

**Rajesh Jha**  
**College of Tropical Agriculture and Human Resilience**  
 Human Nutrition, Food and Animal Sciences  
 FTE Distribution: 50% I; 40% R; 10% E

**Education**

<u>Degree</u>	<u>University</u>	<u>Major</u>
B. V. Sc & A. H.	Tribhuvan University, Nepal	Veterinary Science & Animal Husbandry
M. Sc.	Wageningen University, the Netherlands	Livestock and Food Sector
Ph. D.	University of Saskatchewan, Canada	Animal Nutrition

**Professional Appointments**

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Professor of Animal Nutrition	University of Hawaii at Manoa	2021 to date
Visiting Professor	University of Applied Sciences, Bingen, Germany	2022 (June to December)
Associate Professor of Animal Nutrition	University of Hawaii at Manoa	2017 to 2021
Visiting Professor	Kyoto University, Japan	2019 (summer)
Assistant Professor of Animal Nutrition	University of Hawaii at Manoa	2012 to 2017
Research Associate	University of Alberta, Canada	2009 to 2012
Graduate Research Assistant	Prairie Swine Center/ University of Saskatchewan, Canada	2006 to 2009
Livestock Expert ( <i>Concurrent position</i> )	WIN project / Food and Agriculture Organization (FAO), Nepal	2001 to 2003
Livestock Development Officer	Dept. of Livestock Services, Govt. of Nepal	1997 to 2004
Technical Officer	Pakhribas Agriculture Centre, Nepal	1997

**Courses Taught**

Course Number and Title (credits)

- ANSC 244 / FSHN 244: Comparative Nutrition (3 cr)
- ANSC 321: Applied Animal Nutrition (3 cr)
- ANSC 491: Topics in Animal Sciences (3 cr)
- ANSC 642: Advanced Animal Nutrition (3 cr)
- ANSC 682: Advanced Topics in Animal Sciences (3 cr)
- FSHN 682: Topics in Nutritional Sciences – Monogastric Nutrition and Gut Health (3 cr)

**Publications (reverse chronological order)**

Books

1. P. M. Villa, **R. Jha**, I. M. Zainuddin, and A. M. F. Nogueraeds, Eds. (2024). The Cassava Crop: Management, Production and Food Security. Nova Science Publishers, Hauppauge, NY. [\[LINK\]](#)
2. F. Hassan, M. Alagwany, and **R. Jha**, Eds. (2022). Interplay of nutrition and genomics: Potential for improving performance and health of poultry. Lausanne: Frontiers Media SA. ISBN: 978-2-83250-523-6. [\[LINK\]](#)
3. X. Kong and **R. Jha**, Eds. (2022). Parent-offspring Integration: Gut Health and Physiological Functions of Animals. Lausanne: Frontiers Media SA. ISBN: 978-2-88974-398-8. [\[LINK\]](#)
4. S. W. Kim and **R. Jha**, Eds. (2021). Nutritional Intervention for the Intestinal Health of Young Monogastric Animals. Lausanne: Frontiers Media SA. ISBN: 978-2-88966-730-7. [\[LINK\]](#)

Book Chapters/ Editorials (\*corresponding author, underlined authors are my mentees)

1. **R. Jha\*** and T. A. Woyengo (2022). Cereal Grains, Cereal Grain Byproducts, and Other Energy Sources in Swine Diets. In: L. I. Chiba (Ed.), Sustainable Swine Nutrition (2nd Ed.). Wiley-Blackwell Publisher, Hoboken, NJ. eISBN: 978-1-119-583-939-8. pp. 285-306. [\[LINK\]](#)
2. F. Hassan\*, M. Alagwany, and **R. Jha** (2022). Editorial: Interplay of nutrition and genomics: Potential for improving performance and health of poultry. Frontiers in Physiology- Avian Physiology, 13:1030995. [\[PDF\]](#)
3. X. Kong and **R. Jha\*** (2022). Editorial: Parent-offspring Integration: Gut Health and Physiological Functions of Animals. Frontiers in Veterinary Science, 8:808074. [\[PDF\]](#)

4. R. Das, P. Mishra, and **R Jha\***(2021). In ovo feeding as a tool for improving performance and gut health of poultry: a review. In: X. Kong and **R. Jha** (Eds). Parent-offspring Integration: Gut Health and Physiological Functions of Animals. *Frontiers in Veterinary Science*, 8:754246. [\[PDF\]](#).
5. **R. Jha\*** and S. W. Kim (2021). Editorial: Nutritional Intervention for the Intestinal Health of Young Monogastric Animals. *Frontiers in Veterinary Science*, 8:668563. [\[PDF\]](#).
6. **R. Jha\***, A. K. Singh, S. Yadav, J. F. D. Berrocoso, and B. Mishra (2019). Early nutrition programming (in ovo- and post hatch-feeding) as a strategy to modulate gut health of poultry. In: S. W. Kim and **R. Jha** (Eds.), *Nutritional Intervention for the Intestinal Health of Young Monogastric Animals*. *Frontiers in Veterinary Science*, 6:82. [\[PDF\]](#).
7. B. Mishra\* and **R. Jha** (2019). Oxidative stress in poultry gut: Potential challenges and intervention. In: Co-Eds: S. W. Kim, and **R. Jha**. In: S. W. Kim and **R. Jha** (Eds.), *Nutritional Intervention for the Intestinal Health of Young Monogastric Animals*. *Frontiers in Veterinary Science*, 6:60. [\[PDF\]](#).
8. **R. Jha\***, J. M. Foughse, U. P. Tiwari, L. Li, and B. P. Willing (2019). Dietary fibers and intestinal health of monogastric animals. In: S. W. Kim, and **R. Jha** (Eds.), *Nutritional Intervention for the Intestinal Health of Young Monogastric Animals*. *Frontiers in Veterinary Science*, 6:48. [\[PDF\]](#).
9. P. J. Moughan\*, W. Miner-Williams, and **R. Jha** (2018). Protein digestion- amino acid digestibility. In: P. J. Moughan, and W. Hendriks (Eds.), *Feed Evaluation Science*. Wageningen Academic Publishers, the Netherlands, eISBN: 978-90-8686-854-4. pp. 173-217. [\[LINK\]](#)

