

**CURRICULUM VITAE**  
**Justin Tyler Brown, DVM**

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**Phone:** (912) 536-9015

**Present Position:** Assistant Teaching Professor  
Veterinary Diagnostic and Production Animal Medicine  
2219 Lloyd Veterinary Medicine Center  
1809 S. Riverside Drive Ames, Iowa 50010  
Iowa State University  
*Conduct applied swine medicine research; Instruct veterinary students; Provide clinical service for ISU swine farms and external clients*

**Degrees Held:**

Degree		Institution	Year
PhD	<i>Population Sciences in Animal Health</i>	<i>Iowa State University</i>	2021*
DVM	Veterinary Medicine (Emphasis: Food Animal Medicine)	University of Georgia	2016
BSA	Animal Science	University of Georgia	2012

\*PhD degree currently in progress

**Professional Licensure:** State licensure for veterinary practice in Georgia, 2016-present  
State licensure for veterinary practice in Iowa, 2016-present  
USDA Federally Accredited—Category II, Iowa

**Professional Positions:**

2019-Present Assistant Teaching Professor  
Veterinary Diagnostic and Production Animal Medicine  
Swine Medicine Education Center  
College of Veterinary Medicine  
Iowa State University

2017-Present Swine Herd Veterinarian  
Iowa State University

2016-2019 Post-doctoral research associate  
Swine Medicine Education Center  
Veterinary Diagnostic and Production Animal Medicine  
College of Veterinary Medicine  
Iowa State University

## Experiences:

- 08/2019-Present                      Executive Veterinary Program – Swine Health Management  
College of Veterinary Medicine  
University of Illinois  
Urbana, Illinois  
*Participated in modules designed to enhance the diagnostic, management, leadership, strategic thinking, and problem-solving skills of leaders in the pork industry*
- 03/2015-04/2015                      International Veterinary Work  
Uganda, Africa  
*Trained Ugandan veterinary officials on proper sample collection of swine for African Swine Fever surveillance. Collected samples from swine in three regions of Uganda to monitor for African Swine Fever virus*
- 05/2013-03/2015                      Research Assistant: Dr. Amelia Woolums’s lab  
College of Veterinary Medicine  
University of Georgia  
Athens, Georgia  
*Assisted with the development of novel techniques to monitor beef herds for respiratory disease. Conducted bench top research including cell culture, virus isolation and TCID50*
- 12/2011-08/2012                      Research Assistant: Dr. Mike Overton’s lab  
College of Veterinary Medicine  
University of Georgia  
Athens, Georgia  
*Evaluated dairy calves for respiratory disease in conjunction with Dr. Brad Heins’s masters’ project. Conducted a research project evaluating the effects of Multimin<sup>®</sup> on respiratory disease in Holstein heifers*
- 07/2009-05/2012                      Student Worker  
Meat Science Technology Center  
University of Georgia  
Athens, Georgia  
*Harvested beef, swine, and lamb for various research projects; Fabricated cuts of meat for retail sales.*

## **Instruction:**

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### **Courses Taught**

**Course ID:** VDPAM 310

**Course Title:** Introduction to Production Animal Medicine

**Course Description:** The course focuses on the role of the veterinarian in the management of animal health and production in dairy and beef cattle herds, beef feedlots and swine herds with a focus on the transition from considering individual patients to investigating and treating populations of animals. Provides veterinary students with a basis of the principles and techniques that are the basis of food-animal health management programs

**Taught:** 2, 1-hour lectures: population diagnostics

1-hour lecture: Certificates of Veterinary Inspection

1-hour lecture: Veterinary Feed Directives

**Years Taught:** Spring 2018-Present

**Course ID:** VDPAM 478B

**Course Title:** Swine Clinical Pharmacology and Treatment Management

**Course Description:** Provides veterinary students with basic and applied information on swine treatment options, strategies to maximize efficacy and skills to pursue judicious use of antimicrobials, reproductive interventions and the entire spectrum of drug therapies

