

| <b>NAME</b>                 | <b>TITLE</b>   | <b>BIRTHDATE</b> |
|-----------------------------|--|------------------|
| Amy L. Johnson, DVM, DACVIM | Associate Professor of Large Animal Medicine & Neurology | 01/15/77         |

### **EDUCATION**

| <b>INSTITUTION AND LOCATION</b>              | <b>DEGREE</b>     | <b>YEAR CONFERRED</b> | <b>FIELD OF STUDY</b>                       |
|--|-------------------|-----------------------|---|
| University of Pennsylvania, Philadelphia, PA | BA                | 1999                  | Biology                                     |
| Cornell University, Ithaca, NY               | DVM               | 2003                  | Veterinary Medicine                         |
| Cornell University, Ithaca, NY               | DACVIM - LAIM     | 2007                  | Residency in Large Animal Internal Medicine |
| University of Pennsylvania, Philadelphia, PA | DAVIM - Neurology | 2011                  | Residency in Neurology                      |

### **RESEARCH AND/OR PROFESSIONAL EXPERIENCE**

2003-2004 Internship in Equine Medicine and Surgery, B.W. Furlong & Associates, Equine Veterinary Hospital, Oldwick, NJ

2004-2007 Residency in Large Animal Internal Medicine, Cornell University College of Veterinary Medicine, Ithaca, NY

2007-2011 Residency in Neurology, University of Pennsylvania School of Veterinary Medicine, Philadelphia, PA

2007-2011 Lecturer in Large Animal Medicine, New Bolton Center, University of Pennsylvania School of Veterinary Medicine, Kennett Square, PA

2011-2019 Assistant Professor of Large Animal Medicine and Neurology, New Bolton Center, University of Pennsylvania School of Veterinary Medicine, Kennett Square, PA

2019-present Associate Professor of Large Animal Medicine and Neurology, New Bolton Center, University of Pennsylvania School of Veterinary Medicine, Kennett Square, PA

### **PUBLICATIONS** (*representative and past three years, out of 68*)

**Johnson AL**, Divers TJ, Chang Y-F. Validation of an in-clinic enzyme-linked immunosorbent assay kit for diagnosis of *Borrelia burgdorferi* infection in horses. *J Vet Diagn Invest* 2008;20:321-324.

**Johnson AL.** Evidence-based clinical question: Which is the most sensitive and specific commercial test to diagnose *Sarcocystis neurona* infection (equine protozoal myeloencephalitis) in horses? *Equine Vet Educ* 2008;20:166-168.

**Johnson AL,** Burton AJ, Sweeney RW. Utility of two immunological tests for antemortem diagnosis of equine protozoal myeloencephalitis (*Sarcocystis neurona* infection) in naturally occurring cases. *J Vet Intern Med* 2010;24:1184-1189.

**Johnson AL,** Sweeney RW, McAdams SC, Whitlock RH. Quantitative real-time PCR for detection of the neurotoxin gene of *Clostridium botulinum* type B in equine and bovine samples. *Vet J* 2012;194:118-120.

**Johnson AL,** Morrow JK, Sweeney RW. Indirect fluorescent antibody test and surface antigen ELISAs for antemortem diagnosis of equine protozoal myeloencephalitis. *J Vet Intern Med* 2013;27:596-599.

Reed SM, Howe DK, Morrow JK, Graves A, Yeargan MR, **Johnson AL,** MacKay RJ, Furr M, Saville WJ, Williams NM. Accurate antemortem diagnosis of equine protozoal myeloencephalitis (EPM) based on detecting intrathecal antibodies against *Sarcocystis neurona* using the SnSAG2 and SnSAG4/3 ELISAs. *J Vet Intern Med* 2013;27:1193-200.

**Johnson AL,** McAdams-Gallagher SC, Sweeney RW. Quantitative real-time PCR for detection of neurotoxin genes of *Clostridium botulinum* types A, B, and C in equine samples. *Vet J* 2014;199:157-161.

Reed SM, Furr M, Howe DK, **Johnson AL,** MacKay RJ, Morrow JK, Pusterla N, Witonsky S. Equine protozoal myeloencephalitis: an updated consensus statement with a focus on parasite biology, diagnosis, treatment, and prevention. *J Vet Intern Med* 2016 Mar;30(2):491-502. doi: 10.1111/jvim.13834. Epub 2016 Feb 9.