#### Conference Proceedings (\*corresponding author, underlined authors are my mentees)

1. N. Stoehr\*, J. G. Brettschneider, L. Schneider, J. Stracke, **R. Jha**, and G. Dusel (2025). Live black soldier fly larvae as a substitute for soybean meal and oil in free-range laying hens' diet– effects on laying performance and egg quality parameters. *Proceedings of BOKU-Symposium (Feb 27, 2025)*, Vienna, Austria. pp. 124-126. [\[PDF\]](#)
2. N. Stoehr\*, T. Stiem, L. Schneider, J. Stracke, **R. Jha**, and G. Dusel (2025). Feeding live black soldier fly larvae to suckling piglets increases their voluntary feed intake and enables a higher dietary diversity. *Proceedings of BOKU-Symposium (Feb 27, 2025)*, Vienna, Austria. pp. 45-47. [\[PDF\]](#)
3. N. Stoehr, F. Geisel, J. G. Brettschneider, L. Schneider, **R. Jha**, and G. Dusel\* (2024). Feeding live black soldier fly larvae affects growth performance and fatty acid profile in muscle and liver of broiler chickens. *Proceedings of BOKU-Symposium (Feb 29, 2024)*, Vienna, Austria. pp. 43-46. [\[PDF\]](#)
4. **R. Jha\*** and B. Mishra (2023). Feeding and nutritional strategies for commercial poultry dealing with climate changes. *Proceedings of 23<sup>rd</sup> European Symposium on Poultry Nutrition (June 21-24, 2023)*, Rimini, Italy. pp. 26-29. [\[PDF\]](#)
5. N. Stohr, P. Harig, R. Ibrahim, K. Schuh-van Graevenitz, **R. Jha**, and G. Dusel\* (2023). Black soldier fly larvae (*Hermetia illucens*) meal in low inclusion rates is a suitable protein source for broiler chickens. *Proceedings of BOKU-Symposium (Apr 20, 2023)*, Vienna, Austria. pp. 135-139. [\[PDF\]](#)
6. **R. Jha\*** and U. P. Tiwari (2016). Rapid techniques in feed evaluation: Scope and limitations. *Proceedings of New Zealand Poultry Industry Conference, Vol 13 (Oct 4-5, 2016)*, Wellington, New Zealand. pp. 84-102.
7. Y. S. Kim\*, G. Fukumoto, M. Stevenson, M. Thorne, and **R. Jha** (2016). Carcass traits and tenderness of grass-fed beef from subtropical pastures in Hawaii. *Proceedings of 17<sup>th</sup> AAAP Animal Science Congress (Aug 22-25, 2016)*, Fukuoka, Japan. pp. 1525-1529.
8. U. P. Tiwari, and **R. Jha\*** (2015). Nutrient profile and in vitro digestibility of fresh and ensiled cassava in swine. *Proceedings of 3<sup>rd</sup> International Seminar on Animal Industry (Sept 17-18, 2015)*, Bogor, Indonesia. pp. 248-249.
9. R. T. Zijlstra\*, and **R. Jha** (2012). Novel swine feeding programs to enhance competitiveness and pork differentiation: Feedstuffs and Carbohydrates. *Advances in Pork Production*, 23:227-232.
10. R. T. Zijlstra\*, P. Regmi, L. Wang, and **R. Jha** (2011) In vitro techniques to describe energy digestibility and kinetics of carbohydrate degradation of feedstuffs in pigs. *Computerized Journal of Pig Production*, 18 (3):174-176.
11. R. T. Zijlstra\*, M. Swift, L. Wang, P. Regmi, J. H. Helm, and **R. Jha** (2010). Rapid methods for prediction of energy values of feedstuffs for pigs. *Proceedings of Western Nutrition Conference (Sept 21-23, 2010)*, Saskatoon, SK, Canada. pp. 235-242.
12. **R. Jha\***, B. Pakhrin, and R. P. Thakur (1997). Reproductive problems in pigs in the eastern hills of Nepal. *Proceedings of Second National Workshop on Livestock and Fisheries Research (Sept 24-25, 1997)*, Lalitpur, Nepal. pp. 11-17.
13. I. P. Dhakal\*, **R. Jha**, and H. B. Basnet (1996). Common diseases of livestock at Pathivara VDC of Sankhuwasava. *Bulletin of Veterinary Science and Animal Husbandry Nepal*, 24:95-99.

Refereed Journal Publications (\*corresponding author, underlined authors are my mentees)

