

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

Yuko Sato, DVM, MS, DACPV

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Education:

- 2012-2015** Purdue University - Department of Comparative Pathobiology, West Lafayette, IN. Master in Poultry Diagnostic Medicine.
- 2008-2012** Purdue University - College of Veterinary Medicine, West Lafayette, IN. Doctor of Veterinary Medicine (food animal emphasis).
- 2004-2008** Berry College, Rome, GA. BS in pre-veterinary medicine/animal science.

Professional Experience (related to field):

- 2009-2010 Student Worker in Virology (Dr. Roman Pogranichniy), Purdue Animal Disease Diagnostic Laboratory (ADDL), West Lafayette, IN
- 2013 Visiting Scholar, Midwest Poultry Consortium (Center of Excellence), Madison, WI
- 2012-2015 Residency in Poultry Diagnostic Medicine, Purdue ADDL (Dr. Pat Wakenell)
- 2015-present Assistant Professor, Poultry Extension Veterinarian and Diagnostician
Iowa State University, Department of Veterinary Diagnostic and Production Animal Medicine
- 2015-present Iowa Egg Symposium, event coordinator (Ames, IA)
- 2016-present Adjunct faculty, Purdue University, West Lafayette, IN

Awards/Certifications

- 2015-present Diplomate, American College of Poultry Veterinarians
- 2015-present Licensed and accredited veterinarian (Iowa)
- 2013-2015 Poultry Health Management School (turkey/broiler and layer)
- 2012-present Licensed and accredited veterinarian (Indiana)
- 2012-2014 National Poultry Improvement Plan, Indiana delegation
- 2016-present National Poultry Improvement Plan, Iowa delegation

Membership and Synergistic Activities

- Iowa Emergency Disease Response Committee (IEDRC) – member (Aug 2015-present)
- American Association of Avian Pathologists (AAAP) – member since 2012
- Membership committee (2012-present), chair elect (2017)
 - Toxicoinfectious diseases of poultry committee (member, 2015-present)
 - Educational committee (member, 2015-present)
 - History committee (2015-present)
- Association of Veterinarians in Egg Production (AVEP) – member (2013-present)
- American Veterinary Medical Association (AVMA) – member (2008-present)

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Iowa Egg Council, Iowa Turkey Federation – ex-officio member (2015-present)

United States American Health Association (USAHA) – member of transmissible diseases of poultry (2013-present)

American Association of Bovine Practitioners (AABP) – Purdue student delegate (2010-2012)

Selected Peer-reviewed publications

4. **Sato, Y.**, William L Wigle, Susan Gallagher, Amy L Johnson, Raymond W Sweeney, Patricia S Wakenell. Case Report: Outbreak of Type C Botulism in Commercial Layer Chickens. *Avian Diseases*, 2016 Mar;60(1):90-4. doi: 10.1637/11293-100415-Case.1.
3. **Sato, Y.**, T.L. Lin, and P. O'Neil. Pathology in Practice. *Journal of American Veterinary Medical Association* (AVMA). 249(9): 1027-1029, Nov 1 2016. doi: 10.2460/javma.249.9.1027.
2. Arruda P.H., Stevenson G.W., Killian M.L., Burrough E.R., Gauger P.C., Harmon K.M., Magstadt D.R., Yoon K.J., Zhang J., Madson D.M., Pineyro P., Derscheid R.J., Schwartz K.J., Cooper V.L., Halbur P.G., Main R.G., **Sato Y.**, Arruda B.L. Outbreak of H5N2 highly pathogenic avian Influenza A virus infection in two commercial layer facilities: lesions and viral antigen distribution. *J. Vet Diagn Invest.* 2016 Sep;28(5):568-73. doi: 10.1177/1040638716658929
1. **Sato, Y.**, W.L. Wigle, T.L. Lin, E.N. Gingerich, and P.S. Wakenell. Case Report: Necrotizing and Hemorrhagic Hepatitis and Enteritis in Commercial Layer Pullets. *Av. Path.* 46(1):84-89, July 7 2016. doi: <http://dx.doi.org/10.1080/03079457.2016.1222769>

