

Kwangcheol Casey (KC) Jeong, Ph. D.

Associate Professor of Microbiology
Emerging Pathogens Institute, Department of Animal Sciences, University of Florida
2055 Mowry Rd, PO Box 10009, Gainesville, FL 32611
Phone: 352-294-5376, E-mail: kcjeong@ufl.edu
<https://sites.google.com/site/thejeonglab/>

EDUCATION

- Ph. D. University of Wisconsin-Madison, Department of Food Microbiology and Toxicology with Bacteriology minor, Madison, Wisconsin (2004)
- M. S. Chonnam National University, Dept. of Food Science and Technology, Gwangju, Korea (1998)
- B. S. Chonnam National University, Dept. of Food Science and Technology, Gwangju, Korea (1996)

PROFESSIONAL EXPERIENCE

- Associate Professor, Dept. of Animal Sciences & Emerging Pathogens Institute, U. of Florida (July 2017 – present)
- Assistant professor, Dept. of Animal Sciences & Emerging Pathogens Institute, U. of Florida (March 2011 – June 2017)
- Faculty of Graduate school, University of Florida (2011 – present)
- Faculty of Animal Molecular and Cellular Biology Graduate Program, University of Florida (2011 – present)
- Adjunct Professor, Seoul National University, Korea (2017 – 2019)
- International Scholar Professor, KyungHee University, Korea (2017 – 2019)
- Adjunct Professor, Korea University, Korea (2015 – 2016)
- Postdoc, Department of Bacteriology, University of Wisconsin-Madison (July 2010 – March 2011)
- Postdoc, Department of Molecular Microbiology, Washington University in St. Louis, School of Medicine (June 2005 – June 2010)
- Postdoc, Food Research Institute, University of Wisconsin-Madison (Jan. 2005 – May 2005)
- Graduate Research Assistant, Department of Food Microbiology and Toxicology, University of Wisconsin-Madison (Aug. 2000 – Dec. 2004)
- Teaching Assistant, Department of Food Science, University of Wisconsin-Madison (Jan. 2003 – May 2003)

AREAS OF SPECIALIZATION

My area of specialization is in microbial pathogenesis in animals and humans. The research fits under the umbrella of the One Health concept. The following areas are my research priorities: i) Food microbiology with food safety emphasis, ii) Host-microbe interactions to understand mechanisms that cause diseases in hosts, iii) Antimicrobial resistance - occurrence, transmission, and mitigation strategies, and iv) High throughput analyses including whole genome sequencing, metagenomics, and artificial intelligence to identify and understand genetic factors that are required for survival and persistence in hosts, foods, and environments.

PUBLICATIONS

A. Peer-reviewed Selected Journal Articles (h-index, 35)

See full list of publications at <https://scholar.google.com/citations?user=4u1aMNUAAAAJ&hl=en>

1. Fan, P., R. Mir, Z. Ma, M.J. Dickson, M.B. Jimenez, A.C.M. Silva, L. Teng, T. Liu, Y. Zhai, J.J. Bromfield, C.D. Nelson, M.A. Elzo, D.O. Rae, K.N. Galvão, I.M. Sheldon, J. P. Vogel, J.G. Morris, and **K.C. Jeong**. 2021. The origin of meconium microbiota and its effects on fetal development and offspring health. (*In revision*).
2. Arce-Cordero, J., T. Liu, A. Ravelo, R.R. Lobo, B.C. Agostinho, H. Monteiro, **K.C. Jeong**, and A. Faciola. 2022. Effects of calcium-magnesium carbonate and calcium-magnesium hydroxide as supplemental sources of magnesium on ruminal microbiome. *Transl Anim Sci*. DOI: 10.1093/tas/txac092.

3. Partow, A.G., M. Kim, P. Fan, T. Liu, Z. Tong, and **K.C. Jeong**. 2022. Comprehensive *in vitro* and *in vivo* risk assessments of β -lactam antibiotic and β -lactamase inhibitor loaded chitosan nanoparticles. *J. Ind. Eng. Chem.* <https://doi.org/10.1016/j.jiec.2022.05.044>.
4. Lee, S., P. Fan, T. Liu, A. Yang, R.K. Boughton, K.M. Pepin, R.S. Miller, and **K.C. Jeong**. 2022. Transmission of antimicrobial resistance at the wildlife-livestock interface. *Comms. Biol.* 5:1-12.
5. Leon-Tinoco, A.Y., S.L. Annis, S.T. Almeida, B.C. Guimaraes, M. Killerby, J. Zhang, C. Wu, L.B. Perkins, Z. Ma, **K.C. Jeong**, and J.J. Romero. 2022. Evaluation the potential lignosulfonates and chitosans as alfalfa hay preservatives using in vitro techniques. *J. Ani. Sci.* <https://doi.org/10.1093/jas/skac154>.
6. Arce-Cordero, J., P. Fan, H. Monteiro, X. Dai, **K.C. Jeong**, and A. Faciola. 2022. Choline chloride effects on the ruminal microbiome at two dietary neutral detergent fiber concentrations in continuous culture. *J. Dairy Sci.* 105:4128-4143.
7. Monteiro, H., A.L. Januario Lelis, P. Fan, B. Agostinho, R. Lobo, J. Arce-Cordero, X. Dai, **K.C. Jeong**, and A. Faciola. 2022. Effects of lactic acid-producing bacteria as direct-fed microbials on the ruminal microbiome. *J. Dairy Sci.* 105:2242-2255.
8. Jones, K., F. Cunha, S.J. Jeon; J. Pérez-Báez, S. Casaro, P. Fan, T. Liu, S. Lee, **K.C. Jeong**, Yongqiang Yang, K. Galvao. 2022. Tracing the source and route of uterine colonization by exploring the genetic relationship of *Escherichia coli* isolated from the reproductive and gastrointestinal tract of dairy cows. *Vet. Microbiol.* 266:109355.
9. Pawluk, A.M., D. Kim, Y.H. Jin, **K.C. Jeong**, and J.H. Mah. 2022. Biofilm-associated heat resistance of *Bacillus cereus* spores *in vitro* and in a food model, *Cheonggukjang jjigae*. *Int. J. Food. Microbiol.* 363:109505.
10. Fan, P., Z. Ma, A.J. Partow, M. Kim, G. Shoemaker, R. Tang, Z. Tong, C.D. Nelson, Y. Jang, and **K.C. Jeong**. 2022. A novel combination therapy for multidrug resistant pathogens using chitosan nanoparticles loaded with β -lactam antibiotics and β -lactamase inhibitor. *Int. J. Biol. Macromol.* 195:506-514.
11. Sarmikasoglou, E, J.R. Vinyard, M.S.R Khan, T. Jiranantasak, A. Ravelo, R.R. Lobo, P. Fan, **K.C. Jeong**, A. Tuanyok and Antonio Faciola. 2021. Ruminal lipid A analysis by matrix-assisted laser desorption ionization time of flight mass spectrometry. *Polysaccharides.* 2(4):817-824.
12. Fan, P., M. Kim, G. Liu, Y. Zhai, T. Liu, J. D. Driver, **K.C. Jeong**. 2021. The gut microbiota of newborn calves and influence of potential probiotics on reducing diarrheic disease by inhibition of pathogen colonization. *Front Microbiol.* 12:772863. DOI: 10.3389/fmicb.2021.772863.
13. Liu, H, Y. Zhai, T Liu, P. Fan, R. Boughton, and **K.C. Jeong**. 2021. Draft genome sequence of NDM-encoding *Klebsiella pneumoniae* isolated from feral swine. *Microbiol. Resour. Announc.* 10(41):e00808-21.
14. Volokhov, D.V., T.A. Zagorodnyaya, Z. Shen, J. Blom, V.A. Furtak, T. Eisenberg, P. Fan, **K.C. Jeong**, Y. Gao, S. Zhang, and M. Amselle. 2021. *Streptococcus vicugnae* sp. nov., isolated from feces of alpacas (*Vicugna pacos*) and cattle (*Bos taurus*), *Streptococcus zalophi* sp. nov., and *Streptococcus pacifica* sp. nov., isolated from respiratory tract of California sea lions (*Zalophus californianus*). *Int. J. Syst. Evol. Microbiol.* 71:004826.
15. Silva, T.V., E.B. Oliveira, J. Perez-Baez, C.A. Risco, R.C. Chebel, F. Cunha, R. Daetz, J.E.P. Santos, F.S. Lima, **K.C. Jeong**, and K.N. Galvão. 2021. Economic comparison between ceftiofur treated and nontreated dairy cows with metritis. *J. Dairy Sci.* DOI:10.3168/jds.2020-19340.
16. Zhai, Y., S. Lee, L. Teng, Z. Ma, N.B. Hilliard, R.J. May, S.A. Brown, F. Yu, K.E. DeSear, K. Cherabuddi, K.H. Rand, J.G. Morris Jr., N.A. Iovine, and **K.C. Jeong**. 2021. Dissemination mechanisms of New Delhi Metallo- β -lactamase genes in hospitalized patients. *JAC-AMR.* 3(1):dlab032.
17. Zhai, Y., K.E. DeSear, K. Cherabuddi, J.G. Morris Jr., and **K.C. Jeong**. 2021. Draft Genome Sequence of *Burkholderia cepacia* complex strain isolated from the human intra-abdominal abscess. *Microbiol. Resour. Announc.* DOI:10.1128/MRA.00091-21.
18. Fan, P., C.D. Nelson, J.D. Driver, M.A. Elzo, F. Peñagaricano, and **K.C. Jeong**. 2021. Host genetics exert lifelong effects upon hindgut microbiota and its association with bovine growth and immunity. *The ISME J.* DOI: 10.1038/s41396-021-00925-x.