1. X. Ye, Y. Yang, Q. Yao, M. Huang, B. Balasubramanian, **R. Jha\***, and W. C. Liu (2025). The ameliorative role of phlorotannin on aflatoxin B1-induced liver oxidative stress and mitochondrial injury is related to the activation of Nrf2 and Nrf1 signaling pathways in broilers. *Journal of Animal Science and Biotechnology* (*accepted* on Apr 9, 2025).
2. L. Schneider\*, N. Stoehr, B. Kisinga, S. Cord-Landwehr, E. Schulte-Geldermann, B. M. Moerschbacher, K. Eder, **R. Jha**, and G. Dusel (2025). Dietary protein levels in isoenergetic diets affect the performance, nutrient utilization and retention of nitrogen and amino acids of *Hermetia illucens* (L.) (Diptera: Stratiomyidae) larvae. *Insects*, 16 (3):240. [\[PDF\]](#)
3. S. Al Amaz, S. Wasti, M. R. Adnan, A. Chaudhary, **R. Jha**, and B. Mishra\* (2025). Dried plum supplementation enhanced the expression of liver antioxidant capacity, metabolism, and epigenetic-related gene markers in broiler chickens under heat stress conditions. *Poultry Science*, 104:104911. [\[PDF\]](#).
4. M. Madesh, J. Yan, G. Jinan, P. Hu, I. H. Kim, H-Y. Liu, W. Ennab, **R. Jha\*** and D. Cai (2025). Phytochemicals in swine nutrition and their effects on growth performance, nutrient utilization, gut health, and meat quality: a review. *Stress Biology*, 5:11. [\[PDF\]](#)
5. S. Al Amaz, A. H. Shahid, **R. Jha**, and B. Mishra\* (2025). Early embryonic thermal programming and post-hatch flavonoid (*Scutellaria baicalensis*) supplementation enhanced immune response markers in broiler chickens. *Frontiers in Veterinary Science*, 12:1537116. [\[PDF\]](#)
6. Z. X. Zhao, Y. M. Yuan, Z. H. Zhao, Q. H. Yao, X. Q. Ye, Y. Y. Wang, H. M. Liu, **R. Jha**, B. Balasubramanian, and W. C. Liu\* (2024). Phlorotannin alleviates liver injury by regulating redox balance, apoptosis, and ferroptosis of broilers under heat stress. *Antioxidants*, 13:1048. [\[PDF\]](#)
7. L. Dang, D. Li, Q. Mu, N. Zhang, C. Li, M. Wang, H. Tian, **R. Jha\***, and C. Li (2024). Youth-derived *Lactobacillus rhamnosus* with Prebiotic xylo-oligosaccharide exhibits anti-hyperlipidemic effects as a novel synbiotic. *Food Research International*, 195:114976. [\[PDF\]](#)
8. C. Li, D. Li, H. Liu, N. Zhang, L. Dang, M. Wang, H. Tian, **R. Jha**, and C. Li\* (2024). Synbiotic supplementation with Xylooligosaccharide derived probiotic *Lactobacillus gasseri* and prebiotic mixture exerts antidiabetic effects via collaborative action. *Food Bioscience*, 61:104948. [\[PDF\]](#)
9. S. Al Amaz, A. H. Shahid, **R. Jha**, and B. Mishra\* (2024). Pre-hatch thermal manipulation of embryos and post-hatch baicalein supplementation increased liver metabolism and muscle proliferation in broiler chickens. *Poultry Science*, 103:104155. [\[PDF\]](#)
10. R. Das, P. Mishra, B. Mishra, and **R. Jha\*** (2024). Effects of in ovo feeding of xylobiose and xylotriose on growth performance, carcass traits, ileal histomorphometry, and immune-related gene expression in broilers. *Animal Feed Science and Technology*, 313:115998. [\[PDF\]](#)
11. H. Wang, X. He, J. Li, J. Wu, S. Jiang, H. Xue, J. Zhang, **R. Jha**, and R. Wang\* (2024). Lactic acid bacteria fermentation improves physicochemical properties, bioactivity, and metabolic profiles of *Opuntia ficus-indica* fruit juice. *Food Chemistry*, 453:139646. [\[PDF\]](#)
12. R. Das, P. Mishra, B. Mishra, and **R. Jha\*** (2024). Effect of in ovo feeding of xylobiose and xylotriose on plasma immunoglobulin, cecal metabolites production, microbial ecology, and metabolic pathways in broiler chickens. *Journal of Animal Science and Biotechnology*, 15:62. [\[PDF\]](#)
13. Y. Liu, X. Zhou, X. Hu, E. Li, Y. Fang, H. Xue, C. Li, J. Zhang, **R. Jha**, and R. Wang\* (2024). Bioaffinity ultrafiltration combined with UPLC-ESI-QTrap-MS/MS rapid screening of potential xanthine oxidase inhibitors in *Paederia foetida* L. leaf extract. *Arabian Journal of Chemistry*, 17:105706. [\[PDF\]](#)
14. S. Al Amaz, A. H. Shahid, A. Chaudhary, **R. Jha**, and B. Mishra\* (2024). Embryonic thermal manipulation reduces hatch time, increases hatchability, thermotolerance, and liver metabolism in broiler embryos. *Poultry Science*, 103:103527. [\[PDF\]](#)
15. S. Al Amaz, A. Chaudhary, P. L. Mahato, **R. Jha**, and B. Mishra\* (2024). Pre-hatch thermal manipulation of embryos and post-hatch baicalein supplementation mitigated heat stress in broiler chickens. *Journal of Animal Science and Biotechnology*, 15:8. [\[PDF\]](#)
16. P. L. Mahato, T. Weatherby, K. Ewell, **R. Jha**, and B. Mishra\* (2024). Scanning electron microscope-based evaluation of eggshell quality. *Poultry Science*, 103:103428. [\[PDF\]](#)
17. P. Mishra, R. Das, A. Chaudhary, B. Mishra, and **R. Jha\*** (2024). Effects of microalgae, with or without xylanase supplementation, on serum immunoglobulins, cecal short-chain fatty acids, microbial diversity, and metabolic pathways of broiler chickens. *Poultry Science*, 103:103325. [\[PDF\]](#)
18. W. C. Liu, H. M. Liu, Y. Y. Wang, Z. X. Zhao, B. Balasubramanian, and **R. Jha\*** (2023). Effects of *Enteromorpha prolifera* polysaccharides on growth performance, intestinal barrier function, and cecal microbiota in yellow-feathered broilers under heat stress. *Journal of Animal Science and Biotechnology*, 14:132. [\[PDF\]](#)