**Taught:** 2 week, 4<sup>th</sup> year veterinary student rotation

**Years Taught:** Fall 2016-Present

**Course ID:** VDPAM/SMEC 478C

**Course Title:** Swine Emerging Diseases Diagnosis and Management

**Course description:** Provides veterinary students with best practices and methodologies to detect disease and the presence of infection within herds and methods to eliminate or manage the disease for infected herds

**Taught:** 2 week, 4<sup>th</sup> year veterinary student rotation – lead instructor

**Years Taught:** Fall 2016-Present

**Course ID:** VDPAM 450

**Course Title:** Disturbances of Reproduction

**Course Description:** Provide pre-clinical knowledge in the area of reproduction and how to diagnose, evaluate and treat normal and abnormal reproductive conditions in ruminants, equine, swine and small animals.

**Taught:** 1-hour lecture over swine reproduction

**Years Taught:** Fall 2016

**Course ID:** VDPAM/SMEC 480

**Course Title:** Swine Production Medicine Clinical Rotation

**Course Description:** Enables veterinary students to gain valuable knowledge about the swine industry, develop and practice clinical and production management skills, experience swine veterinary practice, and further develop communication skills.

**Taught:** 2 week, 4<sup>th</sup> year veterinary student rotation

**Years Taught:** Fall 2016-Present

**Course ID:** VDPAM 487

**Course Title:** Livestock Disease Prevention

**Course Description:** The course is designed for both the pre-veterinary and animal science majors who have an interest in production animal health, disease prevention methods, epidemiology of economically important agents, and the ecology of currently important pathogens found in North American livestock industries. It will focus on disease prevention principles for individuals and large production population systems.

**Taught:** 2, 1 hour lectures: Swine diseases

**Years Taught:** Fall 2018-Present

### **Continuing Education**

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#### **Conferences Attended**

<b>Year</b>	<b>Conference</b>	<b>Location</b>
2020	AASV Annual Conference	Atlanta, GA
2019	James D. McKean Swine Disease Conference	Ames, IA
2019	AASV Annual Conference	Orlando, FL
2018	James D. McKean Swine Disease Conference	Ames, IA
2018	AASV Annual Conference	San Diego, CA
2017	AASV Annual Conference	Denver, CO
2016	ISU James D. McKean Swine Disease Conference	Ames, IA
2015	AABP Annual Conference	New Orleans, LA
2014	AABP Annual Conference	Albuquerque, NM
2014	AASV Annual Conference	Dallas, TX
2013	AABP Annual Conference	Milwaukee, WI

## Certifications and Trainings

<b>Years</b>	<b>Instructor</b>	<b>Training - Certification</b>
2019	Independent Study	FEMA Emergency Management Institute: IS-00130.a
2019	Independent Study	FEMA Emergency Management Institute: IS-00111.a
2019	Dr. Tim Smith	USDA Foreign Animal Disease Investigation Refresher Course
2019	Dr. Patrick Webb Mr. Bruce Spence	National Pork Board Foreign Animal Disease Table Top Exercise
2019	Dr. Chris Rademacher	National Pork Board's PQA Plus 4.0 program - Advisor
2018	Dr. Patrick Webb Mr. Bruce Spence	National Pork Board Foreign Animal Disease Table Top Exercise
2017	Dr. Rebecca Husted (Gimenez)	Technical Large Animal Emergency Rescue – AWARENESS certification – 8 hours
2017	Dr. Patrick Webb Mr. Bruce Spence	National Pork Board Foreign Animal Disease Table Top Exercise
2017	Dr. John Robertson Dr. William Connick	Writing Winning Grant Proposals – Iowa State University
2016	Dr. Chris Rademacher Dr. Anna Johnson	National Pork Board's PQA Plus 3.0 program - Advisor
2013	Independent Study	FEMA Emergency Management Institute: IS-00100.b
2013	Dr. Rebecca Husted (Gimenez)	Technical Large Animal Emergency Rescue – AWARENESS certification – 8 hours
2010	Independent Study	FEMA Emergency Management Institute: IS-00010.a
2010	Independent Study	FEMA Emergency Management Institute: IS-00700.a
2010	Independent Study	FEMA Emergency Management Institute: IS-00200.a
2010	Independent Study	FEMA Emergency Management Institute: IS-00100.a