19. Ma, Z., S. Lee, P. Fan, J. Lim, K.N. Galvão, C.D. Nelson, and **K.C. Jeong**. 2021. Diverse β -lactam antibiotic resistant bacteria and microbial community in milk from mastitic cows that may not be related to antibiotic treatment failure. *Appl. Microbiol. Biotechnol.* DOI:10.1007/s00253-021-11167-4.
20. Yu, H., Z. Ma, S. Meng, S. Qiao, X. Zeng, Z. Tong, and **K.C. Jeong**. 2021. A novel nanohybrid antimicrobial based on chitosan nanoparticles and antimicrobial peptide microcin J25 with strong antimicrobial activity and low toxicity. *Carbohydrate Polymers*. 253:117309.
21. Matthew T. Pileggi, John R. Chase, Runhang Shu, Lin Teng, **K.C. Jeong**, Phillip E. Kaufman, and Adam C. N. Wong. 2021. Prevalence of Field-Collected House Flies and Stable Flies with Bacteria Displaying Cefotaxime and Multidrug Resistance. *J. Medical Entomol.* DOI:10.1093/jme/tjaa241.
22. Thomas A Weppelmann, **K.C. Jeong**, Afsar Ali. 2020. Characterization of the Vibriocidal Activity of Chitosan Microparticles: A potential Therapeutic Agent for Emerging Multi-Drug Resistant Cholera Infections. *ACS Appl. Mater. Interfaces*. <https://doi.org/10.1021/acsami.0c14313>. ***Co-corresponding authors**.
23. Rachel L Piersanti, Jeremy Block, Zhengxin Ma, **K.C. Jeong**, José EP Santos, Fahong Yu, I Martin Sheldon, John J Bromfield. 2020. Uterine infusion of bacteria alters the transcriptome of bovine oocytes. *FASEB BioAdvances*. <https://doi.org/10.1096/fba.2020-00029>.
24. Young Kyoung Park, Young Hun Jin, Jun-Hee Lee, Bo Young Byun, Junsu Lee, **K.C. Jeong**, Jae-Hyung Mah. 2020. The Role of *Enterococcus faecium* as a Key Producer and Fermentation Condition as an Influencing Factor in Tyramine Accumulation in Cheonggukjang. *Foods*. DOI:10.3390/foods9070915.
25. Klibs N Galvão, Eduardo B de Oliveira, Frederico Cunha, Rodolfo Daetz, Kristi Jones, Zhengxin Ma, **K.C. Jeong**, Rodrigo C Bicalho, Catherine H Higgins, Marjory X Rodrigues, Candelaria Gonzalez Moreno, Soojin Jeon. 2020. Effect of chitosan microparticles on the uterine microbiome of dairy cows with metritis. *Appl. Environ. Microbiol.* doi: 10.1128/AEM.01066-20.
26. Anthony D Horlock, Rachel L Piersanti, Rosabel Ramirez-Hernandez, Fahong Yu, Zhengxin Ma, **K. C. Jeong**, Martin Jd Clift, Jeremy Block, José EP Santos, John J Bromfield, I Martin Sheldon. 2020. Uterine infection alters the transcriptome of the bovine reproductive tract three months later. *Reproduction*. 160:93-107.
27. Christopher A Baker, Shinyoung Lee, Jaysankar De, **K.C. Jeong**, Keith R Schneider. 2020. Survival of *Escherichia coli* O157 in autoclaved and natural sandy soil mesocosms. *PLoS ONE*. doi.org/10.1371/journal.pone.0234562.
28. Lin Teng, Shinyoung Lee, Dongjin Park, **K.C. Jeong**. 2020. Genetic and Functional Analyses of Virulence Potential of an *Escherichia coli* O157: H7 Strain Isolated From Super-Shedder Cattle. *Front. Cell. Infect.* doi.org/10.3389/fcimb.2020.00271.
29. EB de Oliveira, F Cunha, R Daetz, CC Figueiredo, RC Chebel, JE Santos, CA Risco, **K.C. Jeong**, VS Machado, KN Galvão. 2020. Using chitosan microparticles to treat metritis in lactating dairy cows. *J. Dairy Sci.* 103(8):7377-7391.
30. Mackenzie J Dickson, Rachel L Piersanti, Rosabel Ramirez-Hernandez, Eduardo Barros de Oliveira, Jeanette V Bishop, Thomas R Hansen, Zhengxin Ma, **K.C. Jeong**, Jose EP Santos, I Martin Sheldon, Jeremy Block, John J Bromfield. 2020. Experimentally induced endometritis impairs the developmental capacity of bovine oocytes. *Biol Reprod.* doi.org/10.1093/biolre/ioaa069.
31. Zhengxin Ma, Minyoung Kang, Shanyu Meng, Zhaohui Tong, Soon-Do Yoon, Yeongseon Jang, **K. C. Jeong**. 2020. Selective Killing of Shiga Toxin-Producing *Escherichia coli* with Antibody-Conjugated Chitosan Nanoparticles in the Gastrointestinal Tract. *ACS Appl. Mater. Interfaces*. 12:18332-18341.
32. Shinyoung Lee, Raies A. Mir, Si Hong Park, Donghyuk Kim, Hae-Yeong Kim, Raoul K. Boughton, J. Glenn Morris, Jr., and **K.C. Jeong**. 2020. Prevalence of Extended-Spectrum β -Lactamases in the Local Farm Environment and Livestock: Challenges to Mitigate Antimicrobial Resistance. *Crit Rev Microbiol.* DOI: 10.1080/1040841X.2020.1715339.
33. Lee, Shinyoung, L. Teng, N. DiLorenzo, T. A. Weppelmann, and **K.C. Jeong**. 2020. Prevalence and Molecular Characteristics of Extended-spectrum and AmpC β -lactamase producing *Escherichia coli* in Grazing Beef Cattle. *Front Microbiol.* DOI: 10.3389/fmicb.2019.03076.