19. [P. Mishra](#), [R. Das](#), [A. Chaudhary](#), B. Mishra, and [R. Jha\\*](#) (2023). Effects of microalgae, with or without xylanase supplementation, on growth performance, organs development, and gut health parameters of broiler chickens. *Poultry Science*, 102:103056. [\[PDF\]](#)
20. [A. Chaudhary](#), [P. Mishra](#), [S. Amaz](#), [P. L. Mahato](#), [R. Das](#), [R. Jha](#), and B. Mishra\* (2023). Dietary supplementation of microalgae mitigates the negative effects of heat stress in broilers. *Poultry Science*, 102:102958). [\[PDF\]](#)
21. [Y. Wu](#), [R. Jha](#), A. Li, H. Liu, Z. Zhang, C. Zhang, Q. Zhai, and J. Zhang\* (2022). Probiotics (*Lactobacillus plantarum* HNU082) supplementation relieves ulcerative colitis by affecting intestinal barrier functions, immunity-related genes expression, gut microbiota, and metabolic pathways in mice. *Microbiology Spectrum*, 10(6):e01651-22. [\[PDF\]](#)
22. [X. Zhang](#), [S. Zhang](#), D. Li, N. Zhang, Y. Wang, M. Wang, [R. Jha\\*](#), and C. Li (2022). Niacin inhibits post-acidification of yogurt based on the mining of LDB\_RS00370 biomarker gene. *Food Research International*, 162:111929. [\[PDF\]](#)
23. [R. Mishra](#), [R. Jha](#), B. Mishra, and Y. S. Kim\* (2022). Maternal immunization against myostatin suppresses post-hatch chicken growth. *PLOS ONE*, 17(10): e0275753. [\[PDF\]](#)
24. [R. Mishra](#), B. Mishra, Y. S. Kim, and [R. Jha\\*](#) (2022). Practices and issues of molting programs for laying hen: A review. *British Poultry Science*, 63(5):720-729. [\[PDF\]](#)
25. W. C. Liu, [M. Y. Huang](#), B. Balasubramanian, and [R. Jha\\*](#) (2022). Heat stress affects jejunal immunity of yellow-feathered broilers and is potentially mediated by the microbiome. *Frontiers in Physiology- Avian Physiology*, 13:913696. [\[PDF\]](#)
26. [U. P. Tiwari](#), R. K. Mandal, K. Neupane, B. Mishra, and [R. Jha\\*](#) (2022). Starchy and fibrous feedstuffs differ in their in vitro digestibility and fermentation characteristics and differently modulate gut microbiota of swine. *Journal of Animal Science and Biotechnology*, 13:53. [\[PDF\]](#)
27. W. C. Liu, [Z. Y. Pan](#), [Y. Zhao](#), Y. Guo, S. J. Qiu, B. Balasubramanian, and [R. Jha\\*](#) (2022). Effects of heat stress on productive performance, redox status, intestinal morphology and barrier-related gene expression, cecal microbiome, and metabolome in indigenous broiler chickens. *Frontiers in Physiology- Avian Physiology*, 13:890520. [\[PDF\]](#)
28. [A. K. Singh](#), [U. P. Tiwari](#), B. Mishra, and [R. Jha\\*](#) (2022). Effects of in ovo delivered xylo- and mannan-oligosaccharides on growth performance, intestinal immunity, cecal short-chain fatty acids, and cecal microbiota of broilers. *Journal of Animal Science and Biotechnology*, 13:13. [\[PDF\]](#)
29. [A. K. Singh](#), B. Mishra, M. R. Bedford, and [R. Jha\\*](#) (2021). Effects of supplemental xylanase and xylooligosaccharides on production performance and gut health variables of broiler chickens. *Journal of Animal Science and Biotechnology*, 12:98. [\[PDF\]](#)
30. [S. Wasti](#), [N. Sah](#), C. N. Lee, [R. Jha](#), and B. Mishra\*. Dietary supplementation of alpha-lipoic acid mitigates the negative effects of heat stress in poultry. *PLOS ONE*, 16(7): e0254936. [\[PDF\]](#)
31. [S. H. Lee](#), [Y. B. Kim](#), [D. H. Kim](#), D. W. Lee, H.G. Lee, [R. Jha](#), and K. W. Lee\* (2021). Dietary soluble flaxseed oils as a source of omega-3 polyunsaturated fatty acids for laying hens. *Poultry Science*, 100:101276. [\[PDF\]](#)
32. [Z. Zhang](#), [Y. Wang](#), Y. Zhang, K. Chen, H. Chang, C. Ma, S. Jiang, D. Huo, W. Liu, [R. Jha](#), and [J. Zhang\\*](#) (2021). Synergistic effects of the jackfruit seed sourced resistant starch and *Bifidobacterium pseudolongum* subsp. *globosum* on suppression of hyperlipidemia in mice. *Foods*, 10:1431. [\[PDF\]](#)
33. [S. Yadav](#), [K. D. Caliboso](#), [J. E. Nanquil](#), [J. Zhang](#), H. Kae, K. Neupane, B. Mishra, and [R. Jha\\*](#) (2021). Cecal microbiome profile of Hawaiian feral chickens and pasture-raised broiler (commercial) chickens determined using 16S rRNA amplicon sequencing. *Poultry Science*, 100:101181. [\[PDF\]](#)
34. [A. K. Singh](#), R. K. Mandal, M. R. Bedford, and [R. Jha\\*](#) (2021). Xylanase improves growth performance, enhances cecal short chain fatty acids production, and increases the relative abundance of fiber fermenting cecal microbiota in broilers. *Animal Feed Science and Technology*, 277:114956. [\[PDF\]](#)
35. [N. Sah](#), [D. L. Keuhu](#), V. Khadka, Y. Deng, [R. Jha](#), [S. Wasti](#), and B. Mishra\* (2021). RNA sequencing-based analysis of the magnum tissues revealed the novel genes and biological pathways involved in the egg-white formation in the laying hen. *BMC Genomics*, 22:318. [\[PDF\]](#)
36. [R. Jha\\*](#) and [P. Mishra](#) (2021). Dietary fiber in poultry nutrition and their effects on nutrient utilization, performance, gut health, and on the environment: A review. *Journal of Animal Science and Biotechnology*, 12:51. [\[PDF\]](#)
37. [Y. Zhao](#), B. Balasubramanian, [Y. Guo](#), S. J. Qiu, and [R. Jha\\*](#), and W. C. Liu\* (2021). Dietary *Enteromorpha* polysaccharides supplementation improves breast muscle rate and is associated with modification of mRNA transcriptome in broiler chickens. *Frontiers in Veterinary Science*, 8:663988. [\[PDF\]](#)