**Johnson AL,** McAdams-Gallagher SC, Aceto H. Accuracy of a mouse bioassay for the diagnosis of botulism in horses. *J Vet Intern Med* 2016 Jul;30(4):1293-9. doi: 10.1111/jvim.13950. Epub 2016 Apr 25.

Mittelman NS, Divers TJ, Engiles JB, Gerhold R, Ness S, Scrivani PV, Southard T, **Johnson AL\***. *Parelaphostrongylus tenuis* cerebrospinal nematodiasis in a horse with cervical scoliosis and meningomyelitis. *J Vet Intern Med* 2017 May;31(3):890-893. doi: 10.1111/jvim.14691. Epub 2017 Mar 20.

Setlakwe E, **Johnson AL\***. Acute encephalopathy in a 2-year-old pot-bellied pig following accidental intoxication with clonazepam. *J Vet Emerg Crit Care (San Antonio)* 2017 May;27(3):369-372. doi: 10.1111/vec.12602. Epub 2017 Apr 20.

Intan-Shameha AR, Divers TJ, Morrow JK, Graves A, Olsen E, **Johnson AL,** Mohammed HO. Phosphorylated neurofilament H (pNF-H) as a potential diagnostic marker for neurological disorders in horses. *Res Vet Sci* 2017 Oct;114:401-405. doi: 10.1016/j.rvsc.2017.07.020. Epub 2017 Jul 18.

Divers TJ, Gardner RB, Madigan JE, Witonsky SG, Bertone JJ, Swinebroad EL, Schutzer SE, **Johnson AL**. *Borrelia burgdorferi* infection and Lyme disease in North American horses: a consensus statement. *J Vet Intern Med* 2018 Mar;32(2):617-632. doi: 10.1111/jvim.15042. Epub 2018 Feb 22.

Parkinson NJ, McKenzie HC, Barton MH, Davis JL, Dunkel B, **Johnson AL**, MacDonald ES. Catheter-associated venous air embolism in hospitalized horses: 32 cases. *J Vet Intern Med* 2018 Mar;32(2):805-814. doi: 10.1111/jvim.15057. Epub 2018 Feb 20.

**Johnson AL**, Johnstone LK, Stefanovski D. Cerebrospinal fluid Lyme multiplex assay results are not diagnostic in horses with neuroborreliosis. *J Vet Intern Med* 2018 Mar;32(2):832-838. doi: 10.1111/jvim.15067. Epub 2018 Feb 20.

Schale S, Howe D, Yeargan M, Morrow JK, Graves A, **Johnson AL\***. Protozoal coinfection in horses with equine protozoal myeloencephalitis in the eastern United States. *J Vet Intern Med* 2018 May;32(3):1210-1214. doi: 10.1111/jvim.15127. Epub 2018 Apr 10.

Burke MJ, Tomlinson JE, Blikslager AT, **Johnson AL**, Dallap-Schaer BL. Evaluation of digital cryotherapy using a commercially available sleeve style ice boot in healthy horses and horses receiving i.v. endotoxin. *Equine Vet J* 2018 Nov;50(6):848-853. doi: 10.1111/evj.12842. Epub 2018 May 7.

Mittelman NS, Stefanovski D, **Johnson AL\***. Utility of C-reactive protein and serum amyloid A in the diagnosis of equine protozoal myeloencephalitis. *J Vet Intern Med* 2018 Sep;32(5):1726-1730. doi: 10.1111/jvim.15254. Epub 2018 Sep 14.

Proctor-Brown L, Hicks R, Colmer S, Guilfoyle D, Dallap-Schaer B, **Johnson AL**, Tomlinson J. Distal limb pathologic conditions in horses treated with sleeve-style digital cryotherapy (285 cases). *Res Vet Sci* 2018 Dec;121:12-17. doi: 10.1016/j.rvsc.2018.09.008. Epub 2018 Oct 2

Luethy D, Frimberger AE, Bedenice D, Byrne BS, Groover ES, Gardner RB, Lewis T, MacDonald VS, Proctor-Brown L, Tomlinson JE, Rassnick KM, **Johnson AL\***. Retrospective evaluation of clinical outcome after chemotherapy for lymphoma in 15 equids (1991-2017). *J Vet Intern Med* 2019 Mar;33(2):953-960. doi: 10.1111/jvim.15411. Epub 2019 Jan 12.