## Student Advising

### Veterinary Student Mentoring

<b>Year</b>	<b>Program</b>	<b>Student</b>
2020	Swine Veterinary Internship Program Intern	Mrs. Kelly Hewitt
2019	Swine Veterinary Internship Program Intern	Mrs. Gabrielle Doughan
2019	Hourly work-study student	Ms. Julianna Henderson
2019	Swine Veterinary Internship Program Intern	Ms. Meredith Petersen
2018	Hourly work-study student	Ms. Cassandra Fitzgerald
2018	Swine Medicine Applied Research Intern	Ms. Annie Szczotka
2018	Swine Medicine Applied Research Intern	Mrs. Brette Ratliff
2017	Swine Medicine Applied Research Intern	Ms. Samantha Anthony
2017	Swine Medicine Applied Research Intern	Mr. Michael Rohde
2017	Swine Medicine Applied Research Intern	Ms. Kacey Klemesrud
2016	Swine Medicine Applied Research Intern	Ms. Rochelle Warner
2016	Swine Medicine Applied Research Intern	Ms. Megan Nickel
2016	Swine Medicine Applied Research Intern and Hourly work-study student	Mrs. Victoria Monahan (Thompson)
2016	Swine Medicine Applied Research Intern	Ms. Katie O'Brien

## **Undergraduate Student Mentoring**

<b>Year</b>	<b>Program</b>	<b>Student</b>
2017	Hourly research assistant	Mr. Sam Baker

## **Publications**

### **Refereed Journal Articles, Published:**

5. Kittrell, H.C., Mochel, J.P., **Brown, J.T.**, Forseth, A.M.K., Hayman, K.P., Rajewski, S.M., Coetzee, J.F., Schneider, B.K., Ratliffe, B., Skoland, K.J., Karriker, L.A., 2020. Pharmacokinetics of Intravenous, Intramuscular, Oral, and Transdermal Administration of Flunixin Meglumine in Pre-wean Piglets. *Frontiers in Veterinary Science* 7
4. Ruston C, **Brown J**, Canning P, Monahan V, Fitzgerald C, Skoland K, Kittrell H, Hayman K, Karriker L. (2019). Development and improvement of an international webcast series to expand the accessibility of swine medicine resources. (*Journal of Veterinary Medical Education*, Accepted 6/5/2019).
3. **Brown J**, Rademacher C, Baker S, Poonsuk K, Cheng TY, Skoland K, Canning P, Forseth A, Karriker L. (2019). Evaluation of a commercial PEDV vaccine in reducing duration of viral shedding in gilts. *Journal of Swine Health & Production*. 2019;27(5):256-264.
2. Poonsuk K, Gimenez-Lirola L, Magtoto R, Ji J, Baum D, Rademacher C, **Brown J**, Zhang J, Wang C, Main R, & Zimmerman J. (2018). The effect of chemical clarification of oral fluids on porcine epidemic diarrhea virus antibody responses. *Journal of Veterinary Diagnostic Investigation*. 30(6), 937-941. doi: 10.1177/1040638718798672
1. Powell EJ, Charley S, Boettcher AN, Varley L, **Brown J**, Schroyen M, Adur MK, Dekkers S, Isaacson D, Sauer M, Cunnick J, Ellinwood NM, Ross JW, Dekkers JC, Tuggle CK. (2018). Creating effective biocontainment facilities and maintenance protocols for raising specific pathogen-free, severe combined immunodeficient (SCID) pigs. *Lab Anim*, 52(4), 402-412. doi: 10.1177/0023677217750691

### **Refereed Journal Articles, In Preparation:**

1. **Brown J**, Poonsuk K, Cheng T, Rademacher C, Baum D, Karriker L. Performance of Two Diagnostic Assays for the Detection of Serum Neutralizing Antibody to Porcine Epidemic Diarrhea Virus

### **Oral Presentations at National, Regional, and Local Meetings:**

“\*\*\*” Denotes a student that Dr. Brown mentored during the study.