38. [F. X. G. Jaramillo](#), [D. H. Kim](#), [S. H. Lee](#), S. K. Kwon, **R. Jha**, and K. W. Lee\* (2021). Role of oregano and Citrus species-based essential oil preparation for the control of coccidiosis in broiler chickens. *Journal of Animal Science and Biotechnology*, 12:47. [\[PDF\]](#)
39. [S. Wasti](#), [N. Sah](#), [A. K. Singh](#), C. N. Lee, **R. Jha**, and B. Mishra\* (2021). Dietary supplementation of dried plum: a novel strategy to mitigate heat stress in broiler chickens. *Journal of Animal Science and Biotechnology*, 12:58. [\[PDF\]](#)
40. [S. Yadav](#) and **R. Jha\*** (2021). Macadamia nut cake as an alternative feedstuff for broilers: Effect on the growth performance. *Animal Feed Science and Technology*, 275:114873. [\[PDF\]](#)
41. A. R. Ganesan, B. Balasubramanian, S. Park, **R. Jha**, I. Andretta, A. G. Bakare, and I. H. Kim\* (2021). Ochratoxin A: Carry-over from animal feed into livestock and the mitigation strategies. *Animal nutrition*, 7:56-63. [\[PDF\]](#)
42. J. S. Odani\*, E. M. Sox, W. Coleman, **R. Jha**, and R. Malik (2021). First documented cases of canine neuroangiostrongyliasis due to *Angiostrongylus cantonensis* in Hawaii. *Journal of the American Animal Hospital Association*, 57(1):42-46. [\[PDF\]](#)
43. D. H. Kim, H. Sadakane, Y. Nishikiori, M. Matsumura, M. Ikeda, Z. Diao, **R. Jha**, M. Murakami, T. Matsui, and M. Funaba\* (2020). Factors affecting expression and transcription of uncoupling protein 2 gene. *The Journal of Veterinary Medical Science*, 82(12):1734-1741. [\[PDF\]](#)
44. [W. C. Liu](#), Y. Guo, Z. H. Zhao, and **R. Jha\***, and [B. Balasubramanian\\*](#) (2020). Algae-derived polysaccharides promotes growth performance by improving antioxidant capacity and intestinal barrier function in broiler chickens. *Frontiers in Veterinary Science*, 7:601336. [\[PDF\]](#)
45. **R. Jha\***, [R. Das](#), [S. Oak](#), and [P. Mishra](#) (2020). Probiotics (Direct-fed microbials) in poultry nutrition and their effects on nutrient utilization, growth and laying performance, and gut health: A systematic review. *Animals*, 10(10):1863. (Received [Best Paper Award 2022](#)) [\[PDF\]](#)
46. [J. Zhang](#), [K. Cai](#), [R. Mishra](#), and **R. Jha\*** (2020). In ovo supplementation of chitooligosaccharide and chlorella polysaccharide affect cecal microbial community, metabolic pathways, and fermentation metabolites in broiler chickens. *Poultry Science*, 99:4476-4785. [\[PDF\]](#)
47. [H. T. Nhan\\*](#), T. Q. Nhu, P. M. Duc, L. H. Jung, H. Ako, and **R. Jha** (2020). Effects of dietary arachidonic acid on final maturation, spawning, and composition of gonad of black sea urchin *Diadema setosum* (Leske, 1778). *Aquaculture Nutrition*, 26:1771–1779. [\[PDF\]](#)
48. [U. P. Tiwari](#), S. A. Fleming, M. S. A. Rasheed, **R. Jha**, and R. N. Dilger\* (2020). The role of oligosaccharides and polysaccharides of xylan and mannan in gut health of monogastric animals. *Journal of Nutritional Science*, 9 (e21):1-9. [\[PDF\]](#)
49. [S. Wasti](#), [N. Sah](#), [D. L. Kuehu](#), Y. S. Kim, **R. Jha**, and B. Mishra\* (2020). Expression of follistatin is associated with egg formation in the oviduct of laying hens. *Animal Science Journal*, e13396:1-8. [\[PDF\]](#)
50. [C. Li](#), Z. Niu, M. Zou, S. Liu, M. Wang, X. Gu, H. Lu, H. Tian\*, and **R. Jha\*** (2020). Probiotics, prebiotics, and synbiotics regulate the intestinal microbiota differentially and restore the relative abundance of specific gut microorganisms. *Journal of Dairy Science*, 103:5816–5829. [\[PDF\]](#)
51. P. Adhikari\*, A. Kiess, R. Adhikari, and **R. Jha** (2020). Nutritional strategies to control avian coccidiosis and necrotic enteritis: A focus on intestinal health. *The Journal of Applied Poultry Research*, 29:515-534. [\[PDF\]](#)
52. [A. Needham](#), **R. Jha**, and N. K. Lincoln\* (2020). The Response of Breadfruit Nutrition to Local Climate and Soil: A Review. *Journal of Food Composition and Analysis*, 88:103451. [\[PDF\]](#)
53. J. L. Yanez, T. A. Woyengo, **R. Jha**, T. A. T. G. van Kempen, and R. T. Zijlstra (2019). Nutrient digestibility of soybean products in grower-finisher pigs. *Journal of Animal Science*, 97 (11):4598-4607. [\[PDF\]](#)
54. B. J. Kerr, P. E. Urriola, **R. Jha**, J. Thomson, S. M. Curry, and G. C. Shurson (2019). Amino acid composition and digestible amino acid content in animal protein by-product meals fed to growing pigs. *Journal of Animal Science*, 97 (11):4540-4547. [\[PDF\]](#)
55. [A. K. Singh](#), [U. P. Tiwari](#), Y. Dersjant-Li, A. Awati, and **R. Jha\*** (2019). Effect of a combination of xylanase, amylase, and protease and probiotics on major nutrients including amino acids and non-starch polysaccharides utilization in broilers fed different level of fibers. *Poultry Science*, 98:5571-5581. [\[PDF\]](#)
56. [S. Yadav](#), B. Mishra, and **R. Jha\*** (2019). Cassava (*Manihot esculenta*) root chips inclusion in broiler chicken diets: effects on growth performance, ileal histomorphology and cecal volatile fatty acid production. *Poultry Science*, 98:4008-4015. [\[PDF\]](#)
57. [J. Yang](#), **R. Jha**, W. L. Zhang and I. H. Kim\* (2019). Effects of chitooligosaccharide supplementation on egg production, egg quality and blood profiles in laying hens. *Indian Journal of Animal Research*, 53:1199-1204. [\[PDF\]](#)
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50. A. K. Singh, R. Kida, M. Bedford, and **R. Jha** (2017). Effect of xylanase on growth performance and cecal short-chain fatty acid production in broilers fed different levels of fiber. *Poultry Science*, 96 (E-suupl. 1):160 (abstract # 435P).
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52. S. Yadav, K. Neupane and **R. Jha** (2017). Macadamia nut cake as an alternative feedstuff for broiler chickens: effect on growth performance and gut microbiota profile. *Poultry Science*, 96 (E-suupl. 1):186 (abstract # 509P).
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54. J. D. Berrocoso, A. K. Singh, and **R. Jha** (2016). Effect of macadamia nut cake inclusion on growth performance of pasture raised broiler chickens. Proceedings of the World's Poultry Congress (Sept 5-9, 2016), Beijing, China. pp. 179 (Abstract # S1-0411).
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64. A. K. Singh, J. D. Berrocoso, Y. Dersjant-Li, A. Awati, and **R. Jha** (2015). Effect of supplemental multi-enzymes and direct fed microbial on nutrients digestibility in broilers fed low and high fiber diets. *Poultry Science*, 94 (E-suppl. 1):9 (Abstract #22).
65. A. K. Singh, J. D. Berrocoso, U. P. Tiwari, Y. Dersjant-Li, A. Awati, and **R. Jha** (2015). Effect of supplemental multi-enzymes on growth performance of broilers fed low and high fiber diets. *Poultry Science*, 94 (E-suppl. 1):129 (Abstract #386P).
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82. **R. Jha**, J. Li, M. R. Bedford, C. R. Christensen, T. Vasanthan, and R. T. Zijlstra (2012). Enzymes enhance degradation of DDGS, revealed by in vitro gas production and microscopic examination. *Advances in Pork Production*, 23 (Abstract # 26).
83. **R. Jha** and R. T. Zijlstra (2011). Evaluation of fermentation characteristics and volatile fatty acids production of unique fiber and starch sources using an in vitro model of the pig large intestine. *Journal of Animal Science*, 89 (E-Suppl. 2):129 (Abstract # 251).
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91. R. T. Zijlstra, **R. Jha**, M. G. Young, J. F. Patience, E. Beltranena, and J. K. Htoo (2010). Effects of dietary crude protein and inclusion of co-products on growth performance and carcass characteristics of grower-finisher pigs. Journal of Animal Science, 88 (E-Suppl. 2):554 (Abstract # 678).
92. **R. Jha**, J. Bindelle, B. Rossnagel, A. Van Kessel, and P. Leterme (2009). In vitro fibre fermentation characteristics of specialty ingredients with varying NSP levels. Proceedings of Western Nutrition Conference (Sept 23-24, 2009), Winnipeg, MB, Canada. pp. 308.
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94. **R. Jha**, J. Bindelle, B. Rossnagel, A. Van Kessel, and P. Leterme (2009). In vitro evaluation of the fermentation characteristics in the pig intestines of hulless barleys differing in  $\beta$ -glucan content. Journal of Animal Science, 87 (E-Suppl. 3):103 (Abstract # 210).
95. **R. Jha**, P. Kish, A. Van Kessel, and P. Leterme (2009). Feed ingredients differing in fermentable fibre content affect nitrogen excretion and fermentation metabolites in weaned pigs. Advances in Pork Production, 20 (Abstract # 8).
96. R. Pieper, **R. Jha**, P. Leterme, B. Rossnagel, W. Souffrant, and A. Van Kessel (2008). Effect of hulless barley varieties with different  $\beta$ -glucan content on intestinal microbiota in pigs. Proceedings of the Society of Nutrition Physiology (April 1-3, 2008), Gottingen, Germany. **17:102**.
97. **R. Jha**, R. Pieper, B. Rossnagel, A. Van Kessel, and P. Leterme (2008). Digestibility and fermentation parameters of barleys and oats differing in  $\beta$ -glucan content in the pig intestines. Journal of Animal Science, 86 (E-Suppl. 3):66 (Abstract # 96).
98. R. Pieper, **R. Jha**, P. Leterme, B. Rossnagel, W. Souffrant, and A. Van Kessel (2008). Effect of barley and oats  $\beta$ -glucans on intestinal microbiota in the pig. Journal of Animal Science, 86 (E- Suppl. 3):104 (Abstract # 217).
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100. R. Pieper, **R. Jha**, A. Van Kessel, B. Rossnagel, W. Souffrant, and P. Leterme (2008). Effect of hulless barleys differing in  $\beta$ -glucan content on the intestinal ecology of weaned pigs. Advances in Pork Production, 19 (Abstract # 12).
101. K. Mai, **R. Jha**, R. P. Kwakkel, A. F. B. van der Poel, and M. W. A. Verstegen (2006). Effect of diet structure, conformation and acidification on performance of broilers. Proceedings of 31<sup>st</sup> Annual Meeting of Dutch Speaking Nutritionists (Apr 7, 2006), Rotterdam, The Netherlands. **pp. 56-57**.
102. **R. Jha**, G. N. Gongal, and S. N. Mahato (1999). A retrospective study of animal rabies in Nepal. Proceedings of 6<sup>th</sup> National Veterinary Conference (Sept 22-24, 1999), Kathmandu, Nepal.