34. Y. Jiang, I.M. Ogunade, A.A. Pech-Cervantes, P.X. Fan, X. Li, D.H. Kim, K.G. Arriola, M.B. Poindexter, **K.C. Jeong**, D. Vyas, A.T. Adesogan. 2020. Effect of sequestering agents based on a *Saccharomyces cerevisiae* fermentation product and clay on the ruminal bacterial community of lactating dairy cows challenged with dietary aflatoxin B1. *J. Dairy. Sci.* DOI: 10.3168/jds.2019-16851.
35. Fan, Peixin, B. Bian, L. Teng, C. Nelson, J. Driver, M. Elzo, and **K.C. Jeong**. 2020. Host genetic effects upon the early gut microbiota in a bovine model with graduated spectrum of genetic variation. *The ISME J.* doi:10.1038/s41396-019-0529-2.
36. Ma, Z., S. Lee, and **K.C. Jeong**. 2019. Mitigating antibiotic resistance at the livestock-environment interface: a review. *J. Microbiol Biotechnol.* 29(11):1683-1692.
37. Cunha F, Jeon SJ, Kutzer P, and **K.C. Jeong**, Galvão KN. 2019. Draft Genome Sequences of *Bacteroides pyogenes* Strains Isolated from the Uterus of Holstein Dairy Cows with Metritis. *Microbiol. Resour. Announc.* 8: e01043-1.
38. Fan Peixin, C. Nelson, J. Driver, M. Elzo, and **K.C. Jeong**. 2019. Animal breed composition influences the gut microbiota structure and antibiotic resistome in an Angus-Brahman crossbred herd. *Front Microbiol.* doi: 10.3389/fmicb.2019.01846.
39. Rackerby B, Lee SI, Moppert I, Ricke SC, **K.C. Jeong**, Park SH. 2019. Application of Whole-Genome Sequencing to Transposon Mutants of *Salmonella* Heidelberg. *Methods Mol. Biol.* 2016:17-27.
40. Cunha F, Jeon SJ, Kutzer P, **K.C. Jeong**, Galvão KN. 2019. Draft Genome Sequences of *Helicobacter ovis* Strains Isolated at Time of Metritis Diagnosis from the Uterus of Holstein Dairy Cows. *Microbiol. Resour. Announc.* doi:10.1128/MRA.00402-19.
41. Teng, L., Lee, S., Ginn, A., Markland, S., Mir, R., DiLorenzo, R., Boucher, C., Prosperi, M., Johnson, J., Morris, G., and **K.C. Jeong**. 2019. Genomic comparison reveals natural occurrence of clinically relevant multi-drug resistant extended-spectrum β -lactamase producing *Escherichia coli*. *Appl. Environ. Microbiol.* AEM.03030-18.
42. Francis AM, Jeon SJ, Cunha F, **K.C. Jeong**, and Galvão KN. 2019. Draft Genome Sequences of two *Fusobacterium necrophorum* Strains Isolated from the Uterus of Dairy Cows with Metritis. *Microbiol. Resour. Announc.* doi:10.1128/MRA.00201-19.
43. Sinnelä MT, Park YK, Lee JH, **K.C. Jeong**, Kim YW, Hwang HJ, and Mah JH. 2019. Effects of calcium and manganese on sporulation of *Bacillus* species involved in food poisoning and spoilage. *Foods.* 8:119.
44. Ghosal, D. *, **K.C. Jeong** *, Y.W. Chang, J. Gyore, L. Teng, A. J.P. Vogel, and G.J. Jensen. 2019. Molecular architecture, polar targeting and biogenesis of the Legionella Dot/Icm T4SS. *Nature Microbiol.* doi:10.1038/s41564-019-0427-4. * **Co-first author.**
45. Markland, S., Thomas A. Weppelmann, Zhengxin Ma, Shinyoung Lee, Raies A. Mir, Lin Teng, Amber Ginn, Choonghee Lee, Maria Ukhanova, Sebastian Galindo, Chad Carr, Nicolas DiLorenzo, SooHyoun Ahn, Jae Hyung Mah, Volkmar Mai, Mobley Ray, J Glenn Morris, and **K.C. Jeong**. 2019. High Prevalence of Cefotaxime Resistant Bacteria in grazing Beef Cattle: A Cross Sectional Study. *Front Microbiol.* 10:176.
46. Piersanti, R.L., Zimpel, R., Molinari, P.C.C., Dickson, M.J., Ma, Z.X., **Jeong, K.C.**, Santos, J.E.P., Sheldon, I.M., and Bromfield, J.J., 2019. A model of clinical endometritis in Holstein heifers using pathogenic *Escherichia coli* and *Trueperella pyogenes*. *J. Dairy Sci.* 102:1-12.
47. Dai, Xiaoxia, Eduardo Paula, Lelis Januario, Laura Ana; Lorrainy Silva, Virginia Brandao, Hugo Monteiro, Peixin Fan, Simon Poulson, **K.C. Jeong**, and Antonio Faciola. 2019. Effects of lipopolysaccharide dosing on bacterial community composition and fermentation in a dual-flow continuous culture system. *J. Dairy Sci.* 102:334-350.
48. Ma, Zhengxin, A. Ginn, M.Y. Kang, K.N. Galvao, and **K.C. Jeong**. 2018. Genomic and virulence characterization of intrauterine pathogenic *Escherichia coli* with multi-drug resistance isolated from cow uteri with metritis. *Front Microbiol.* 9:3117.
49. Alejandro Garrido-Maestu, Zhengxin Ma, Sae-Yeol-Rim Paik, Nusheng Chen, Sanghoon Ko, Zhaohui Tong, **K.C. Jeong**. 2018. Engineering of Chitosan-derived nanoparticles to enhance antimicrobial activity against foodborne pathogen *Escherichia coli* O157:H7. *Carbohydr Polym.* 197:623-630.

50. Mir, R, T.A. Weppelmann, L. Teng, A. Kirpich, M.A. Elzo, J.D. Driver, and **K.C. Jeong**. 2018. Colonization Dynamics of Cefotaxime Resistant Bacteria in Beef Cattle Raised Without Cephalosporin Antibiotics. *Front Microbiol.* 9:1-12.
51. Cunha, F., Soo Jin Jeon, Rodolfo Daetz, Achilles Vieira-Neto, Jimena Laporta, **K.C. Jeong**, Anthony F Barbet, Carlos A Risco, Kliks N Galvão. 2018. Quantifying known and emerging uterine pathogens, and evaluating their association with metritis and fever in dairy cows. *Theriogenology.* 114:25-33.
52. **Jeong, K.C.** J. Gyore, L. Teng, D. Ghosal, G.J. Jensen, J.P. Vogel. 2018. Polar targeting and assembly of the Legionella Dot/Icm type IV secretion system (T4SS) by T6SS-related components. *bioRxiv*. doi: <https://doi.org/10.1101/315721>.
53. Ghosal, D. Yi-Wei Chang, **K.C. Jeong**, J.P. Vogel, G. Jensen. 2018. Molecular architecture of the Legionella Dot/Icm type IV secretion system. *bioRxiv*. doi: <http://dx.doi.org/10.1101/312009>.
54. Belli, A.L., A. Veronese, R. Moreira, K. Flanagan, M. Ballou, J. Clapper, J. Driver, C. Nelson, Corwin; **K.C. Jeong**, R. Ricardo. 2018. Effects of treatment of pre-weaned dairy calves with recombinant bovine somatotropin on immune responses and somatotrophic axis. *J. Dairy Sci.* 101:1-14.
55. Rothrock, M., Peixin Fan, **K.C. Jeong**, Sun Ae Kim, Steven Ricke, and Si Hong Park. 2018. Genome sequences of a *Listeria monocytogenes* strain isolated from pastured flock poultry farm system. *genomeA.* 6(10). E00171-18. doi: 10.1128/genomeA.00171-18.
56. Van Bruggen, AHC. M.M. He, K. Shin, V. Mai, **K.C. Jeong**, M.R. Finckh, J. G. Morris. 2018. Environmental and health effects of the herbicide glyphosate. *Science of The Total Environment.* 616:255-268.
57. Lee, SY. M.J. Kim, H.J. Kim, **K.C. Jeong**, H.Y. Kim. 2018. Simultaneous detection of four foodborne viruses in food samples using a one-step multiplex PCR. *J. Microbiol. Biotechnol.* doi: 10.4014/jmb.1710.10008.
58. Ogunade IM, Jiang Y, Pech Cervantes AA, Kim DH, Oliveira AS, Vyas D, Weinberg ZG, **K.C. Jeong**, Adesogan AT. 2018. Bacterial diversity and composition of alfalfa silage as analyzed by Illumina MiSeq sequencing: Effects of *Escherichia coli* O157:H7 and silage additives. *J. Dairy Sci.* doi: 10.3168/jds.2017-12876.
59. Ma, Z.X., A. Garrido-Maestu, C. Lee, J. Chon, D. Jeong, Y. Yue, K. Sung, Y. Park, and **K.C. Jeong**. 2018. Comprehensive *in vitro* and *in vivo* evaluation of chitosan microparticles for risk assessments using epithelial cells and *Caenorhabditis elegans*. Hazardous Materials. *J. Hazardous Materials.* 341:248-256.
60. Ma Z.X., A. Garrido-Maestu, and **K.C. Jeong**. 2017. Application, Mode of Action, and In Vivo Activity of Chitosan and its Micro- and Nanoparticles as Antimicrobial Agents: A Review. *Carbohydrate polymers.* 176:257-265.
61. Ma, Z.X., A. Felipe, J. Romero, O. Pereira, **K.C. Jeong**, and A.T. Adesogan. 2017. The capacity of silage inoculant bacteria to bind aflatoxin B1 *in vitro* and in contaminated corn silage. *J. Dairy Sci.* 100:7198-7210.
62. Fan Y., A. Ginn, M. Kang, A.C. Wright. 2017. Application of chitosan microparticles for mitigation of *Salmonella* in Agricultural water. *J. Appl. Microbiology.* August 17. DOI: 10.1111/jam.13566.
63. Vieira-Neto, A. IRP Lima, F Lopes, C Lopera, R Zimpel, LDP Sinedino, **K.C. Jeong**, K Galvão, WW Thatcher, CD Nelson, JEP Santos. 2017. Use of calcitriol to maintain postpartum blood calcium and improve immune function in dairy cows. *J. Dairy Sci.* 100:5805-5823.
64. **Jeong, K.C.**, D. Ghosal, Y. Chang, G.J. Jensen, and J.P. Vogel. 2017. Polar delivery of *Legionella* type IV secretion system substrates is essential for virulence. *Proc. Natl. Acad. Sci. USA.* 114:8077-8082.
65. Ghosal, D., Y. Chang, **K.C. Jeong**, J.P. Vogel, G.J. Jensen. 2017. Structure of the *Legionella* Dot/Icm type IV secretion system in situ by electro cryotomography. *EMBO Reports.* Mar 23. doi: 10.15252/embr.201643598.
66. Jeon, S.J., F. Cunha, A. Ginn, **K.C. Jeong**, and K. Galvao. 2017. Draft Genome Sequences of *Escherichia coli* Strains Isolated at Calving from the Uterus, Vagina, Vulva, and Rectoanal Junction of a Dairy Cow that Later Developed Metritis. *genomeA.* e01511-16. doi: 10.1128/genomeA.01511-16.
67. Ogunade, I., D. Kim, Y. Jiang, A. Cervantes, A. Pech; K. Arriola, D. Vyas, Z. Weinberg, **K.C. Jeong**, A.T. Adesogan. 2017. Fate of *E. coli* O157:H7 and bacterial diversity in corn silage contaminated with the pathogen and treated with chemical or microbial additives. *J. Dairy Sci.* 100:1780-1794.