Invited Presentations

National

7. **Sato, Y.** Why have my hens stopped laying? North American Veterinary Community Conference. Orlando, FL; February 8, 2017.
6. **Sato, Y.** HPAI Update for the General Practitioner. North American Veterinary Community Conference. Orlando, FL; February 8, 2017.
5. **Sato, Y.** Antibiotic Usage and Regulations in Backyard Poultry. North American Veterinary Community Conference. Orlando, FL; February 8, 2017.
4. **Sato, Y.**, G. Lossie, P.S. Wakenell. Top 10 Backyard Poultry Conditions. North American Veterinary Community Conference. Orlando, FL; February 8, 2017.
3. **Sato, Y.**, K.J. Yoon, J. Adelman, J. Blanchong, P.C. Gauger. The State of Avian Influenza Research: EIC Research Update I, II, and III. Egg Industry Center Annual Forum. Chicago, IL; April 20-21, 2016.
2. **Sato, Y.** "Hen Health and Egg Quality" "Biosecurity, Hen Health and Egg Safety." National Egg Quality School. Indianapolis, IN; May 16-17, 2016.
1. **Sato, Y.** "Layer Skeletal Anatomy" "Skeletal Diseases." Layer Health Management School. Madison, WI; May 25, 2016.

Regional

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18. **Sato, Y.**, W. Philibert, K. Flaming. One Brick Higher: Biosecurity Practices and Investments Implemented by Today's Poultry Producers. Midwest Poultry Federation Meeting: Layer/Pullet Workshop. St. Paul, MN; March 15, 2017.
17. **Sato, Y.**, G. Lossie, P.S. Wakenell. Top 10 Backyard Poultry Conditions and Troubleshooting. Greater Des Moines Veterinary Medical Association meeting. Des Moines Library, IA; November 21, 2016.
16. **Sato, Y.**, G. Lossie, P.S. Wakenell. Top 10 Backyard Poultry Conditions and Troubleshooting. Master Cup Poultry Event. Webster City, IA; November 19, 2016. <http://www.mastercuppoultryshow.com/index.php>
15. **Sato, Y.** Panelist: Midwest Vet Symposium. ISU Vet Med, Ames, IA; November 12, 2016.
14. **Sato, Y.**, J. Swanson. Problem-Solving Session: Highly Pathogenic Avian Influenza. Iowa One Health Conference. Iowa City, IA. November 5, 2016.
13. **Sato, Y.** "Salmonella, Mycoplasma, and Avian Influenza." 2016 Iowa Poultry Association Blood Testing School. Ames, IA; June 3, 2016.
12. **Sato, Y.**, G. Lossie, P.S. Wakenell. Top 10 backyard poultry diseases and update on Egg Industry Center Highly Pathogenic Avian Influenza Research. Federal Field Staff meeting. Des Moines, IA; April 30, 2016.
11. **Sato, Y.** "Salmonella, Mycoplasma, and Avian Influenza." 2016 Iowa Poultry Association Blood Testing School. Ames, IA; June 3, 2016.
10. **Sato, Y.** "Salmonella, Mycoplasma, and Avian Influenza." 2016 Iowa Poultry Association Blood Testing School. Ames, IA; June 3, 2016.
9. **Sato, Y.** Avian Session: Backyard chickens and Avian Influenza. Eastern Iowa Veterinary Association, Spring Clinic. Cedar Rapids, IA; May 3, 2016.
8. **Sato, Y.**, G. Lossie, P.S. Wakenell. Top 10 backyard poultry diseases and update on Egg Industry Center Highly Pathogenic Avian Influenza Research. Federal Field Staff meeting. Des Moines, IA; April 30, 2016.
7. **Sato, Y.**, G. Lossie, P.S. Wakenell. Poultry Potpourri: Top 10 Backyard Poultry Conditions and Troubleshooting. Northeastern Iowa Amish Grower Meeting. Hazeltown, IA; August 3, 2016.
6. **Sato, Y.** Introduction to High Pathogenic Avian Influenza (HPAI) – what the veterinary practitioner needs to know. Iowa Veterinary Medical Association. Altoona, IA; Feb 11, 2016.
5. **Sato, Y.**, G. Lossie, P.S. Wakenell. Poultry Potpourri: Top 10 Backyard Poultry Conditions and Troubleshooting. Iowa Veterinary Medical Association. Altoona, IA; Feb 10, 2016.
4. **Sato, Y.**, E.N. Gingerich, and J.A. Roth. Highly Pathogenic Avian Influenza (HPAI) Lessons Learned. 23rd Annual James D. McKean Swine Disease Conference for Swine Practitioners, November 6, 2015.
3. Main, R., J. Kraft, P. Gauger, **Y. Sato**, W. Stensland, K. Woodard. Collaborative Efforts to Improve the AIV Diagnostic Process. Iowa Egg Symposium. Ames, IA; October 1, 2015.
2. **Sato, Y.** and P.S. Wakenell. Non-reportable diseases in poultry; Avian coccidiosis. Zoetis Backyard Poultry Symposium. University of Kentucky. May 2014.
1. **Sato, Y.** and P.S. Wakenell. The misery of Marek's and other miscellaneous diseases; Cooped up-poultry housing secrets. Backyard symposium at the Avian and Exotics Clinic of Indianapolis. May 2014.