### **Leadership Roles (Committees, Boards, Advisory, etc.)**

#### **Professional leadership roles / service**

- **Editorial board member**
  - Section Editor: [Poultry Science- Metabolism and Nutrition](#) (2019 to date)
  - Associate Editor: [Animal Nutrition- Poultry Nutrition](#) (2022 to date)
  - Associate Editor: [Frontiers in Veterinary Science- Animal Nutrition and Metabolism](#) (2018 to date)
  - Associate Editor: [Animal Science Journal](#) (2018 to date)
  - Guest Associate Editor: [Frontiers in Physiology- Avian Physiology](#) (2021 to date)
  - Editor: [Journal of Animal Science and Biotechnology](#) (2021 to date)
- **Ad-hoc reviewer of scientific journals:**
  - Poultry Science, Journal of Animal Science, Animal Feed Science and Technology, Animal.
- **Ad-hoc reviewer of fellowship proposal** for the Fulbright Commission.

- **Ad-hoc reviewer of grant proposals** for different organizations, both from the US and abroad. A few to name are UG Belgium, Teagasc Ireland, NWO Netherlands, NCN Poland, CPRC Canada, NSERC Canada, OMAFRA Canada, EFC Canada, RDAR Canada, Virginia Tech University, and the University of Wisconsin- Milwaukee.
- **External Evaluator of Faculty Promotion application to Full Professor (2025):** Scotland's Rural College (SRUC), UK
- **External Evaluator of Faculty Promotion application to Associate Professor (2024):** Curtin University, Australia
- **External Evaluator of Faculty Promotion application to Full Professor (2023):** University of California Davis, US
- **External Evaluator of Faculty Promotion application to Full Professor (2022):** Seoul National University, South Korea
- **External Evaluator of Faculty Tenure and Promotion application (2021):** University of Saskatchewan, Saskatoon, Canada
- **External Evaluator of Faculty Tenure and Promotion application (2018):** University of Agriculture Peshawar, Pakistan
- **External Examiner of PhD Dissertation- 1 (2025):** University of Manitoba, Canada
- **External Examiner of PhD Dissertation- 1 (2025):** Central Queensland University, Australia
- **External Examiner of PhD Dissertation- 1 (2025):** Wageningen University, The Netherlands
- **External Examiner of PhD Dissertation- 1 (2024):** The University of the South Pacific, Fiji Islands
- **External Examiner of PhD Dissertation- 1 (2021):** Dalhousie University, Canada
- **External Examiner of PhD Dissertation- 1 (2021):** University of New England, Australia
- **External Examiner of PhD Dissertation- 1 (2021):** University of Manitoba, Canada
- **External Examiner of PhD Dissertation- 1 (2021):** University of Guelph, Canada
- **External Examiner of PhD Dissertation- 1 (2020):** Central Queensland University, Australia
- **External Examiner of PhD Dissertation- 1 (2020):** University of Agriculture Peshawar, Pakistan
- **External Examiner of PhD Dissertation- 1 (2019):** University of Manitoba, Canada
- **External Examiner of PhD Dissertation- 1 (2019):** University of New England, Australia
- **External Examiner of PhD Dissertation- 1 (2017):** University of Queensland, Australia
- **External Examiner of MS Thesis- 1 (2022):** Rhodes University, South Africa
- **External Examiner of MS Thesis- 3 (2017, 2018, 2022):** The University of the South Pacific, Fiji Islands
- **Expert Volunteer:** Served as an Expert Volunteer in Myanmar (June 1-19, 2016), and Nepal (Dec 9-31, 2016 and Mar 15 - Apr 1, 2018) for the USAID/Farmers to Farmers program through Winrock International
- **Chair:** Comparative Gut Physiology Program Committee of ASAS-CSAS-SSASAS Annual Meeting & Trade Show (July 14-18, 2021), Louisville, KY.
- **Member:** NE-1442/NE1942/NE2442: Improving Sustainable Poultry Production through Collaborative Research and Outreach (since 2017 to date)
- **Chair:** NCCC042- Committee on Swine Nutrition, USDA (2017)
- **Vice Chair:** NCCC042- Committee on Swine Nutrition, USDA (2016)
- **Secretary:** NCCC042- Committee on Swine Nutrition, USDA (2015)
- **Member:** NCCC042- Committee on Swine Nutrition, USDA (since 2013)
- **Session Chair:** for different national and international conferences
- **Judging Science Fair and Debate Tournament:**
  - I have been serving as a judge for Science Fairs and Debate Tournaments at the Honolulu district level and the Hawaii State level regularly since 2012. So far, I have judged 30 such events in the last 10 years.
- **Member-** Planning Committee, Annual NACTA (North American Colleges and Teachers of Agriculture) Conference (June 14-17, 2011), University of Alberta, Canada
- **Member (2007-2008):** University Council, University of Saskatchewan, Canada
- **Course Councilor (2007-2008):** Graduate Students Association, University of Saskatchewan, Canada
- **Chairman (2004-2005):** International Student Panel, Wageningen University, the Netherlands
- **Coordinator (1995-1996):** Forum for Technical Students, TU, Nepal
- **Acting President (1994-1996):** Free Students Union, IAAS Rampur, TU, Nepal
- **Vice President (1992-1994):** Free Students Union, IAAS Rampur, TU, Nepal