68. Jeon, S.J., Z.X. Ma, M.Y. Kang, K. Galvão, and **K.C. Jeong**. 2016. Application of chitosan microparticles for treatment of metritis and *in vivo* evaluation of broad spectrum antimicrobial activity in cow uteri. *Biomaterials*. 110:71-80.
69. Jeon, S.J., F. Cunha, X. Ma, N. Martinez, A. Vieira-Neto, R. Daetz, R. Bicalho, S. Lima J.E. Santos, **K.C. Jeong**, and K.N. Galvao. 2016. Uterine microflora and immune parameters associated with fever in dairy cows with metritis. *PLoS One*, doi: 10.1371/journal.pone.0165740.
70. Daetz, R., F. Cunha, J. Bittar, C. Risco, F. Magalhaes, Y. Maeda, J.E. Santos, **K.C. Jeong**, R. Cooke, and K.N. Galvao. 2016. Clinical response after chitosan microparticle administration and preliminary assessment of efficacy in preventing metritis in lactating dairy cows. *J. Dairy Sci.* 99:8946-8955.
71. Mir R.A., T.A. Weppelmann, J. Johnson, D. Archer, J.G. Morris, and **K.C. Jeong**. 2016. Identification and characterization of cefotaxime resistant bacteria in beef cattle. *PLoS One*. doi: 10.1371/journal.pone.0163279.
72. Ma Z.X., D. Kim, A.T. Adesogan, S. Ko, K.N. Galvao, and **K.C. Jeong**. 2016. Chitosan microparticles exert broad spectrum antimicrobial activity against antibiotic resistant microorganisms without increasing resistance. *ACS Appl. Mater. Interfaces*. 8:10700-9.
73. Ginn A., Z.X. Ma, K.N. Galvao, and **K.C. Jeong**. 2016. Draft genome sequence of an *Escherichia coli* O8:H19 ST708 strain isolated from a Holstein dairy cow with metritis. *genomeA*. 4(2) e00261-16.
74. Teng L, A. Ginn, S.J. Jeon, and **K.C. Jeong**. 2016. Complete genome and plasmid sequence of an *E. coli* O157:H7 strain isolated from a super-shedder steer. *genomeA*. 4(2) e00228-16.
75. Ogunade I., D. Kim, Y. Jiang; Z. Weinber, **K.C. Jeong**, A.T. Adesogan. 2016. Control of *Escherichia coli* O157:H7 in contaminated alfalfa silage: Effects of silage additives. *J. Dairy Sci.* 99:4427-36.
76. Gene P., D. Herzig, M. Aydin, S. Dunigan, P. Shah, **K.C. Jeong**, S.H. Park, S.C. Ricke and S. Ahn. 2016. Magnetic Bead-Based Immunoassay Coupled with Tyramide Signal Amplification for Detection of *Salmonella* in Foods. *J. Food Safety*. DOI:10.1111/jfs.12255.
77. Mir R.A., T.A. Weppelmann, M. Elzo, S. Ahn, J.D. Driver, and **K.C. Jeong**. 2016. Colonization of Beef Cattle by Shiga Toxin-producing *Escherichia coli* during the First year of Life: a Cohort Study. *PLoS One*. 10.1371/journal.pone.0148518.
78. Jeon SJ, Vieira-Neto A, Gobikrushanth M, Daetz R, Mingoti RD, Parize AC, de Freitas SL, da Costa AN, Bicalho RC, Lima S, K.C. Jeong, Galvão KN. 2015. Uterine Microbiota Progression from Calving until Establishment of Metritis in Dairy Cows. *Appl. Environ. Microbiol.* 81:6324-32.
79. **Jeong, K.C.** and J.P. Vogel. 2015. Spatiotemporal regulation of a *Legionella pneumophila* T4SS substrate by the metaeffector SidJ. *PLoS Pathogens*. doi: 10.1371/journal.ppat.1004695.
80. Fang, L., B. Wolmarans, M. Kang, **K.C. Jeong**, and A. Wright. 2015. Application of chitosan microparticles for reduction of *Vibrio* species in seawater and live oysters (*Crassostrea virginica*). *Appl. Environ. Microbiol.* 81:640-7.
81. **Jeong, K.C.** and J.P. Vogel. 2015. Novel export control of *Legionella* Dot/Icm substrate is mediated by dual, independent signal sequences. *Mol. Microbiol.* 96:175-88.
82. Mir, R.A., T.A. Weppelmann, M. Kang, T.M. Bliss, N. DiLorenzo, G.C. Lamb, and **K.C. Jeong**. 2015. Association between animal age and the prevalence of Shiga toxin-producing *Escherichia coli* in a cohort of beef cattle. *Vet. Microbiol.* 175:325-31.
83. Thompson, I.M.T., S. Tao, A.P. Monteiro, **K.C. Jeong**, G.E. Dahl. 2014. Effect of cooling during the dry period on immune response after *Streptococcus uberis* intramammary infection challenge of dairy cows. *J. Dairy Sci.* 97:7426-7436.
84. Li, Q., J.H. Brendemuhl, **K.C. Jeong**, and L. Badinga. 2014. Effects of dietary *omega*-3 polyunsaturated fatty acids on growth and immune response of weanling pigs. *J. Animal. Sci. Tech.* 56:7. doi: 10.1186/2055-0391-56-7.
85. Jeon, S., M. Oh, W. Yeo, K. Galvao, and **K.C. Jeong**. 2014. Underlying mechanism of antimicrobial activity of chitosan microparticles and implications for the treatment of infectious diseases. *PLoS One*. 10.1371/journal.pone.0092723.