Gorenberg EB, **Johnson AL**, Magdesian KG, Bertin FR, Costa LRR, Theelen MJP, Durward-Akhurst SA, Cruz Villagran C, Carslake H, Frank N, Tomlinson JE. Diagnosis and treatment of confirmed and suspected primary hyperparathyroidism in equids: 17 cases (1999-2016). *Equine Vet J* 2019 Apr 13. doi: 10.1111/evj.13120. [Epub ahead of print]

Boorman S, **Johnson AL**, Schaer TP, Fecteau ME. Clinical findings, treatments and outcomes in farm animals with vertebral fractures or luxations: 22 cases (2006-2017). *Vet Comp Orthop Traumatol* 2019 Jun 26. doi: 10.1055/s-0039-1692637. [Epub ahead of print]

Luethy D, **Johnson AL**, Stefanovski D, Boston RC, Orsini JA. Glucose and insulin response after intravenous and subcutaneous somatostatin administration in healthy horses. *J Vet Pharmacol Ther* 2019 Sep;42(5):541-547. doi: 10.1111/jvp.12793. Epub 2019 Jul 20.

Boorman S, Scherrer N, Stefanovski D, **Johnson AL\***. Facial nerve paralysis in 64 equids: Clinical variables, diagnosis and outcome. *J Vet Intern Med.* 2020 May;34(3):1308-1320. doi: 10.1111/jvim.15767. Epub 2020 Apr 6.

Scherrer NM, Knickelbein KE, Engiles JB, Johnstone LK, Tewari D, **Johnson AL\***. Ocular disease in horses with confirmed ocular or central nervous system *Borrelia* infection: Case series and review of literature. *Vet Ophthalmol.* 2020 Nov;23(6):1014-1024. doi: 10.1111/vop.12817. Epub 2020 Aug 30.

Brown KA, Davidson EJ, **Johnson AL**, Wulster KB, Ortvad K. Inflammatory cytokines in horses with cervical articular process joint osteoarthritis on standing cone beam computed tomography. *Equine Vet J.* 2020 Nov 22. doi: 10.1111/evj.13392. Online ahead of print.

Edwards LA, Donnelly CG, Reed SM, Valberg S, Chigerwe M, **Johnson AL**, Finno CJ. Serum and cerebrospinal fluid phosphorylated neurofilament heavy protein concentrations in equine neurodegenerative diseases. *Equine Vet J.* 2021 May 9. doi: 10.1111/evj.13452. Online ahead of print.

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## BOOKS AUTHORED OR COAUTHORED

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**Johnson AL**. Tetanus. In: TS Mair, EE Hutchinson. *Infectious Diseases of the Horse.* Fordham, Ely, EVJ Ltd., September 2009.

**Johnson AL**. Update on infectious diseases affecting the equine nervous system. *Vet Clin Equine* 2011;27:573-587.

**Johnson AL**. Nervous system: diagnostic and therapeutic procedures. In: Orsini JA, Divers TJ. *Equine Emergencies: Treatment and Procedures*, 4<sup>th</sup> ed. Elsevier, Dec 2013.

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Gilsenan WF and **Johnson AL\***. Large animal neurologic diseases. In: Lien L, Loly S, Ferguson S. *Large Animal Medicine for Veterinary Technicians*, 1<sup>st</sup> ed. Wiley-Blackwell, June 2014.

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**Johnson AL,** Reed SM. Cervical vertebral stenotic myelopathy. In: Furr M, Reed S. *Equine Neurology*, 2<sup>nd</sup> ed. Wiley-Blackwell, 2015.

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**Johnson AL,** Wagner B. *Borrelia burgdorferi*. In: Pusterla N, Higgins J. *Interpretation of Equine Laboratory Diagnostics*. Wiley-Blackwell, 2018.

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Bedenice D, **Johnson AL.** Neurologic conditions affecting the equine athlete. *Vet Clin North Am Equine Pract* 2018 Aug;34(2):277-297. doi: 10.1016/j.cveq.2018.04.006.

**Johnson AL.** Lyme disease. In: Lavoie, Jean-Pierre. *Blackwell's Five-Minute Veterinary Consult: Equine, Third Edition*. Wiley-Blackwell, 2020.