**Institutional leadership roles/service**

**UHM- University level:**

- **Member:** Tenure and Promotion Committee (2023-24), UHM (evaluated nine dossiers)
- **Senator:** Manoa Faculty Senate (2017-19, 2019- 21), UH Manoa
- **Member:** Research Advisory Committee of Vice Chancellor for Research (2017-19), UH Manoa
- **Expert panelist:** New Faculty Orientation Program Fall 2015, UH Manoa
- **Reviewer of Grant / Scholarship Application:**
  - Marshall Scholarship, UH Manoa, Fall 2017.
  - Associated Students of the University of Hawaii at Manoa’s (ASUH) Spring 2012 and Fall 2015 Scholarship
  - Undergraduate Research Opportunity Program (UROP), UH Manoa Fall 2015 Scholarship
- **Judge:**
  - Oral presentation. UROP Spring Symposium (May 4, 2018), UH Manoa
  - Oral presentation. UROP Spring Symposium (May 6, 2016), UH Manoa
  - Oral presentation. UROP Spring Symposium (May 8, 2015), UH Manoa
  - Oral presentation. UROP Fall Symposium (Dec 12, 2014), UH Manoa
  - Oral presentation. UROP Spring Symposium (May 8, 2014), UH Manoa

**CTAHR- College level:**

- **Chair:** CTAHR Faculty Senate Executive Committee (2015-16)
- **Vice Chair:** CTAHR Senate Executive Committee (2014-2016)
- **Member:** Search committee for Interim Dean and Director of Research of CTAHR (2016), (*Hire was made*)
- **Member:** Search committee for Associate Dean and Associate Director of Research of CTAHR (2013-14), (*Hire was made*)
- **Member:** CTAHR Faculty Senate (2013-15), UH Manoa
- **Member:** CTAHR Faculty Senate Research Committee (2013-14), UH Manoa
- **Judge:**
  - Students’ Research Symposium (2013, 2014, 2015, 2016, 2017, 2018, 2019, and 2025)

**HNFAS- Department level:**

- **Graduate Chair:** Animal Science Program (Fall 2016 to date)
- **Member:** Department Promotion Committee (2018-2020, 2023-2025)
- **Chair:** Search Committee for Assistant Professor of Animal Production (2025)- *in progress*
- **Member:** Search Committee for Assistant Professor of Human Nutrition (2024-2025)- *in progress*
- **Chair:** Curriculum / Instruction Committee (2017-18, 2018-19, 2019-20)
- **Member:** Curriculum / Instruction Committee (2016-17, 2020 to date)
- **Chair:** Search committee for Assistant Aquaculture Specialist (2019-20) (*Position frozen with the University administration’s order after COVID-19 situation*)
- **Member:** Search committee for Assistant Professor of Nutritional Biochemistry (2019) (*Hire was made*)
- **Member:** Research and Extension Committee (2012-13, 2013-14, 2014-15, 2015-16)
- **Member:** Search committee for Assistant Professor of Physiology (2015-16), (*Hire was made*)
- **Mentor:** Graduate Students Organization of HNFAS, UH Manoa
- **Facilitator** to the “Internship program in Aquaponic System (4 months)” as a Nutrition Expert for six interns from Rota Island. The program was co-organized by HNFAS.

**Graduate Students**

<u>Category</u>	<u>Current Number of Students</u>	<u>Number Graduated (Career)</u>
Chair of Master’s Committees	2	9
Chair of PhD Committees	2	4
Member of Master’s Committees	1	14
Member of PhD Committees	4	6

## Grant Support

- **Co-PI-** Seedless *Leucaena* hybrids for sustainable silvopasture systems. USDA- Western SARE. **\$348,722** (2023-2026). PI- Dr. T. Idol, NREM, CTAHR. My share- 20%.
- **PI-** Effect of in ovo injection of xylo-oligosaccharides on growth performance, NSP digestibility, and gut health of broiler chickens supplemented from hatch with xylanase or a stimbiotic. AB Vista Feed Ingredients, UK. **\$64,576** (2022-23).
- **Co-PI-** Development and promotion of best management practices for poultry production in Hawaii. **\$33,060**. (2022-2023, PI- Dr. J. Odani, HNFAS, CTAHR). My share- 25%.
- **PI-** Sustainable and healthy poultry production in the post-antibiotic era. USDA- Multistate Fund. **\$66,189** (2021-23).
- **Co-PI-** Transcriptional regulation of egg formation in the oviduct of broiler breeder chicken. USDA-NIFA. **\$183,102** (2021-23, PI- Dr. B. Mishra, HNFAS, CTAHR). My share- 30%.
- **Co-PI-** Leveraging established research plantings of breadfruit (*Artocarpus altilis*) to understand drivers of fruit quality and its impacts on post-harvest processes and profits. USDA-AFRI. **\$479,302** (2020-25, PI- Dr. N Lincoln, TPSS, CTAHR). My share- 25%.
- **Co-PI-** Establishing a new aquaculture demonstration center at the University of Hawai'i that integrates Land Grant-Sea Grant research, extension and education services. **\$749,815** (2019-21) (PI- Dr Darren Lerner- Sea Grant College Program, UHM). my share- 25%.
- **PI-** Effect of a novel carbohydrase supplementation in corn/soy-based diets on growth performance and gut health of broiler chickens. DSM Nutritional Products AG, Switzerland. **\$94,676** (2018-20).
- **PI-** Nutrition programming of monogastric animals using alternative feedstuffs. USDA- Hatch and Smith-Lever Fund. **\$60,000** (2018-20).
- **PI-** Unrestricted gift from Ulupono Initiative Hawaii. **\$9,000** (2018).
- **Co-PI-** Maternal immunization against myostatin to enhance post-hatch broiler growth and muscle mass. USDA-Hatch fund. **\$76,316** (2018-20) (PI- Dr Y.S. Kim- HNFAS). my share- 30%.
- **Co-PI-** The use of local surveillance and analysis for Hawaii's poultry industry. Dept of Agriculture, State of Hawaii. **\$81,730** (2018-19, PI- Mr. M. Duponte). my share- 25%.
- **PI-** Effect of xylanase enzyme and prebiotic supplementation in diets on growth performance and intestinal health parameters of broiler chickens. AB Vista Feed Ingredients, UK. **\$28,091** (2017-18).
- **Co-PI-** Analysis of oviductal functions in laying hen. USDA- Hatch fund. **\$70,000** (2017-19) (PI- Dr B. Mishra - HNFAS). my share- 25%.
- **Co-PI-** Assessing and sharing breadfruit management practices. USDA- Western SARE. **\$220,812** (2017-20, PI- Dr. N. Lincoln). my share- 20%.
- **Co-PI-** Increasing Veterinary Services for Food/Production Animals in Hawai'i. USDA-NIFA, VSGP program. **\$169,304** (2017-20, PI- Dr. J. Odani). my share- 20%.
- **PI-** Evaluating local feedstuffs for their effects on performance and gut health of poultry and fish. Ulupono Initiative Hawaii. **\$107,000** (2017, Unrestricted gift).
- **PI-** Effect of xylanase on growth performance, cecal short chain fatty acids production and gut microbiota of broilers fed different levels of fiber. AB Vista Feed Ingredients, UK. **\$28,091** (2016, Unrestricted gift).
- **Co-PI-** The Effects of Stocking Density, Forage Environment, and Climate on Animal Performance in Tropical Forage Finish Beef Production. USDA- Smith Lever fund. **\$79,794** (2016-18, PI- Dr. M. S. Thorne). my share- 20%.
- **PI-** Nutritional evaluation of local feedstuffs for swine in Hawaii. USDA- Hatch and Smith Lever fund. **\$80,000** (2015-17).
- **PI-** Evaluation of nutrient content of Hawaii-grown avocados and identification of optimal harvest period. USDA-Hatch and Smith Lever fund. **\$78,352** (2015-17). I took over this project from Dr. M. Stewart who resigned in August 2016.
- **Co-PI-** The use of agricultural byproducts for animal feeds in Hawaii. USDA- Smith Lever fund. **\$38,200** (2015-17, PI- Mr. M. Duponte). my share- 40%.
- **Co-PI-** Potentials of the anti-MSTN proteins to enhance skeletal muscle growth of animals. USDA- Hatch Fund. **\$58,938** (2015-17, PI- Dr. Y. S. Kim). my share- 30%.
- **PI-** In vitro digestibility of animal protein meals. Evonik Corporation, USA. **\$17,500** (2015, Unrestricted gift).

