

Curriculum Vitae
James F. Lowe, D.V.M., M.S.
PO Box 409 – 404 Pin Oak Drive
Albers, IL
309-336-1006
lowe@hogvet.com - jlowe@illinois.edu

Professional Experience:

- Veterinarian - Carthage Veterinary Service, Ltd. (1997 to 2003; 2007 to present)
- Visiting Clinical Instructor – University of Illinois, Department of Veterinary Clinical Medicine (2009-present)
- Director, Health and Production Services – The Maschhoffs, Inc. (2003 to 2007)
- Manager – Professional Swine Management LLC (2000 to 2004)
- Associate Veterinarian - Vet Care Associates, P.C. (1994 – 1997)

Education:

Masters of Science in Veterinary Pathobiology (Epidemiology and Immunology)
University of Illinois

Executive Veterinary Program – Certificate in Swine Health Management
University of Illinois

Doctor of Veterinary Medicine
University of Illinois

Bachelor of Science in Veterinary Science
University of Illinois

Bachelor of Science in Agriculture
University of Illinois

Professional Licenses:

- Licensed to practice veterinary medicine in Illinois, Iowa, Indiana, Missouri, Oklahoma, Kentucky, Alabama and Georgia
- Licensed to prescribe controlled substances in Illinois, Oklahoma, and by the U.S. Drug Enforcement Administration

Professional Organization Membership and Recognitions:

- Howard Dunne Memorial Lecture (2010) – American Association of Swine Veterinarians
- Allen D Leman Science in Practice Award (2007) – University of Minnesota and Pfizer Animal Health
- Conference of Research Workers and Animal Disease (CRWAD) (2008-present)
- North American PRRSV Eradication Task Force, American Association of Swine Veterinarians (2006-present)

- USDA Coordinated Agricultural Project (CAP), PRRS CAP 2 External Advisory Committee (2006-present)
- Board of Directors (2002-2008) American Association of Swine Veterinarians
- USDA Coordinated Agricultural Project (CAP), PRRS renewal Steering Committee (2006)
- Laboratory Committee, Illinois State Veterinary Medical Association (2004)
- American Association of Swine Veterinarians
- American Veterinary Medical Association
- Illinois State Veterinary Medical Association

Research Interests:

- Host-pathogen interactions and effects of management strategies on the evolution of pathogen fitness and transmission
- Biological changes from environmental stress in swine: Effect on production in commercial swine farms

Peer Reviewed Publications:

- J. Patterson, A. Wellen, M. Hahn, A. Pasternak, J. Lowe, S. DeHass, D. Kraus, N. Williams, and G. Foxcroft; Responses to delayed estrus after weaning in sows using oral progestagen treatment. *J Anim Sci.*, 2008 : jas.2007-0440v1.
- Lowe, James F, Federico A. Zuckermann, Lawrence D. Firkins, William M. Schnitzlein, Tony L. Goldberg; Immunological and clinical consequences of exposure to wild type or attenuated porcine reproductive and respiratory syndrome virus in swine under field conditions. *J of the American Veterinary Medical Association*, 2006 Apr 1;228(7):1082-8.
- Lowe, JF, R Husmann, LD Firkins, FA Zuckermann, TL Goldberg; Correlation of cellular immunity to Porcine Reproductive and Respiratory Syndrome Virus and clinical disease during outbreaks of PRRS in commercial swine herds. *J of the American Veterinary Medical Association*, 2005 May 15;226(10):1707-11.
- Goldberg TL, JF Lowe, SM Milburn, and LD Firkins. Quasispecies variation of porcine reproductive and respiratory syndrome virus during natural infection. *Virology*. Dec 20 2003;317(2):197-207.
- Lowe, JF, L Firkins, M. Banerjee, T. Goldberg; A novel technique for the collection of ante mortem tonsil biopsies from alert swine. *J of Swine Health and Production*, 2003, 11(5):229-232.
- S. L. Rodriguez-Zas, B. R. Southey, R. V. Knox, J. F. Connor, J. F. Lowe} and B. J. Roskamp; Bioeconomic evaluation of sow longevity and profitability1. *J. Anim. Sci.*, 2003; 81:2915-2922.