10. **Brown J**. A Swine Practitioner’s Perspective When Responding to Truck Rollovers: No Two Scenarios are Alike. 51<sup>st</sup> Annual Meeting of the American Association of Swine Veterinarians. March, 2020, Atlanta, GA.

9. Doughan G\*\*, **Brown J**, Skoland K, Nickel M, Kittrell H, Ruston C, Breuer M, Ellingson J, Thomas PR, Petersen M, Karriker L. Comparison of standard and novel precision agriculture vaccination strategies and the effect on vaccine responses in weaned pigs. 51<sup>st</sup> Annual Meeting of the American Association of Swine Veterinarians. March, 2020, Atlanta, GA.
8. **Brown J**, Skoland K, Karriker L. Anatomy of a Public-Private-Corporate Collaboration to Provide Clinical Food Animal Training to Fourth Year Veterinary Students. Veterinary Educator Collaborative Symposium of the Association of American Veterinary Medical Colleges.
7. Szczotka A\*\*, Hayman K, Ratliff B, Rademacher C, Swalla R, Hoogland M, **Brown J**, Kittrell H, Skoland K, Breuer M, Forseth A, Wang C, Karriker L. Effects of antibiotic and non-antibiotic interventions applied to swine umbilici within the first 24 hours of life on the incidence of umbilical infection, growth, and mortality. Veterinary Student Seminar in the Proceedings of the 50<sup>th</sup> Annual Meeting of the American Association of Swine Veterinarians. March, 2019, Orlando, FL.
6. **Brown J**. A Swine Practitioner's Perspective When Responding to Truck Rollovers: No Two Scenarios are Alike. Iowa Veterinary Medical Association Winter Conference, Feb. 2019, Altoona, IA. (invited)
5. **Brown J**, Rademacher C, Baker S, Poonsuk K, Cheng T, Skoland K, Canning P, Forseth A, Karriker L. Evaluation of a Commercial PEDV Vaccine in Reducing Duration of Viral Shedding in Gilts. Iowa State University James D. McKean Swine Disease Conference, November 2018, Ames, IA.
4. **Brown J**, Kittrell H, Hayman K, Forseth A, Skoland K, Karriker L. Meningeal Swabs Tips and Tricks. AASV Practice Tip at the 49<sup>th</sup> Annual Meeting of the American Association of Swine Veterinarians, Feb. 2018, San Diego, CA.
3. Nickel M\*\*, Skoland K, Forseth A, **Brown J**, Thompson V, Breuer M, Warner R, O'Brien K, Canning P, Thomas P, Hoogland M, Lauterbach N, Karriker L. Development and validation of ante-mortem urine collection techniques for gilts and sows. Veterinary Student Seminar in the Proceedings of the 48<sup>th</sup> Annual Meeting of the American Association of Swine Veterinarians, Feb. 2017, Denver, CO.
2. **Brown, J**, Canning P, Forseth A, Skoland K, Ellingson J, Thomas P, Karriker L. New tools and techniques: the Swine Medicine Education Center at Iowa State University. 2016 ISU James D. McKean Swine Disease Conference, Nov. 2016.
1. **Brown J**, Woolums A, Jones L, McKinnon G, Fulton R, Ridpath J. Investigation into an outbreak of respiratory disease in nursing calves in a South Georgia beef herd. Veterinary Student presentation, American Association of Bovine Practitioners annual conference, Sept. 2014, Albuquerque, NM.

## Poster Presentations at National, Regional, and Local Meetings:

“\*\*” Denotes a student that Dr. Brown mentored during the study.

