic E. How do small birds see? Relationships in binocularity and bill morphology in closely related sparrows. Purdue College of Science Research Symposium, Purdue University, West Lafayette, IN, USA (April 2013).
17. Abplanalp B, Tyrrell LP, **Moore BA**, Hanchar J, and Fernández-Juricic E. 2013. Visual ecology of red-winged blackbirds and common grackles. Animal Behavior Conference, Bloomington, IN, USA (March 2013).
18. **Moore BA**, Doppler M, Fernandez-Juricic E. Interspecific differences in the visual system and scanning behavior of three forest passerines that form heterospecific flocks. Merial-NIH Conference, Colorado State University, Fort Collins, CO, USA (August 2012).
19. Pita D, **Moore BA**, Fernandez-Juricic E. How do small birds see? Visual field configuration and eye movements in closely related sparrows. Center for the Integrative Study of Animal Behavior Conference, Indiana University, Bloomington, IN, USA (April 2012).
20. Young JE, Doppler M, **Moore BA**, Fernandez-Juricic E. Visual resolution within the retina of ground and tree avian foragers to different degrees: ecological implications. Indiana Academy of Science Conference, Purdue University, West Lafayette, IN, USA (March 2012).
21. Doppler M, Baumhardt P, **Moore BA**, Randolet J, Fernandez-Juricic E. Color vision in Canada geese: an ‘oblique’ violet-sensitive system. Animal Behavior Society Conference, Indiana University, Bloomington, IN, USA (July 2011).
22. Pita D, **Moore BA**, Fernandez-Juricic E. Visual fields and foraging techniques in Blue Jays and Red-winged Blackbirds. Animal Behavior Society Conference, Indiana University, Bloomington, IN, USA (July 2011).
23. Doppler M, **Moore B**, Young J, Fernandez-Juricic E. Visual fields and eye movements of titmice and chickadees. 18th Annual Animal Behavior Conference, Indiana University, Bloomington, IN, USA (April 2011).
24. Doppler M, **Moore B**, Young J, Curry T, Fernandez-Juricic E. It’s all about eye movement: Different visual and foraging strategies of the chickadee and nuthatch. Sigma Xi Foundation, Grad Student Poster Competition. Purdue University, West Lafayette, IN, USA (February 2011).
25. Allawzi AM, Grelle E, **Moore B**, Fernández-Juricic E, Pelaez N. Contractile properties of the lateral rectus in starlings and house sparrows using supramaximal electrical stimulation. Experimental Biology Meeting, Washington DC, USA (April 2011).
26. **Moore B**, Doppler MS, Freeman J, Kapernaros K, Blackwell BF, Fernandez-Juricic EJ. Geese see the world laterally and transversally: implications for vigilance. 47th Annual Meeting of the Animal Behavior Society. College of William and Mary, Williamsburg, VA, USA (July 2010).
27. Allawzi AM, Grelle EN, Teclaw ME, **Moore B**, Fernandez-Juricic E, Nancy Pelaez. Isometric force of isolated extraocular muscles of wild cowbirds. Experimental Biology Meeting, Anaheim, CA, USA (April 2010).

**PRESENTATIONS (40)**

*Research Seminars (9)*

1. **Moore BA**. A tale of a whale. University of California Davis – Resident and Alumni Research Symposium, Sacramento, California, USA (June 2019)
2. **Moore BA**. A survey of ophthalmic examination findings and ocular imaging in free-living hummingbirds. University of California Davis – House Officer Seminar Day, Davis, California, US (March 2018)
3. **Moore BA**. How our animal friends see(?)! Veterinary Specialty Hospital of San Diego – Grand Rounds Seminar Series, San Diego, California, USA (September 2018)
4. **Moore BA**. The retinal wholemount, comparative topography, and the peculiar fovea. University of Curitiba, Setor de Ciencias Agrarias, Medicina Veterinaria – Parana, Curitiba, Brazil (November 2014)
5. **Moore BA**. A multidimensional approach to comparative avian visual systems. Purdue University, Department of Biological Sciences – West Lafayette, Indiana, USA (August 2014)
6. **Moore BA**. The role of the avian visual system in scanning behavior: a comparative approach. Purdue University, Department of Biological Sciences – West Lafayette, Indiana, USA (May 2012)
7. **Moore BA**. Functional implications of retinal specializations: Going back to behavior. Purdue University, Department of Biological Sciences – EcoLunch: Ecology Seminar Series West Lafayette, Indiana, USA (March 2011)
8. **Moore BA**. Functional hypotheses of retinal specializations. Duke University, NESCent – Durham, North Carolina, USA (July 2011)
9. **Moore BA**. Testing the terrain hypothesis: Canada geese see their world laterally and obliquely. Purdue University, Department of Biological Sciences – EcoLunch: Ecology Seminar Series West Lafayette, Indiana, USA (November 2010)