86. Aydin, M., G. Herzig, **K.C. Jeong**, S. Dunigan, P. Shah, and S. Ahn. 2014. Rapid and sensitive detection of *Escherichia coli* O157:H7 in milk and ground beef using magnetic bead-based immunoassay coupled with tyramide signal amplification. *J. Food Prot.* 77:100-105.
87. Jeon, S., M. Elzo, N. DiLorenzo, C. Lamb, **K.C. Jeong**. 2013. Evaluation of animal genetic and physiological factors that affect the prevalence of *Escherichia coli* O157 in cattle. *PLoS One*. 10.1371/journal.pone.0055728.
88. Park D., E. Stanton, C. Kristin, D. Parrell, M. Bozile, D. Pike, S. Foster, **K.C. Jeong**, R. Ivanek, D. Dopfer, and C.W. Kaspar. 2013. Evolution of *stx2*-prophage in persistent bovine *Escherichia coli* O157:H7 strains. *Appl. Environ. Microbiol.* 10.1128/AEM.03158-12.
89. **Jeong, K.C.**, O. Hiki, M.Y. Kang, D. Park, C.W. Kaspar. 2013. Prevalent and persistent *Escherichia coli* O157 strains on farms are selected by bovine passage. *Vet. Microbiol.* doi:10.1016/j.vetmic.2012.11.034.
90. **Jeong, K.C.** and J. Yu. 2012. Investigation of *in vivo* protein interactions in *Aspergillus* spores. *Methods Mol. Bio.* 944:251-7.
91. Park, H.S., M. Ni, **K.C. Jeong**, J. H. Yu. 2012. The role, interaction, and regulation of the Velvet regulator VelB in *Aspergillus nidulans*. *PLoS One*. 7(9):e45935.
92. Vincent, C.D., J.R. Friedman, **K.C. Jeong**, M. Sutherland, and J.P. Vogel. 2012. Identification of the DotL coupling protein subcomplex of the *Legionella* Dot/Icm type IV secretion system. *Mol. Microbiol.* 85:378-391.
93. Lim, M.S., J. Kim, J.G. Lim, B.S. Kim, **K.C. Jeong**, K.H. Lee, and S.H. Choi. 2011. Identification and characterization of a novel serine protease, VvpS, that contains two functional domains and is essential for autolysis of *Vibrio vulnificus*. *J. Bacteriol.* 193:3722-32.
94. **Jeong, K.C.**, M.Y. Kang, J.H. Kang, D.J. Baumler, and C.W. Kaspar. 2011. Reduction of *Escherichia coli* O157:H7 shedding in cattle by addition of chitosan microparticles to feed. *Appl. Environ. Microbiol.* 77:2611-2616.
95. Baumler, D.J., K.F. Hung, **K.C. Jeong**, and C.W. Kaspar. 2008. Molybdate treatment and sulfate starvation decrease ATP and DNA levels in *Ferropasma acidarmanus*. *Archaea*. 2:205-209.
96. **Jeong, K.C.**, D.J. Baumler, K.F. Hung, J. Byrd, and C.W. Kaspar. 2008. *Escherichia coli* O157:H7 Dps protects DNA against low pH by formation of Dps-DNA complexes. *BMC Microbiol.* 8:181.
97. **Jeong, K.C.**, M.Y. Kang, C. Heimke, J.A. Shere, I. Erol and C.W. Kaspar. 2007. Isolation of *Escherichia coli* O157:H7 from the gall bladder of inoculated and naturally infected cattle. *Vet. Microbiol.* 119:339-345.
98. Baumler D.J., K.F. Hung, **K.C. Jeong**, and C.W. Kaspar. 2007. Production of methanethiol and volatile sulfur compounds by the archaeon "*Ferropasma acidarmanus*". *Extremophiles*. 11:841-851.
99. Vincent, C.D., J.R. Friedman, **K.C. Jeong**, E.C. Buford, J.L. Miller, and J.P. Vogel. 2006. Identification of the core transmembrane complex of the *Legionella* Dot/Icm type IV secretion system. *Mol. Microbiol.* 62:1278-129.
100. Erol, I., **K.C. Jeong**, D.J. Baumler, B. Vykhodets, S.H. Choi, and C.W. Kaspar. 2006. H-NS controls metabolism and stress tolerance in *Escherichia coli* O157:H7 that influence mouse passage. *BMC Microbiol.* 6:72.
101. Baumler, D.J., K.F. Hung, J.L. Bose, B.M. Vykhodets, C.M. Cheng, **K.C. Jeong**, and C.W. Kaspar. 2006. Enhancement of acid tolerance in *Zymomonas mobilis* by a proton-buffering peptide. *Appl. Biochem. Biotechnol.* 134:15-26.
102. **Jeong, K.C.**, D.J. Baumler, and C.W. Kaspar. 2006. Dps expression in *Escherichia coli* O157:H7 requires an extended -10 region and is affected by the cAMP receptor protein. *Biochim Biophys Acta*. 1759:51-59.
103. Baumler D.J. **K.C. Jeong**, B.G. Fox, and C.W. Kaspar. 2005. Sulfate requirement for heterotrophic growth of *Ferropasma acidarmanus* strain fer1. *Research in Microbiology*. 156:492-498.
104. Jeong, H.S., **K.C. Jeong**, H.K. Choi, K.J. Park, K.H. Lee, J.H. Rhee, and S.H. Choi. 2001. Differential expression of *Vibrio vulnificus* elastase gene in a growth phase-dependent manner by two different types of promoters. *J. Biol. Chem.* 276:13875-13880.

105. **Jeong, K.C.**, H.S. Jeong, S.E. Lee, S.S. Chung, J.H. Rhee, A.M. Starks, G.M. Escudero, P.A. Gulig, and S.H. Choi. 2000. Construction and phenotypic evaluation of a *Vibrio vulnificus* *vvpE* mutant for elastolytic protease. *Infect. Immun.* 68:5096-5106.
106. Lee, S.E., Shin, S.Y. Kim, Y.R. Kim, D.H. Shin, S.S. Chung, Z.H. Lee, J.Y. Lee, **K.C. Jeong**, S.H. Choi, and J.H. Rhee. 2000. *Vibrio vulnificus* has the transmembrane transcription activator ToxRS stimulating the expression of the hemolysin gene *vvhA*. *J. Bacteriol.* 182:3405-3415.
107. **Jeong, K.C.**, E.Y. Jeong, T.E. Hwang, and S.H. Choi. 1998. Identification and characterization of *Acinetobacter* sp. CNU961 able to grow with phenol at high concentrations. *Biosci. Biotechnol. Biochem.* 62:1830-1833.
108. Kim, C.M., **K.C. Jeong**, J.H. Rhee, and S.H. Choi. 1997. Thermal-death times of opaque and translucent morphotypes of *Vibrio vulnificus*. *Appl. Environ. Microbiol.* 63:3308-3310.

B. Book chapters

1. Bryna Rackerby, Sang In Lee, Ian Moppert, Steven C. Ricke, **K.C. Jeong**, Si Hong Park. 2019. Application of whole genome sequencing to transposon mutants of Salmonella Heidelberg. Steven Ricke [et al]. Microbial Transposon Mutagenesis: protocols and applications, Springer.
2. Si Hong Park, Mushin Aydin, Peixin Fan, Shinyoung Lee, Lin Teng, Sun Ae Kim, Soohyoun Ahn, Steven C Ricke, Zhaohao Shi, and **K.C. Jeong**. 2018. Detection strategies for foodborne Salmonella and prospects for utilization of whole genome sequencing approaches. Pages:289-308. Food and Feed Safety Systems and Analysis. Steven Ricke [et al.]. Academic Press.
3. **K.C. Jeong**, C.D. Vincent, E. Buford, and J.P. Vogel. 2006. Subcellular Localization of the Dot/Icm Type IV Secretion Proteins. *Legionella: State of the art 30 years after its recognition*. Nicholas P. Cianciotto [et al.]. Washington, D.C. ASM Press.
4. C.D. Vincent, **K.C. Jeong**, J. Sexton, E. Buford, and J.P. Vogel. 2006. The *Legionella pneumophila* Dot/Icm Type IV Secretion System. *Legionella: State of the art 30 years after its recognition*. Nicholas P. Cianciotto [et al.]. Washington, D.C. ASM Press.