10. Ratliff B\*\*, Kittrell H, Szczotka A, **Brown J**, Hayman K, Forseth A, Skoland K, Breuer M, Rajewski S, Mochel J, Karriker L. Measure and compare the pharmacokinetics of intramuscular, oral, and topical administration of flunixin meglumine in pre-wean piglets. Veterinary Student Poster #25 in the Proceedings of the 50<sup>th</sup> Annual Meeting of the American Association of Swine Veterinarians, March 2019, Orlando, FL.
9. Anthony S\*\*, **Brown J**, Madson D, Klemesrud K, Rohde M, Akin E, Radke S, Skoland K, Breuer M, Forseth A, Canning P, Hayman K, Kittrell H, Karriker L. Characterization of skin variations that may influence transdermal absorption of topical drugs. Veterinary Student Poster #16 in the Proceedings of the 49<sup>th</sup> Annual Meeting of the American Association of Swine Veterinarians, Feb. 2018, San Diego, CA.
8. Klemesrud K\*\*, Forseth A, Akin E, Anthony S, Rohde M, Breuer M, Skoland K, **Brown J**, Kittrell H, Canning P, Thomas P, Rademacher C, Karriker L. Determining the necessity of peri-processing antimicrobial use in piglets. Veterinary Student Poster #30 in the Proceedings of the 49<sup>th</sup> Annual Meeting of the American Association of Swine Veterinarians, Feb. 2018, San Diego, CA.
7. Rohde M\*\*, **Brown J**, Anthony S, Hayman K, Canning P, Klemesrud K, Forseth A, Kittrell H, Breuer M, Skoland K, Rademacher C, Karriker L. Evaluation of BoarBetter® pheromone in optimizing swine reproductive efficiencies in two commercial breeding farms. Veterinary Student Poster #36 in the Proceedings of the 49<sup>th</sup> Annual Meeting of the American Association of Swine Veterinarians, Feb. 2018, San Diego, CA.
6. Poonsuk K, Gimenez-Lirola L, Magtoto R, Baum D, Rademacher C, **Brown J**, Zimmerman J. Oral fluid specimens can be clarified ("cleaned up") without affecting porcine epidemic diarrhea virus (PEDV) isotype-specific (IgG, IgA) ELISA responses. Poster #50 in the Proceedings of the 49<sup>th</sup> Annual Meeting of the American Association of Swine Veterinarians, Feb. 2018, San Diego, CA.
5. O'Brien K\*\*, Canning P, Skoland K, Madson D, Nickel M, Thompson V, Breuer M, Warner R, Forseth A, **Brown J**, Karriker L. Refinement of field anesthesia protocols for joint fluid collection in healthy swine. Veterinary Student Poster #91 in the Proceedings of the 48<sup>th</sup> Annual Meeting of the American Association of Swine Veterinarians, Feb. 2017, Denver, CO.
4. Thompson V\*\*, Canning P, Koep E, Murray D, O'Brien K, Nickel M, Forseth A, **Brown J**, Warner R, Breuer M, Skoland K, Madson D, Karriker L. Utility of antemortem joint fluid collection for diagnostic investigations of infectious lameness. Veterinary Student Poster #30 in the Proceedings of the 48<sup>th</sup> Annual Meeting of the American Association of Swine Veterinarians, Feb. 2017, Denver, CO.



3. Warner R\*\*, **Brown J**, Dohlman T, Krull A, Skoland K, Breuer M, Thompson V, Nickel M, O'Brien K, Forseth A, Canning P, Karriker L. Evaluation of a novel antibiotic-free extender utilizing short-term hypothermic storage. Veterinary Student Poster #11 in the Proceedings of the 48<sup>th</sup> Annual Meeting of the American Association of Swine Veterinarians, Feb. 2017, Denver, CO.
2. **Brown J**, Woolums A, Jones L, McKinnon G, Fulton R, Ridpath J. Investigation into an outbreak of respiratory disease in nursing calves in a South Georgia beef herd. Poster #3 in the 2014 Bovine Respiratory Disease Symposium Proceedings, July 2014, Denver, CO.
1. **Brown, J**, Heins B, Berghaus R, Overton M. Effects of Multimin® on the risk of respiratory disease and growth in pre-weaned group housed Holstein heifers. 2013 UGA Science of Veterinary Medicine Research Symposium.