*Invited Lectures and Continuing Education (16)*

1. **Moore BA**. Examination and Treatment of the Lagamorph Eye. University of California Davis – Veterinary Medical Teaching Hospital. Wildlife and Exotic Animal Symposium, Davis, California, USA (March 2020).
2. **Moore BA**. Gelatt Chapter 4: The Vision and Optics they didn’t tell you about… Eye Care for Animals Grand Rounds lecture series, online (February 2020).
3. **Moore BA**. Spencer’s “Little Black Spot”. UC Davis Medical School, Grand Rounds, Ocular Neoplasia, Sacramento, California, USA (February 2020).
4. **Moore BA**. Life on the wild side: Seeing the world through animal eyes. Iowa State University, College of Veterinary Medicine (January 2020).
5. **Moore BA**. Life on the wild side: Seeing the world through animal eyes. University of Tennessee, College of Veterinary Medicine (January 2020).
6. **Moore BA**. Life on the wild side: Seeing the world through animal eyes. University of Florida, College of Veterinary Medicine (January 2020).
7. **Moore BA**. Ophthalmic Emergencies – Cornea. University of California Davis, School of Veterinary Medicine, Davis, California, USA (January 2020).
8. **Moore BA**. Don’t play with venomous animals! UC Davis Medical School, Grand Rounds, Surgical Comparative Ophthalmology, Sacramento, California, USA (October 2019)
9. **Moore BA**. How our animal friends see!(?): The truth about animal eyes. University of California Davis – 12th Annual Back to School RVT CE Seminar, Davis, California, USA (July 2019)
10. **Moore BA**. You’re not just gonna cut that out? – A guide to the other ophthalmic surgeries. University of California Davis – 12th Annual Back to School RVT CE Seminar, Davis, California, USA (July 2019)
11. **Moore BA**. A novel photoreceptor may enable new world flycatchers to see in ‘slow motion’. University of California Davis – Department of Surgical and Radiological Sciences. Comparative Ophthalmology Grand Rounds, Davis, California, USA (April 2019)
12. **Moore BA**. All Eyes Great and Small. University of California Davis – Veterinary Medical Teaching Hospital. Exotic Club Lecture Series, Davis, California, USA (March 2019)
13. **Moore BA**. Genetics and Ophthalmology: Spontaneous Disease. University of California Davis – Department of Surgical and Radiological Sciences. Comparative Ophthalmology Grand Rounds, Davis, California, USA (April 2017)
14. **Moore BA**. How our animal friends see(?)! University of California Davis – Veterinary Medical Teaching Hospital. Wildlife and Exotic Animal Symposium, Davis, California, USA (March 2017)

*\*\*Plenary Speaker*.

1. **Moore BA**. How our animal friends see(?)! Veterinary Specialty Hospital of San Diego – San Diego area Veterinary Technician Continuing Education, San Diego, California, USA (March 2016)
2. **Moore BA**. Comparative Vision of Domestic and Wild Animals. Avian and Exotic Animal Clinic of Indianapolis, Indianapolis, Indiana, USA (April 2014)