Publications:

- Connor, Joseph, Laura Greiner, James Lowe, Jennifer Reiman, Cassandra Folkerts, R. White, Bacterial Infection of the Navel Cord Blood Clot in Neonatal Piglets: Prevalence and Clinical Outcomes, *AASV*, 2010, pp. 405-406.
- Johnson, E and J Lowe, When is the right time to vaccinate against *Erysipelas rhusiopathiae* in growing pigs?, *J of Swine Health and Production*, 2005, 13(2): 114-115.

- Lowe, JF and JF Connor, Options for Parity Segregation, *National Hog Farmer, Blue Print Series*, 2004, 28:24-26.
- Lowe, JF, Collection of Ante Mortem Tonsil Biopsies from Unanaesthetized Swine, *Suis*, April 15, 2004, 5:32-34.
- Lowe, J. F., J. F. Connor, S. L. Rodriguez-Zas, B. R. Southey, R. V. Knox, B. J. Roskamp, Bioeconomic Evaluation of Sow Longevity and Profitability, *Journal of Animal Science*, 2003, 81:2915-2922.

Abstracts:

- Lowe, JF, S Probst-Miller, DM Augsburg, and MR Gramer *Clinical Presentation of Diagnosis of 2009 Pandemic H1N1 in two commercial swine herds located in the Midwestern United States*, International Symposium on Neglected Influenza Viruses, Feb 2010.
- Lowe, J, J Patterson, A Wellen, M Hahn, A Pastemak, S Dehass, D Kraus, N Williams, and G Foxcroft *Responses to delayed estrus after weaning in sows using oral progestagen treatment*, J Anim Sci. 2008 Apr 11
- Johnson E and Lowe J *Economic losses due to proliferative hemorrhagic enteropathy*, 20th IPVS, Durban S Africa; 2008 Vol II:296.
- Lowe J and Johnson E *Elimination of Actinobacillus pleuropneumoniae from a breeding herd without lowering production output*, 20th IPVS, Durban S Africa; 2008 Vol I:214.
- Lowe, JF, FA Zuckerman, LD Firkins and TL Goldberg *PRRSV control in large-scale commercial settings: incorporating scientific information into herd-level management decisions*. 2005 International PRRSV Symposium, St Louis, Missouri, December 2005.
- Lowe, JF, FA Zuckerman, LD Firkins and TL Goldberg *Immunological and reproductive outcomes of controlled exposure of sows to either wild type porcine reproductive and respiratory syndrome virus or modified live vaccine in a commercial swine herd*, Conference for Research Workers in Animal Disease, November 2004.
- Lowe, J, L Firkins, F. Zuckerman, and T. Goldberg *Immune response and reproductive performance in swine following known infection with PRRS virus commercial herds*. Conference for Research Workers in Animal Disease, November 2003.
- Lowe, J, L Firkins, F. Zuckerman, and T. Goldberg *Immunity and performance of swine infected with PRRS virus in commercial herds*. Conference for Research Workers in Animal Disease, November 2002.

Competitive Grants:

- Goldberg, T, F. Zuckermann, L. Firkins and J. Lowe; *Influences of immunity and viral genetic diversification on the reproductive performance of swine infected with PRRS virus*. USDA/CSREES/NRI 2003.
- Lowe, J, J. Connor, and L. Greiner; *The influence of maternal PCV2 immune response on piglet infection rates at weaning and the effect of PCV2 infection at weaning on lifetime performance and vaccine efficacy*. NPB Project #09-188, September 2009.