C. Invited talks

1. **Jeong, K.C.** A machine learning powered approach to predicting the origin, transmission, and host adaptation of antimicrobial resistant pathogens. ChungAng University, Korea. Apr. 28, 2022. (*Webinar*)
2. **Jeong, K.C.** Lifelong effects of host genetics upon gut microbiota and its association with bovine growth and immunity. Gyeongsang National University, Korea. Nov. 19, 2021.
3. **Jeong, K.C.** A machine learning powered approach to predicting the origin, transmission, and host adaptation of antimicrobial resistant pathogens. 6th Asia-Pacific Food Safety International Conference. Jeju, Korea Nov. 12, 2021.
4. **Jeong, K.C.** Cycling of antimicrobial resistance in the environment. Ewha Womans University, Korean, Oct. 26, 2021. (*Webinar*)
5. **Jeong, K.C.** Development of nano-antimicrobials to treat infections caused by multi-drug resistant pathogens. USDA-NIFA Nanotechnology Program Grantee's Meeting. Oct. 7, 2021. (*Webinar*)
6. **Jeong, K.C.** Lifelong effects of host genetics upon gut microbiota and its association with bovine growth and immunity. ChungAng University, Korea. Sep. 28, 2021. (*Webinar*)
7. **Jeong, K.C.** Antibiotic Resistance and Food Safety: Occurrence, Transmission, and Source Tracking in Food-Producing Animals. 52nd International Symposium and Annual Meeting, Korean Society for Food Science of Animal Resources, Korea. Oct. 29, 2020.
8. **Jeong, K.C.** Interactive Prototyping Workshop: How can Foresight and Futures Planning be used to Address Antimicrobial Resistance in the Livestock Sector? The scale of the AMR crisis. Feed the Future Webinar. Oct. 7, 2020.

9. **Jeong, K.C.** Mechanisms of antimicrobial resistance in Gram-negative bacteria. International Symposium on Veterinary Medicine. Federal University of Vicosa, Vicosa, Brazil. Nov. 15, 2019.
10. **Jeong, K.C.** Host genetic effects upon the early gut microbiota in an animal model with graduated spectrum of genetic variation. Sungsil University, Seoul, Korea. Sep. 6. 2019. Jeong, K.C. Cycling of AMR in the environment. International symposium on One Health Antimicrobial Resistance. Korea Ministry of Health and Welfare, Seoul, Korea. Sept. 5, 2019.
11. **Jeong, K.C.** Host genetic effects upon the early gut microbiota in a bovine model with graduated spectrum of genetic variation. ChungAng University, Korea. July 4, 2019.
12. **Jeong, K.C.** Biogenesis and Polar Delivery of Legionella Type IV Secretion System Substrates for Virulence. KyungHee University, Korea. July 1, 2019.
13. **Jeong, K.C.** Biogenesis and Polar Delivery of Legionella Type IV Secretion System Substrates for Virulence. 46th Annual meeting and international symposium. The Korean Society for Microbiology and Biotechnology. Jeju, Korea. June 24, 2019.
14. **Jeong, K.C.** Genomic comparison reveals natural occurrence and dissemination of antibiotic resistance in food producing animals. Oregon State University. OR. Nov. 2018.
15. **Jeong, K.C.** Occurrence and dissemination of extended-spectrum β -lactamase (ESBL)-producing bacteria at the wildlife-livestock interface. KyungHee University, Korea. Feb. 12, 2019.
16. **Jeong, K.C.** Integrated systems for mitigation of antimicrobial resistance trend (iSMART) in agriculture. China Agricultural University, China. Jun. 21, 2018.
17. **Jeong, K.C.** Engineering and in vivo evaluation of chitosan based nanoparticles as alternative antimicrobial agents. Chonnam National University, Korea. Jun. 26, 2018.
18. **Jeong, K.C.** Understanding cross-talk between gut microbiota and host that modulates immune response and physiological performance. International Association for Food Protection. Salt-Lake City, UT, USA. Jul. 18-21, 2018.
19. **Jeong, K.C.** Engineering and in vivo evaluation of chitosan based nanoparticles as alternative antimicrobial agents in food producing animals. Institute of Food Technologists, Chicago, USA. Jul. 15-18, 2018.
20. **Jeong, K.C.** Natural occurrence and dissemination of Extended-spectrum beta-lactamases in beef cattle raised without antibiotics. of antibiotic resistant microorganisms in food-producing animals. Gyeongsang National University. Korea. Feb. 2, 2018.
21. **Jeong, K.C.** Impact of the use of polymyxin antimicrobials on the emergence of antimicrobial resistance and safety of foods of animal origin. Korean Society of Food Science and Technology. Korea. Jun. 27-29, 2018.
22. **Jeong, K.C.** Understanding cross-talk between host and gut microflora to enhance health and growth performance. ISNFF. Gunsan, Korea. Oct. 22-25, 2017.
23. **Jeong, K.C.** Development of antibody-conjugated chitosan microparticles selectively targeting Shiga toxin producing *Escherichia coli*. KyungHee University. Suwon, Korea. Oct. 2017.
24. **Jeong, K.C.** Engineering and *in vivo* evaluation of chitosan-based Nanoparticles as alternative antimicrobial agents to enhance food safety. Nanotech Conference & Expo. Washington, DC. May 14-17. 2017.
25. **Jeong, K.C.** Enhancing animal health through multiple modes of action. American Dairy Science Association, 2017.
26. **Jeong, K.C.** Antibiotic Resistance and Food Safety in the Genomic Era: Occurrence, Transmission, and Source Tracking. KosFost. Jeju, Korea. June 21-23, 2017.
27. **Jeong, K.C.** Natural occurrence and transmission of antibiotic resistant microorganisms in food-producing animals. 10th China International Food Safety and Quality Conference. Shanghai, China. Nov. 2016.
28. **Jeong, K.C.** Genomic analysis of 62 Extended-Spectrum Beta-Lactamase producing *E. coli* reveals large and diverse virulence repertoires. Kyunghee University. Suwon. Nov. 2016.
29. **Jeong, K.C.** Genomic analysis of Extended-Spectrum Beta-Lactamase producing *E. coli* reveals large and diverse virulence repertoires. Seoul National University. Seoul, Korea. Nov. 2016.