*Scientific Meetings (15)*

1. **Moore BA**. Don’t play with venomous animals! NCVOS (North Coast Veterinary Ophthalmology Society) Conference – Berkeley, California, USA (February 2020).
2. **Moore BA**. Limbal Melanocytoma and a little keratoscleroplasty. NCVOS (North Coast Veterinary Ophthalmology Society) Conference – Berkeley, California, USA (February 2020).
3. **Moore BA**, Tyrrell LP, Fernandez-Juricic E. A new and unique photoreceptor confers exceptional motion detection ability. ACVO (American College of Veterinary Ophthalmology) Conference – Maui, HI, USA (November 2019)
4. Thomasy SM, **Moore BA**. A corneal curiosity: Somewhere over the rainbow…AAO (American Academy of Ophthalmology) Conference – San Francisco, CA, USA (October 2019)
5. Thomasy SM, **Moore BA**. A corneal curiosity: Once in a blue moon… AAO (American Academy of Ophthalmology) Conference – San Francisco, CA, USA (October 2019)
6. **Moore BA**. No eyelids and blue corneas. NCVOS (North Coast Veterinary Ophthalmology Society) Conference – Berkeley, California, USA (February 2019)
7. Minella A, **Moore BA**. The calm before the storm: a case of a subretinal foreign body. NCVOS (North Coast Veterinary Ophthalmology Society) Conference – Berkeley, California, USA (February 2019)
8. **Moore BA**. Identification of novel genes required for normal development of eye structure and function by high-throughput screening of mouse knockouts. ACVO (American College of Veterinary Ophthalmology) Conference – Minneapolis, MN, USA (September 2018)
9. **Moore BA**. Hummingbird Ophthalmology. NCVOS (North Coast Veterinary Ophthalmology Society) Conference – San Francisco, California, USA (February 2018)
10. Moshiri A, **Moore BA**. Identification of novel genes required for eye function by coordinated and systematic genome-wide screening of mouse knockouts. IMPC (International Mouse Phenotyping Consortium) Meeting – London, Great Britain, UK (July 2017)
11. **Moore BA**. A new and unique photoreceptor confers exceptional motion detection ability. NCVOS (North Coast Veterinary Ophthalmology Society) Conference – San Francisco, California, USA (February 2017)
12. **Moore BA**. A new and unique photoreceptor confers exceptional motion detection ability. COPS (Comparative Ocular Pathology Society) Conference – University of California-Davis, School of Veterinary Medicine, Davis, California, USA (February 2017)
13. **Moore BA**. The consequences of avian ocular trauma: histopathological evidence and implications of acute and chronic disease. ACVO (American College of Veterinary Ophthalmology) Conference – Monterey, CA, USA (October 2016)
14. **Moore BA**. The retinal wholemount, comparative topography, and the peculiar fovea. COPS (Comparative Ocular Pathology Society) Conference – Colorado State University School of Veterinary Medicine, Fort Collins, Colorado, USA (September 2014)
15. **Moore BA**. It’s all about eye movement: different visual and foraging strategies of chickadees and nuthatches. Animal Behavior Society, Bloomington, Indiana, USA (April 2011)

**VETERINARY MISSIONS AND INTERNATIONAL WORK**

March 12-19, 2016 *World Vets - International Aid for Animals*

* Veterinary surgical mission in Otavalo, Ecuador

Oct. 27-Nov. 17, 2014 Universidade Federal do Parana

Department of Veterinary Medicine, Ophthalmology

Curitiba, Parana, Brazil

Dr. Fabiano Montiani-Ferreira.

* University training
* Wildlife rehabilitation
* Harpy Eagle rehabilitation and vision research

**LEADERSHIP AND ACTIVITIES**

2011-2015 College of Veterinary Medicine, Class of 2015

*President*

2011-2014 Veterinary Student Resource Center

*President 2013-2014*

*Pathology Tutor 2013-2014*

*Parasitology Tutor 2012-2013*

*Histology Tutor 2011-2013*

2012-2014 Veterinary Purdue Student Supplies Association

*President*

2012-2014 Student Chapter of the American College of Veterinary Internal Medicine

*Vice President*

2013-2014 Student Chapter of the American College of Veterinary Pathology

*President*

**TEACHING EXPERIENCE**

*Course Teaching*

2016-2019 DVM 483 – Clinical Ophthalmology, UC Davis, Veterinary Medical Teaching Hospital, Davis, CA.

2016-2019 VET 433A – Ophthalmic Surgery Laboratory – Small Animal, UC Davis, Veterinary Medical Teaching Hospital, Davis, CA.

2016-2019 VET 434A – Ophthalmic Examinations and Surgery Laboratories - Equine, UC Davis, Veterinary Medical Teaching Hospital, Davis, CA.

2016-2017 VET 430 – Simulated Client Communication Lab – 3rd year students, UC Davis, Veterinary Medical Teaching Hospital, Davis, CA.

2016-2017 VET 417 – Simulated Client Communication Lab – 2nd year students, UC Davis, Veterinary Medical Teaching Hospital, Davis, CA.

2016-2017 VET 400 – Simulated Client Communication Lab – 1st year students, UC Davis, Veterinary Medical Teaching Hospital, Davis, CA.