Proceedings:

- Lowe, JF; *People, Processes, and Pigs: Are We Fixing What is Really Broken?*; AASV Annual Meeting Howard Dunne Memorial Lecture; 2010, pp 11 – 18.
- Kelly Greiner, Laura Greiner, Jim Lowe, Joseph Connor (Carthage Veterinary Services, Ltd, Carthage, IL; Dept. of Veterinary Clinical Medicine, University of Illinois, Urbana, IL). Comparison of Mycoplasma Hyopneumoniae Vaccination Regimens in Pigs Under Mhyo Pressure. Poster session presented at: 2010 AASV Annual Meeting; 2010 Mar 6-9; Omaha, NE.
- Lowe, JF; J Connor; M Gramer; A Vincent; *Novel H1N1 Influenza: On human and animal health*; Allen D. Lemman Swine Conference 2009, pp 101-102.
- Lowe, JF; *Porcine Circovirus Type 2 in swine breeding herd*; Allen D. Lemman Swine Conference 2009, pp 54-55.
- Schilling, E, Greiner, L, Lowe, JF and Connor, JF; *Efficacy of Intensive Neonatal Piglet Care in Reducing the Prevalence of Umbilical Hernias and Joint Infections at Weaning*; AASV Annual Meeting; 2009.
- Lowe, JF; A Lower; D Polson; *Applying the six sigma – DMAIC methodology to capture pig performance improvements*; AASV Annual Meeting; 2008.
- Lowe, JF; *More sources or more time: Making decisions on pig flow to optimize pig health*; Proceedings AASV Annual Meeting; 2008.
- Lowe, JF; *Prospects for PRRSV vaccine: Reality or pipe dream?*; Proceedings AASV Annual Meeting; 2008.
- Lowe, JF; *Recent experiences with swine influenza in a large production system*; Proceedings AASV Annual Meeting; 2008.
- Lowe, JF; Practice Tips; Proceedings AASV Annual Meeting; 2008.
- Lowe, JF, EE Johnson; *Alternative flow strategies in sow farms*; Proceedings Lemman Swine Conference 2007, pp 119-126.
- Lowe, JF; *Production management for high ADG*; Proceedings AASV Annual Meeting Pre-conference Session: Achieving 2 pound Average daily gain; 2007.
- Lowe, JF; *When “backseat” diseases drive the bus*; Proceedings AASV Annual Meeting Pre-conference Session: Backseat Respiratory Diseases; 2007.
- Lowe, JF; *The future of Swine Veterinary Medicine: A practitioner’s perspective*; Proceedings of the AASV Annual Meeting 2006, pp 261-266.
- Lowe, JF, BF Wolter, EE Johnson; *Communicating real time data to influence production and health*; Proceedings AASV Annual Meeting Pre-conference Session: Grow Finish Records: Taking a look at real time monitoring; 2006
- Lowe, JF; *Considerations in managing type A influenza virus in swine populations*; Proceedings Lemman Swine Conference 2005, pp 99-101.
- Lowe, JF, BF Wolter, B Peterson, C Bertelson, EE Johnson and R Bowman; *What we have learned about grow-finish performance: Understanding the role of management in optimizing performance of growing pigs*, Proceedings AASV Annual Meeting 2005, pp 447-56.
- Walk, S, J Lowe, B Wolter, E Johnson, W Ohare, L Wellen; *Effects of synthetic progesterin (altrenogest) administration to primiparous female swine with short or long lactation length on measures of subsequent reproductive performance*, Proceedings AASV Annual Meeting 2005, pp 21-22.

- Wellen, L R Bowman, E Johnson, B Wolter, J Lowe, S Walk; *Effect of antibiotic administration in pigs after weaning in the presence of concurrent nutritional and environmental stressors*, Proceedings AASV Annual Meeting 2005, pp 19-20.
- Lowe, JF; *Controlling PRRS in Commercial Farms – “What Do We Know That’s New?”*; Proceedings 2005 North American Veterinary Conference
- Lowe, JF; *Parity Segregation: How to Make It Work*, Proceedings 2005 North American Veterinary Conference.
- Lowe, JF; *Diagnostic Applications of PCR Technology – A Practice Perspective*, Proceedings, Iowa State University Swine Disease Conference 2004.
- Lowe, JF, BJ Payne, A Haag, and BF Wolter; *Characterization of and risk factors for mortality in grow finish pigs 10 to 20 weeks post weaning*; Proceedings of the AASV Annual Meeting 2004; pp 525-526.
- Haag A, BJ Payne, JF Lowe, BF Wolter, and DM Webel; *Impact of diet complexity on growth performance and morbidity of pigs after weaning*; Proceedings of the AASV Annual Meeting 2004; pp 53-58.
- Payne, BJ, A Haag, JF Lowe, and BF Wolter *Characterization of mortality in pigs 10 to 20 weeks post-weaning in a large production company*; Proceedings of the AASV Annual Meeting 2004; p89.
- Johnson, EE and JF Lowe; *Evaluation of ultrasound for the detection of retained pigs in postpartum sows*; Proceedings of the AASV Annual Meeting 2003; pp 59-60.
- Lowe, JF; *Determining the Value of Weaned Pigs*; Proceedings of the AASV Annual Meeting 2000.
- Lowe, JF; *Pig Flow Dynamics in Wean to Finish Systems*; Proceedings of the AASV Annual Meeting 2000.