30. **Jeong, K.C.** Engineering of Chitosan-based Nanoparticles for Multidrug Resistant Microorganisms. UKC meeting. Atlanta, GA. July 29, 2015.
31. **Jeong, K.C.** Nanotechnology to Enhance Safety and Security in Food Distribution and Preservation. KSFE meeting, Jeju Island, Korea. Nov. 11-13, 2015.
32. **Jeong, K.C.** Challenges and opportunities in food safety on animal farms. Konkuk University. Seoul, Korea. Nov. 19, 2015.
33. **Jeong, K.C.** From bench to the real world: Translational research to intervene pathogens at pre-harvest, Kyunghee University. Korea. Nov. 18, 2015.
34. **Jeong, K.C.** Engineering chitosan-based nanocides for infectious diseases caused by multidrug resistant microorganisms. 2014 Dasan Conference, Pyeongchang, Gangwon, Korea, Dec. 2014.
35. **Jeong, K.C.** *In vivo* evaluation of antimicrobial activity of chitosan microparticles in cows with uterine disease. International Association for Food Protection Annual meeting, Indianapolis, IN, Aug. 5, 2014.
36. **Jeong, K.C.** Understanding antimicrobial activity of chitosan microparticles against *Escherichia coli* O157:H7. International Association for Food Protection Annual meeting, Indianapolis, IN, Aug. 5, 2014.
37. **Jeong, K.C.** Underlying mechanisms of antimicrobial activity of chitosan microparticles and implications for the treatment of infectious diseases. Department of Food Science and Technology, Sejong University, Seoul, Korea, Apr. 2014.
38. **Jeong, K.C.** Underlying mechanisms of antimicrobial activity of chitosan microparticles and implications for the treatment of infectious diseases. Department of Biochemistry, Chosun University School of Medicine, Gwangju, Korea, Apr. 2014.
39. **Jeong, K.C.** Translational food safety and security research: developing pre-harvest mitigation strategies for safer and more food. Department of Food science, Chonnam National University, Gwangju, Korea, Apr. 2014.
40. **Jeong, K.C.** Graduate school application and admission strategies in US. Department of Food science, Chonnam National University, Gwangju, Korea, Apr. 2014.
41. **Jeong, K.C.** From bench to the real world to reduce foodborne pathogen outbreaks. Department of Microbiology, Keimyung University, Daegu, Korea, Apr. 2014.
42. **Jeong, K.C.** Translational food security and safety research: implications of nanotechnology for seafood. College of food science and technology, Ocean University of China, Qingdao, China, Apr. 2014.
43. **Jeong, K.C.** Genomic comparison reveals natural occurrence and dissemination of antibiotic resistance in food producing animals. Oregon State University. OR. Nov. 2018.
44. **Jeong, K.C.** Understanding antibiotic resistance occurrence and development of mitigation strategies in cattle. USDA AFRI Antimicrobial Resistance program grantees' annual meeting. Tampa. FL. July 2017.
45. **Jeong, K.C.** Engineering of Chitosan-based Nanoparticles for targeting specific pathogens in animals. USDA AFRI Nanotechnology program grantees' annual meeting. Washington, DC. May 2017.
46. **K.C. Jeong.** Engineering of Chitosan-based Nanoparticles for targeting specific pathogens in animals. USDA AFRI Nanotechnology program grantees' annual meeting. Pennsylvania. June 2016.
47. **Jeong, K.C.** Naturally Occurring Antimicrobial Resistance in Beef Cattle. 2016 Florida Beef Cattle Short Course. Gainesville, FL, May 2016.
48. **Jeong, K.C.** Naturally occurring antimicrobial resistance. 2016 Family and Consumer Sciences Summit. Gainesville, FL, 2016.
49. **Jeong, K.C.** Occurrence and Transmission of Extend-Spectrum Beta-Lactamase (ESBL)-Producing *Enterobacteriaceae* in the Environment. Dept. Food Sciences and Human Nutrition. U. of Florida. Gainesville, FL, Sept. 2016.
50. **Jeong, K.C.** Challenges and opportunities in food safety on animal farms. Department of Food Science and Human Nutrition, U. of Florida, Gainesville, FL, Sept. 23, 2014.
51. **Jeong, K.C.** Food security and safety research: implications of micro/nanotechnology for sea animals. Tropical Aquaculture Lab, Ruskin, FL, June 5, 2014.

52. **Jeong, K.C.** Molecular targets for antimicrobial activity of chitosan microparticles and *in vivo* evaluation for treating infectious diseases caused by antimicrobial resistant microorganisms. 2014 Southeastern Microbiology Summit, Ponte Vedra, FL, Aug. 2014.

NEWS RELEASE (2015 – present)

1. Emerging Pathogens Institute. 2021. UF research finds genetic markers for cattle health, growth. Available at: <https://epi.ufl.edu/news/research-news/uf-research-finds-genetic-markers-for-cattle-health-growth.html>
2. UFINNOVATE. 2021. Research finds genetic markers of cattle health, growth. Available at https://innovate.research.ufl.edu/2021/03/03/genetic-markers-cattle-health/?utm_source=rss&utm_medium=rss&utm_campaign=genetic-markers-cattle-health
3. UF/IFAS News. Research finds genetic markers of cattle health, growth. Available at <http://blogs.ifas.ufl.edu/news/tag/genetic-markers/>
4. Southeast AGNET. 2021. New research finds genetic markers for cattle health, growth. Available at <https://southeastagnet.com/2021/03/05/new-research-finds-genetic-markers-cattle-health-growth/>
5. Florida Politics. 2020. Jack Payne: Preventing the next coronavirus in Florida. Available at: <https://floridapolitics.com/archives/321113-jack-payne-preventing-the-next-coronavirus-in-florida/>
6. Alligator. 2020. UF/IFAS ranked the No. 1 public institution for agricultural sciences. Available at: https://www.alligator.org/news/uf-ifas-ranked-the-no-public-institution-for-agricultural-sciences/article_930bd964-4c5e-11ea-8fd7-e7b2e727b61b.html
7. UF Innovate. 2019. Nanoparticles, Chitosan Studied As Dairy Metritis Treatment (Feedstuffs). Available at: <https://innovate.research.ufl.edu/2019/08/20/nanoparticles-chitosan-studied-as-dairy-metritis-treatment/>
8. Alligator. 2019. UF researchers have beef with cow bacteria. Here's the solution. Available at: https://www.alligator.org/news/uf-researchers-have-beef-with-cow-bacteria-here-s-the/article_714a3782-c92b-11e9-8a8f-1f6aa08a9c39.html
9. Florida Lambda Rail. 2019. UF investigator aims to uncover the next generation of antimicrobials. Available at: <https://flrnet.org/uf-investigator-aims-to-uncover-the-next-generation-of-antimicrobials/>
10. Southeast AG Net. 2019. UF/IFAS Researcher Aims to Improve Bacteria Treatments for Cows, Humans. Available at: <http://southeastagnet.com/2019/08/20/uf-ifas-researcher-improve-bacteria-treatments-cows-humans/>
11. Newswise. 2019. UF/IFAS Researcher Aims to Improve Bacteria Treatments for Cows, Humans. Available at: <https://www.newswise.com/articles/ufifas-researcher-aims-to-improve-bacteria-treatments-for-cows-humans>
12. UF/IFAS Blogs. 2019. UF/IFAS Researcher Aims to Improve Bacteria Treatments for Cows, Humans. Available at: <http://blogs.ifas.ufl.edu/news/2019/08/20/uf-ifas-researcher-aims-to-improve-bacteria-treatments-for-cows-humans/>
13. Emerging Pathogens Institute. 2019. Decoding legionnaire's disease. Available at: <http://www.epi.ufl.edu/news/decoding-legionnaires-disease.html>
14. Emerging Pathogens Institute. 2019. Next-gen antimicrobials. Available at: <http://www.epi.ufl.edu/articles/next-gen-antimicrobials.html>
15. Emerging Pathogens Institute. 2019. A host's genetics shape its gut microbiome. Available at: <http://www.epi.ufl.edu/news/host-genetic-effect-on-gut-microbiome.html>
16. Feedstuffs. 2019. Nanoparticles, chitosan studied as dairy metritis treatment. Available at: <https://www.feedstuffs.com/nutrition-health/nanoparticles-chitosan-studied-dairy-metritis-treatment>
17. PennState Extension. 2018. Animal Feed Safety Practices to Prevent Aflatoxin in Milk. Available at: <https://extension.psu.edu/animal-feed-safety-practices-to-prevent-aflatoxin-in-milk>
18. California Institute of Technology. 2017. 3-D image of bacterial machine that injects toxins into cells and spreads antibiotic resistance. Available at: <https://phys.org/news/2017-04-d-image-bacterial-machine-toxins.html>