## **Funding**

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### **Proposals submitted, funded:**

6. Ramirez B, Rademacher C, Johnson A, Greiner L, Peschel J, Andersen D, **Brown J**, Schwartz K. Validation of Ventilation Shut Down Plus (VDS+) Methodology for Mass Depopulation. National Pork Board. \$168,000. 1 year.
5. **Brown J**, Skoland K, Monahan V, Fitzgerald C, Karriker L. Renewal of The Swine Medicine Talks: An AASV and SMECast Webinar Series for Veterinary Students. American Association of Swine Veterinarians Student Recruitment Committee and Foundation. March 7, 2020. \$4,247.00. 1 year.
4. Zaabel P, **Brown J**, Webb S, Webb P, Brown G, Karriker L. Develop, Pilot, and Implement Two National Training Programs to Help Build Personnel Capacity and Increase Efficiency during an FAD Outbreak. National Animal Disease Preparedness and Response Program. \$309,000.00. 2 years.
3. **Brown J**, Skoland K, Fitzgerald C, Henderson J, Karriker L. Renewal of The Swine Medicine Talks: An AASV and SMECast Webinar Series for Veterinary Students. American Association of Swine Veterinarians Student Recruitment Committee and Foundation. March 9, 2019. \$4,885.00. 1 year.
2. **Brown J**, Skoland K, Monahan V, Fitzgerald C, Karriker L. Renewal of The Swine Medicine Talks: An AASV and SMECast Webinar Series for Veterinary Students. American Association of Swine Veterinarians Student Recruitment Committee and Foundation. March 3, 2018. \$4,885.00. 1 year.
1. Canning P, **Brown J**, Skoland K, Karriker L. Renewal of The Swine Medicine Talks: An AASV and SMECast Webinar Series for Veterinary Students. American Association of Swine Veterinarians Student Recruitment Committee and Foundation. March 9, 2019. \$5,440.00. 1 year.

**Proposals submitted, not yet funded:**

**Grants submitted, not funded:**

3. **Brown J**, Karriker L, Kittrell H, Ruston C, Skoland K, Breuer M. Comparison of dose delivery accuracy of *Mycoplasma hyopneumoniae* vaccine using three methodologies. Iowa Pork Producers Association Research Proposal. April 30, 2019. \$58,595.00. 1 year.
2. **Brown J**, Skoland K. Accessibility of swine medicine educational videos, transcription and closed captioning. Iowa State University – Miller Open Education Mini-Grant. April 15, 2019. \$5,000. 1 year.
1. **Brown J**, Rademacher C, Karriker L, Schwartz K, Forseth A, Kittrell H, Hayman K. Comparison of antibiotic administration protocols, including prevention, during natural disease outbreaks including co-infections. National Pork Board Research Proposal. \$118,814.00. November 14, 2017. 1 year.

**Recognitions/Awards**

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<b>Year</b>	<b>Association</b>
2016	Proficiency in Theriogenology Award, University of Georgia-CVM
2016	Field Service Award, Large Animal Teaching Hospital, University of Georgia-CVM
2014	AASV/National Pork Industry Foundation Internship Grant Recipient
2008-2016	Food Animal Veterinary Incentive Program Scholar, University of Georgia

**Public and University Service/Professional Memberships**

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**Committees**

<b>Years</b>	<b>Association</b>
2018-Present	AASV Communications Committee
2017-Present	AASV Committee on Transboundary and Emerging Diseases
2016-2019	UGA College of Veterinary Medicine Awards Selection Committee
2014-2016	UGA AABP Student Delegate

**Professional Memberships**

<b>Years</b>	<b>Association</b>
2019-Present	Iowa Veterinary Medical Association
2013-Present	American Association of Swine Veterinarians
2015-2017	Society for Theriogenology
2013-2017	American Association of Bovine Practitioners
2012-2019	American Veterinary Medical Association

References Available Upon Request