Educational Presentations and Programs:

- Presenter to the 2010 20th Annual Swine Health and Production Conference “The School Nurse has a File: Disease Update in Finishing”
- Presenter to the 2010 20th Annual Swine Health and Production Conference “Influenza – Case Description, Management Practices, What to Look for This Winter”
- Presenter to the 2010 AASV Annual Meeting: Howard Dunne Memorial Lecture “People, Processes, and Pigs: Are We Fixing What is Really Broken?”
- Presenter to the 2010 International Symposium on Neglected Influenza Viruses “Clinical Presentation of Diagnosis of 2009 Pandemic H1N1 in two commercial swine herds located in the Midwestern United States”
- Presenter to the 2009 Lemman Swine Conference “Implications to Influenza A/H1N1”
- Presenter to the 2009 Lemman Swine Conference “Porcine Circovirus Type 2 in Swine Breeding Herds: A Case Study”
- Presenter to the 2009 19th Annual Swine Health and Production Conference “SIV- The Unexpected Log Ride of 2009: Where is the Way Back to the Enchanted Tiki Room?”
- Presenter to the 2009 19th Annual Swine Health and Production Conference “Stop Wandering: Here’s the Park Map to Diagnostics”

- Presenter to the 2008 Swine Breeding Management Workshop - for the University of Alberta "Implementation of Boar Exposure Area Management"
- Presenter to the 2008 Swine Breeding Management Workshop - for the University of Alberta "Batch Farrowing Systems"
- Presenter to the 2008 Leman Swine Conference "My three take-home messages"
- Presenter to the 2008 AASV Annual Meeting "More Sources or More Time: Making Decisions on Pig Flow to Optimize Pig Health"
- Presenter to the 2008 AASV Annual Meeting "PRRS Vaccine: Reality or Pipe Dream?"
- Presenter to the 2008 AASV Annual Meeting "Control of Influenza A Viruses in Large Production Systems"
- Presenter to the 2008 AASV Annual Meeting "Practice Tips"
- Presenter to the 2008 20th Annual International Pig Veterinary Society "Elimination of *Actinobacillus pleuropneumoniae* from a breeding herd without lowering production output"
- Presenter to the 2008 18th Annual Swine Conference "Decreasing Culls, Deaths, and Lites"
- Presenter to the 2007 Leman Swine Conference "Alternative Flow Strategies for Sow Farms"
- Presenter to the 13th Discover Conference on Food Animal Agriculture: Sow Productive Lifetime "Managing individuals in large populations to increase lifetime productivity"
- Presenter to the 2007 Focus on the Future Conference (Saskatoon, SK) "Twelve Born Alive: Its not all hugs and kisses"
- Presenter to the 2007 Focus on the Future Conference (Saskatoon, SK) "Our Vision of the Future: It includes pork production and here's why"
- Presenter to the 2007 AASV Annual Meeting "When "backseat" diseases drive the bus"
- Presenter to the 2007 AASV Annual Meeting "Production Management for High ADG"
- Presenter to the 2006 Indiana Swine Veterinarian Association Meeting "Treating Individual Pigs to achieve success"
- Presenter to the 2006 AASV Annual Meeting "Challenges and changes in the swine industry: A practitioner's perspective"
- Presenter to the 2006 AASV Annual Meeting "Communicating real time data to influence production and health"
- Presenter to the 2005 International PRRS Symposium "PRRSV control in large-scale commercial settings: incorporating scientific information into herd-level management decisions."
- Presenter to the 2005 Leman Swine Conference "Considerations in managing type A influenza virus in swine populations"
- Presenter to the University of Illinois – Swine Extension Program – 2005, "What we don't know about swine influenza"
- Presenter to Pfizer Animal Health Draxxin® Launch Meeting, San Francisco, CA, 2005 "Dealing with Sick Pigs in the Real World".
- Presenter to the AASV 2005, "What we have learned about grow- finish performance"