Spring 2014 VCS 830 – Applications and Integrations II, Veterinary Medical Teaching Hospital, School of Veterinary Medicine, Purdue University, West Lafayette, IN. Group Instructor (substitute) of small group case-based course for 1st year veterinary students

Spring 2014 VCS 840 – Applications and Integrations IV, Veterinary Medical Teaching Hospital, School of Veterinary Medicine, Purdue University, West Lafayette, IN. Group Instructor (substitute) of small group case-based course for 2nd year veterinary students

Fall 2013 VCS 820 – Applications and Integrations I, Veterinary Medical Teaching Hospital, School of Veterinary Medicine, Purdue University, West Lafayette, IN. Group Instructor (substitute) of small group case-based course for 1st year veterinary students

Fall 2013 VCS 840 – Applications and Integrations III, Veterinary Medical Teaching Hospital, School of Veterinary Medicine, Purdue University, West Lafayette, IN. Group Instructor (substitute) of small group case-based course for 2nd year veterinary students

2011-2014 Veterinary Student Resource Center, Purdue University College of Veterinary Medicine: Pathology Tutor (2013-2014), Parasitology Tutor (2012-2013), Histology Tutor (2011-2013).

*Guest Course Lectures*

April 2013 BIOL 442 - Senior Laboratory in Anatomy and Physiology – Purdue University, West Lafayette, Indiana, USA

* “An introduction to the visual system: form, function, and design”

April 2013 BIOL 442 - Senior Laboratory in Anatomy and Physiology – Purdue University, West Lafayette, Indiana, USA

* “How to approach diseases of the CNS: gross pathology, histopathology, and forming differential diagnoses”

**AD-HOC REVIEWER**

Scientific Journals

*Animal Cognition*

*Journal of the American Veterinary Medical Association*

*Journal of Avian Medicine and Surgery*

*Journal of Wildlife Diseases*

*PLOS ONE*

*Veterinary Ophthalmology*

*Scientific Reports (Nature)*

**RESEARCH STUDENT MENTORING (44 student years)**

2019-2020 University of California-Davis

Megan Gragg, Morgan Bowman

2018-2019 University of California-Davis

Danielle Madrigal, Carina Pasqualino, Megan Gragg, Christian Munevar

2017-2018 University of California-Davis

Madison Mukai (*Honors Thesis*), Josefina Nordenstahl, Danielle Madrigal, Carina Pasqualino, Makiko Mizutani, Christian Munevar

2016-2017 University of California-Davis

Sanskruti Potnis, Winter Keith, Carina Pasqualino, Ariana Marangakis, Connor Chang, Josefina Nordenstahl, Andrew Wright, Theresa Aller, Danielle Madrigal, Madison Mukai

2013-2014 Purdue University

Amanda Mark, Ryan Cross, Alexandra Osbourne, Melanie Meyer

2012-2013 Purdue University

Amanda Elmore (*Honors Thesis*), Diana Pita (*Honors Thesis*), Jen Hanchar, Amanda Mark, Emily Chen, Kimble Slonaker, Lily Liang, Brad Abplanalp, Haley Jost, Ryan Cross, Alexandra Osbourne

2011-2012 Purdue University

Jordan Young, Amanda Elmore, Brianna Burry, Christina Carey, Jihyun Han, Jon Gritzer, Sailun You, Tony Fleming, Erica Wayne, Skyler King, Steven Ison, Diana Pita, Jen Hanchar

2010-2011 Purdue University

Megan Doppler, Marci Deisher, Jacquelyn Lynch, Katherine Kapernaros, Peter Perno, Melissa Hoover, Andy Schwend, Becky Czaja

**PUBLIC EDUCATION AND OUTREACH**

2017 *Farm Day*, Waggoner Elementary School, Winters, CA, USA

“Ta-Pee-Tum and Color Vision in Animals”

2017 *Meet the Professionals,* Career Discovery Group Volunteer (SAS005), University of California-Davis, Davis, California, USA

2014, 2015 Spring Fest, Purdue University, College of Science, Department of Biological Sciences.

2013 Purdue University College of Veterinary Medicine 4-H Round-Up – West

Lafayette, Indiana, USA

2013 Purdue University College of Veterinary Medicine Animal Science

Workshop for Youth – West Lafayette, Indiana, USA

2012 Purdue University College of Veterinary Medicine 4-H Round-Up – West

Lafayette, Indiana, USA

2012 Purdue University College of Veterinary Medicine Animal Science

Workshop for Youth – West Lafayette, Indiana, USA

2010 Whiteland Community High School (Course: Honors Anatomy and

Physiology) – Whiteland, Indiana, USA

* “College: A guide to survival AND success”