Proceeding Papers, Abstracts, Posters, and Other

21. Houston, D.D., S. Azeem, C. Lundy, **Y. Sato**, B. Guo, J. Blanchong, P.C. Gauger, K.J. Yoon, J.S. Adelman. No evidence of a role for wild songbirds or rodents in spreading avian influenza virus across an agricultural landscape. Society for Integrative and Comparative Biology Annual Meeting. New Orleans, LA. January 5, 2017.
20. **Sato, Y.** Euthanasia and Depopulation Strategies in Poultry Operations. Swine Emerging Diseases VDPAM 478C. Ames, IA; November 1, 2016.

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19. Dewell, G. C. Rademacher, **Y. Sato**. Some Antibiotics in Animal Feed Will Require Veterinary Feed Directive Beginning Jan. 1. Iowa State University Extension and Outreach. September 6, 2016.
<http://www.extension.iastate.edu/article/some-antibiotics-animal-feed-will-require-veterinary-feed-directive-beginning-jan-1>
18. Love, F. Change Agent: Yuko Sato. August 29, 2016. <http://www.news.iastate.edu/news/2016/08/29/casato>
17. Dewell, R.D., R.G. Burzette, S.S. Caston, G.A. Dewell, P.J. Gordon, A.E. Jergens, A.J. Kreuder, J.S. Palerme, P.J. Plummer, **Y. Sato**, B.A. Sponseller, J.L. Ward, B.A. Zaffarano, J.A. Danielson. Proposed method to develop a multi-species tool for formative and summative assessment of reasoning among final-year veterinary students. Veterinary Educator Collaborative. Calgary, Alberta; June 20-21, 2016.
16. Lossie, G.A.; Wakenell, P; **Sato, Y**. Atypical Gross Lesions associated with *Aspergillus fumigatus* in Organic, Cage-free Commercial Layers. Western Poultry Disease Conference Meeting, April 24, 2016.
15. Xin, H., **Y. Sato**, B. Meyer. Iowa State University Test Results Provide Six-year Snapshot of Egg Safety. Iowa State University College of Agriculture and Life Sciences. April 13, 2016.
<http://www.cals.iastate.edu/news/releases/iowa-state-university-test-results-provide-six-year-snapshot-egg-safety>
14. **Sato, Y**. Severe Klebsiella Airsacculitis and Pneumonia in 3-week old Hybrid Poults. North Central Avian Disease Conference. St. Paul, MN; March 15, 2016.
13. **Sato, Y.**, T.L. Lin, G.E. Moore, R. Pogradichniy, K. Miller, D. Schrader, R. Sina, A. Ochs, A. Verkamp, and P.S. Wakenell. Validation of a commercially-based infectious bronchitis virus enzyme-linked immunosorbent assay for serological detection of turkey coronavirus antibodies. International Poultry and Processing Expo. Atlanta, GA; January 26, 2016.
12. Lossie, G.A; Wakenell, P; **Sato, Y**. A Unique Case of Exudative Dermatitis and Inguvitis in a Backyard Chicken. Association of Avian Pathologists Meeting, July 2015.
11. **Sato, Y.**, T.L. Lin, G.E. Moore, R. Pogradichniy, K. Miller, D. Schrader, R. Sina, A. Ochs, A. Verkamp, and P.S. Wakenell. Validation of enzyme-linked immunosorbent assay (ELISA) and polymerase-chain reaction (PCR) assay for Detection of Turkey Coronavirus antibodies and viral nucleic acid. American Association of Avian Pathologists, July 2015.
10. **Sato, Y.** and P.S. Wakenell. Backyard Poultry chapter. *The Merck Veterinary Manual*, June 2015.
9. **Sato, Y.**, T.L. Lin, R.Pogradichniy, G.E. Moore, K. Miller, D. Schrader, R. Sina, A. Ochs, A. Verkamp, and P.S. Wakenell. Validation of Enzyme-linked Immunosorbent Assay and Real-time Polymerase Chain Reaction Assay for Detection of Turkey Coronavirus Antibody and Viral Nucleic Acid. Purdue Phi-Zeta Poster Session. April 2015.
8. **Sato, Y.**, T.L. Lin, and P. O'Neil. Ectopic papillary thyroid adenoma in a research colony pigeon. North Central Avian Disease Conference. March 15, 2015.
7. **Sato, Y.**, W.L. Wigle, S. Gallagher, A.L. Johnson, R.W. Sweeney, and P.S. Wakenell Case Report: Outbreak of Type C Botulism in Commercial Layer Chickens. Western Poultry Disease Conference. March 2015.
6. **Sato, Y.**, P.S. Wakenell, and W.L. Wigle. Fowlpox vectored Reticuloendotheliosis virus infection in commercial turkeys. American Association of Avian Pathologists. July 2014.
5. **Sato, Y.**, P.S. Wakenell, and W.L. Wigle. Fowlpox vectored Reticuloendotheliosis virus infection in commercial turkeys. Midwest Association of Veterinary Pathologists meeting. July 2014.
4. **Sato, Y.**, T.L. Lin, P.S. Wakenell, and W.L. Wigle. Necrotizing and hemorrhagic enteritis and hepatitis in commercial layers in Indiana. North Central Avian Disease Conference. March 2014.
3. **Sato, Y.**, P.S. Wakenell, and W. Wigle. Quail Bronchitis in Bobwhite Quail. Midwest Association of Veterinary Pathologists meeting. August 2013.