19. Karena Elliott. 2017. Chitosan microparticles: A potential alternative treatment to antibiotics. Progressive Dairyman. Available at: <https://www.progressivedairy.com/topics/herd-health/chitosan-microparticles-a-potential-alternative-treatment-to-antibiotics>
20. Utah State University. 2017. Dairy veterinary newsletter. Available at: <http://extension.usu.edu/dairy/files/UtahStateDairyVetNewsletterMar2017.pdf>
21. Florida Farm Bureau Federation. 2016. New biological treatment improves food safety. Available at: <https://www.floridafarmbureau.org/new-biological-treatment-improves-food-safety/>
22. University of Florida Institute of Food and Agricultural Sciences 2016. A faster, better way to detect salmonella in meat, chicken. Available at: <https://www.sciencedaily.com/releases/2016/09/160914095608.htm>
23. Farm Journal Media. 2016. Briefs. Available at: [http://digitaledition.qwinc.com/publication/?i=355954&article_id=2634760&view=articleBrowser&ver=html5#{\"issue_id\":355954,\"view\":\"articleBrowser\",\"article_id\":\"2634760\"}](http://digitaledition.qwinc.com/publication/?i=355954&article_id=2634760&view=articleBrowser&ver=html5#{\)
24. Vet Practice Magazine. 2016. Breakthrough in treating cow disease. Available at: <https://vetpracticemag.com.au/breakthrough-treating-cow-disease/>
25. UF/IFAS Research Discoveries. 2016. Chitosan's antibacterial effects. UF/IFAS. Available at: https://research.ifas.ufl.edu/media/researchifasufledu/docs/pdf/RD_Nutrition.FINAL.pdf
26. CABI, Animal Science Database. 2016. Chitosan shows promise for controlling uterine diseases in cows. Available at: <https://www.cabi.org/animalscience/news/25256>
27. Feedstuffs. 2016. Biological treatment found for metritis. Available at: <https://www.feedstuffs.com/story-biological-treatment-found-metritis-0-147817>
28. Emmy Koeleman. 2016. Fighting uterine diseases with microparticles. Dairy Global. Available at: <https://www.dairyglobal.net/Articles/General/2016/11/Fighting-uterine-diseases-with-microparticles-2918421W/>
29. Florida Agriculture. 2016. New biological treatment improves food safety. Florida Farm Bureau. Available at: <https://www.floridafarmbureau.org/new-biological-treatment-improves-food-safety/>
30. Brad Buck. 2016. Florida metritis research could lead to natural treatment for cattle, humans. Dairy Herd. Available at: <https://www.dairyherd.com/article/florida-metritis-research-could-lead-natural-treatment-cattle-humans>
31. Brad Buck. 2016. K. C. Jeong finds biological treatment for cow disease; could help humans, too. UF Emerging Pathogens Institute News. Available at: <http://www.epi.ufl.edu/news-and-events/epi-news/archive/2016/kc-jeong-finds-biological-treatment-for-cow-disease-could-help-humans-too.html>
32. Veterinary Practice News Editors. 2016. New treatment could prevent uterine disease in cows. Veterinary Practice News. Available at: <https://www.veterinarypracticenews.com/new-treatment-could-prevent-uterine-disease-in-cows/>
33. ScienceDaily. 2016. Researchers find biological treatment for cow disease. Science News. Available at: <https://www.sciencedaily.com/releases/2016/10/161011131735.htm>
34. Markland. S. and K.C. Jeong. 2016. Antibiotic Resistance Research at the University of Florida Emerging Pathogens Institute. Link <https://www.linkedin.com/pulse/antibiotic-resistance-research-university-florida-emerging-k-c-jeong?trk=prof-post>
35. Brad Buck. 2015. \$2 million UF/IFAS study to focus on antibiotic resistance; \$500,000 study on taste retention. IFAS Blogs. Available at: <http://blogs.ifas.ufl.edu/news/2015/04/17/2-million-ufifas-study-to-focus-on-antibiotic-resistance-500000-study-on-taste-retention/>

TEACHING AND ADVISING

Teaching

Since I joined UF, I have been involved in developing four courses or sections that include i) Microbial Physiology (entire course), ii) Meat Technology (food safety section), iii) Experimental Techniques and Analytical Procedures

(pathogen detection and identification in farm animals, lab), and iv) Gastrointestinal Microbiology (host-microbe interaction in the gastrointestinal tract section).

Students/postdoc/visiting scholar mentoring and advising

Another important component of my teaching activities and research program is the training of undergraduate and graduate students, and postdoctoral and international visiting scholars, to be the next generation of scientists.

Summary Table of mentoring/advising (name of the trainees can be released if requested)

Role	Undergraduate	MS students	PhD students	Non-UF students	Postdocs	Visiting scholars
Chair	34	3	8	none	7	12
Co-chair	none	none	1	none	none	none
Member	none	9	15	4	none	none
Total	34	12	24	4	7	12

HONORS AND AWARDS

- Andrew Carnegie Fellows Award Nominee, 2021
- Awards of Excellence for Graduate Research, Best Doctoral Dissertation, CALS, University of Florida, 2019
- Doctoral Dissertation Advisor/Mentoring Award nominee, CALS, University of Florida, 2018
- University Term Professorship Award, University of Florida, 2017
- Excellence Awards for Assistant Professors nominee, University of Florida, 2016
- Gama Sigma Delta Junior Faculty Award nominee, 2015
- International Educator Awards Nominee, University of Florida, 2014
- International Educator of the Year, CALS, University of Florida, 2014
- Sigma Xi, Junior Faculty Research Award, University of Florida Chapter, 2014
- Career development award, Institute of Food and Agricultural Sciences, University of Florida. 2013
- The Laboratorian of the year-2012, Florida Association of Food Protection. IAFP. 2013
- Berg/Morse Fellowship Award, Washington University in St. Louis, School of Medicine. 2007

PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

- Member, American Society for Microbiology (1996 – present)
- Fellow, Faculty1000 (2010 – present)
- Member, Korean-American Scientists and Engineers Association (2011 – present)
- Member, International Association for Food Protection (2013 – present)
- Board Member, R&D planning/evaluation board of Ministry of Trade, Industry and Energy (MOTIE) in Korea (2013 – 2017)
- Member, Institute of Food Technologists (2014 – present)
- Editor, Journal of Veterinary Science, 2021 - present
- Editor, Journal of Agricultural Chemistry and Environment (2011- present)
- Associate Editor, Frontiers in Microbiology (2018 – present)
- Journal reviewer, serve as a reviewer of more than 30 journals. Review about 25 manuscripts per year
- Food Safety Committee Chair, Korean-American Food Technologist Association (2017 – present)
- Swiss National Science Foundation Review, 2021
- Binational Agricultural Research, and the Development Fund US-Israel (BARD) Review, 2020
- USDA-Sustainable Agriculture Research and Education (SARE) Grant Review, 2020, 2022
- USDA-NIFA Antimicrobial Resistance Program Grant Review Panel, Jan. 14-15, 2020
- Medical Research Council (UK) Grant Reviewer, 2018

- International Reviewer for College Evaluation, China Agricultural University. Jul. 2-5, China, 2018
- Foundation of Food and Agriculture Research (FFAR) Grant Reviewer, 2017, 2018, 2019
- USDA-NIFA Grantsmanship workshop mentor, Delaware State University, May 11, 2017
- USDA-NIFA Antimicrobial Resistance Program Grant Review Panel, Nov. 15-18, 2016, 2020
- USDA-NIFA Nanotechnology Program Grant Review Panel, Oct. 5-9, 2015
- Convener, Antimicrobials, General Microbiology, Meat and Poultry session during 2013 International Association for Food Protection meeting, Charlotte, NC. July 2013
- Convener, Risk assessment session during 2013 International Association for Food Protection meeting, Charlotte, NC. July 2013
- Steering committee, 97th Southeastern Branch of American Society for Microbiology meeting, Gainesville, FL. Oct. 20-23, 2011

UNIVERSITY GOVERNANCE AND SERVICE

- Mentor, University Multicultural Mentor Program, 2021– present
- Member of the Mentoring Committee for Junior faculty members (Dr. Jason Scheffler and Dr. Francisco Peñagaricano), 2017 – 2021
- Mentor, University Scholars Program, 2014-2015, 2021 – present
- IT committee, Department of Animal Sciences. 2013 – present.
- CALS honors program advisor. 2012 – present
- Member, Search Committee for food microbiology position, Department of Food Science and Human Nutrition, 2021
- Member, IFAS Strategic Visioning Committee (Phase 1), 2020-2021
- Committee, 2019 Awards of Excellence for Graduate Research, 2020
- Member of the Search Committee for beef cattle reproductive physiology position, Department of Animal Sciences. 2017-2018.
- Member of the Search Committee for Food Virologist position, Department of Food Science and Human Nutrition. 2017.
- Teaching evaluation committee for Dr. S. Ahn (Food Science and Human Nutrition Dept.). 2017
- Korean-American Scientists and Engineers Association Gainesville Chapter, Financial Director, 2014- 2016.
- Member of the Search Committee for Research Assistant Scientist position, D. of Animal Sciences. 2015.
- Member of the Search Committee for Muscle biology position, D. of Animal Sciences. 2013-2014.
- Member of the Search Committee for Research Assistant Scientist position, D. of Animal Sciences. 2014.
- Member of the Search Committee for Equine Physiology position, D. of Animal Sciences. 2012-2013.
- Member of the Search Committee for the department chair position of Department of Food Science and Human Nutrition. 2011 – 2012.
- IFAS International Awards Evaluation committee. Oct. 2012 – Dec 2012.