- Presenter to the North American Veterinary Conference 2005, "Controlling PRRS in Commercial Farms – What Do We Know That's New?"
- Presenter to the North American Veterinary Conference 2005, "Parity Segregation: How to Make It Work"
- Presenter to CRWAD 2004, "Immunological and reproductive outcomes of controlled exposure of sows to either wild type porcine reproductive and respiratory syndrome virus or modified live vaccine in a commercial swine herd"
- Presenter to the Swine Disease Conference, Iowa State University 2004, "Diagnostic Applications of PCR Technology – A Practice Perspective"
- Presenter to the Allen D. Leman Conference, 2004, "How we market our pigs successfully"
- Presenter to the 14th Annual Swine Production Conference, Carthage Veterinary Service, 2004 - "The Next Mixing Pot: SIV and Your Pigs".
- Presenter to the 14th Annual Swine Production Conference, Carthage Veterinary Service, 2004 - "Managing Finishing Barns: SOPs that produce".
- Presenter to the AASV 2004, "Characterization of and risk factors for mortality in grow finish pigs"
- Presenter to the Fall Conference for Veterinarians, University of Illinois 2003 – "What we know about PRRS control in Commercial Swine Farms"
- Presenter to the Illinois Swine Health and Management Conference, University of Illinois 2003 – "The Changing Face of Swine Influenza: Practical Diagnostic and Management Strategies"
- Presenter to CRWAD 2003, "Immune response and reproductive performance in swine following known infection with PRRS virus commercial herds"
- Presenter to the AASV 2003, "Presenting Financial Information to Clients"
- Presenter to CRWAD 2002, "Immunity and performance of swine infected with PRRS virus in commercial herds"

Teaching Experience:

- VCM 694: Production Medicine Principles – University of Illinois College of Veterinary Medicine – Course Coordinator – 2009-present
- VCM 618--Clinical Swine Production Medicine College of Veterinary Medicine – University of Illinois – Course Co-Coordinator – 2010-present
- VCM 622 -Advanced Swine Rotation - University of Illinois College of Veterinary Medicine - 2001 to 2006, 2008 - Coordinator at Carthage Veterinary Service/The Maschhoffs, Inc
- VCM 618 -Clinical Swine Production Medicine College of Veterinary Medicine – University of Illinois - 1995 to 2006, 2008 – Host, lectures and farm visits
- Special projects – Casey Davis: *Systematically managing sow body condition in commercial sow farm*, 2006; Seth Krantz: *Understanding viral and bacterial disease transmission patterns in wean to finish pigs*, 2006; Clayton Johnson: *Efficacy of two modern farrowing management strategies based on temperature loss, passive transfer, and piglet performance*, 2005; Jess Wadell: *Understanding hygiene: assessing and improving hygiene techniques used in production systems*, 2005; Stacey Walk: *Effect of altrenogest (Matrix®) administration post weaning to primiparous sows with short or long lactation length, on duration of estrous and subsequent reproductive performance*, 2004; Lynnette Wellen: *Effect*

of administering antibiotics to pigs after weaning in the presence of practical nutrition and environment stressors. 2004; Brian Payne: Characterization of mortality in pigs 10 to 20 weeks post-weaning in a large production company , 2003; Angie Haag: Impact of diet complexity on growth performance and morbidity of pigs after weaning, 2003; Erin Johnson: Use of ultrasound to detect retained fetuses in farrowing sows. 2002; Stacey Walk: Use of Dexamethasone at birth to improve piglet survival, 2002