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2. **Sato, Y.** and P.S. Wakenell. Case Study of Ulcerative Enteritis in Bobwhite Quail. American Association of Avian Pathologists. July 2013.
1. Wakenell, P.S. and **Y. Sato**. Resurgence of Histomoniasis in Small Turkey and Game Bird Flocks in Indiana. American Association of Avian Pathologists. July 2013.

Awarded Grants:

6. H. Xin, **Y. Sato**. Evaluating Behavioral Responses of Poultry to Ultraviolet Light (UVA) via Preference Test. Once Innovations, Inc. (\$74,400). January 19, 2017.
 - Provide histopathologic analysis and reporting
 - Extension component (tentative)
5. **Y. Sato**, A. Krull, B. Arruda, G. Li, O. Sahin, P. Plummer, J. Zimmerman, J. Ji, N. Cornick. 16S based metagenomics analysis of the etiology behind turkey cellulitis. Sara Lee Foods, West Liberty Foods, VDPAM, May 2017 (\$50,000).
 - Project design with Dr. Krull, primary mentor to summer scholar student
 - Access to farm site
 - Extension component (presentation, relay information back to industry)
4. P. Gauger, **Y. Sato**, K. Harmon, J. Zhang, B. Wilberts, C. Cardona, R. Main, KJ Yoon. Evaluation of alternative environmental sampling matrices for avian influenza surveillance and stability in commercial poultry facilities. Iowa Egg Industry Center, August 2015-March 2017 (\$43,168).
 - Provide access to farm site and communication with producers
 - Coordinate student help and sample collection
 - Extension component (presentation at regional and national meetings).
3. **Y. Sato**, KJ Yoon, J. Zhang, P. Gauger, R. Main, K. Harmon, E. Beilke, A. Canon, G. Girgis, K. Wilson, R. Porter. Evaluation of feedstuffs for the presence of avian influenza virus (AIV) collected from feed mills and poultry farms and their role in spreading AIV. Iowa Egg Industry Center, August 2015-March 2017 (\$45,297).
 - Provide access to farm site and communication with producers
 - Coordinate student help and sample collection
 - Extension component (presentation at regional and national meetings).
2. KJ Yoon, J. Adelman, **Y. Sato**, J. Blanchong, P. Gauger, J. Zhang, G. Li, R. Main, E. Beilke, A. Canon, E. Colboth, J. Wilson. Role of terrestrial wild birds, rodents and insects in spreading avian influenza virus to commercial layer operations. Iowa Egg Industry Center, August 2015-January 2017 (\$119,866).
 - Provide access to farm site and communication with producers
 - Coordinate student help and sample collection
 - Extension component (presentation at regional and national meetings).
1. G. Li, J Zhang, KJ Yoon, P. Gauger, K. Harmon, **Y. Sato**, R. Main. Molecular Epidemiology of Highly Pathogenic Avian Influenza Viruses in Iowa toward Understanding of Area/Regional Spreading of the Virus. ISU VDPAM (Department funds), October 2015-April 2016 (\$49,622).
 - Extension component (presentation at regional meetings).