- **PI-** Investigating lysine absorption in the cecum of the boiler chicken- a pilot study. Massey University, New Zealand. **\$10,000** (2015, Unrestricted gift).
- **PI-** Evaluation of fibrous feedstuffs for their nutritional and functional value. Ulupono Initiative, Hawaii. **\$20,000** (2015, Unrestricted gift).
- **PI-** Enhancing nutrient utilization of corn DDGS by feed enzymes in the pig intestine. National Pork Board. **\$83,205** (2015-16).
- **PI-** Effect of feed additives on digestibility and growth performance of broilers fed high and low NSP diets. Dupont/ Danisco Animal Nutrition, UK. **\$93,391** (2013-14).
- **PI-** Nutritional evaluation of feedstuffs for sustainable and healthy animal production in Hawaii. USDA- ARS collaborative research fund (Agreement no. 58-5320-3-022). **\$265,000** (2013-18).
- **Co-PI-** Enhancing the sustainability of grass-fed beef production through the improvement of carcass and meat quality characteristics of pasture-finished cattle in Hawaii. USDA- WSARE, Professional & Producer grant. **\$49,019** (2013-16, PI- Dr. Y. S. Kim). my share- 30%.
- **Co-PI-** Evaluation of grass-finished beef production in Hawaii: evaluation of soil fertility, forage quality, and herd genetics. Ulupono Initiative Hawaii. **\$167,053** (2013-15, PI- Dr. A. Stokes). my share- 30%.
- **PI-** Evaluation of alternative feedstuffs for utilization in swine diets. USDA- Hatch and Smith Lever Fund. **\$105,742** (2013-15).
- **Co-PI-** Rural Poultry- a complete program for small scale poultry production. USDA- Smith Lever fund. **\$20,320** (2013-15, PI- Mr. M. DuPonte). my share- 30%.
- **PI-** Strengthening animal nutrition research program at the Department of HNFAS, UHM. CTAHR Instrumentation grant. **\$42,440** (2013).
- **Co-PI-** Development of drought-tolerant forage. USDA- ARS collaborative research fund (Agreement no. 58-5320-3-022). **\$45,000** (2012-13, PI- Dr. B. Turano). my share- 40%.
- **PI-** Nutrient composition and digestibility of local feedstuffs in swine. USDA- ARS collaborative research fund (Agreement no. 58-5320-3-022). **\$45,000** (2012-13).
- **Co-PI-** Gut Reactions: A pilot study linking digestive health with ethnicity and chronic disease risk in Hawaii. USDA- Hatch and Smith Lever Fund. **\$40,200** (2012-14, PI- Dr. M. Stewart). my share- 30%.

## Presentations at Conferences

### Presentation as Invited Speaker

#### *International presentation (invited)*

1. Sustainable pig and poultry production: Issues and opportunities. Konkuk University (Oct 26, 2024), Seoul, South Korea
2. Functional value of microalgae in poultry diets. Feed Industry Innovation Forum (Aug 7-9, 2024), Beijing, China.
3. **Keynote speaker:** Reflecting on advances in poultry gut health. 5th Poultry Panorama (Feb 21-25, 2024), Ha Long Bay, Vietnam.
4. Role of dietary fibers in altering the gut microbial community of monogastric animals. International Conference on the Cooperation and Integration of Industry, Education, Research and Application (Dec 15-17, 2023, virtual), Baoding, China.
5. Fibers in poultry diet- antinutritional or functional component? Konkuk University (Oct 28, 2023), Seoul, South Korea.
6. **Keynote speaker:** Sustainable poultry production: Focus on nutrition and gut health. International Food Animal Conference (Aug 30 - Sept 1, 2023), Can Tho City, Vietnam.
7. **Keynote speaker:** Feeding and nutritional strategies for commercial poultry dealing with climate change. 23<sup>rd</sup> European Symposium on Poultry Nutrition (June 21-24, 2023), Rimini, Italy.
8. Nutritional strategies for sustainable pig and poultry production. Queen's University Belfast (June 19, 2023). Belfast, UK.
9. Fiber fermentation characteristics and their impacts on gut health of pigs and poultry. Evonik Industries (Oct 4, 2022). Hanau-Wolfgang, Germany.
10. Prebiotics in poultry nutrition to modulate gut health. Institute of Agricultural Sciences, ETH Zurich (July 13, 2022), Switzerland.

11. Sustainable poultry production systems in modern era. Nepal Veterinary Association (June 11, 2022), Bharatpur, Nepal.
12. Applications of *in ovo* technologies in poultry production. 3<sup>rd</sup> International Conference on IT-Bio Convergence System (Jan 25, 2022, virtual), Korea.
13. **Keynote speaker:** Dietary fibers to modulate intestinal health and enhance poultry production. 7<sup>th</sup> International Animal Gut Ecology and Health Symposium (Dec 13-15, 2021, virtual), Zhuhai City, Guangdong, China.
14. **Keynote speaker:** Fibrous feedstuffs in poultry diets to maintain performance and promote gut health. 9<sup>th</sup> National and 1<sup>st</sup> International Animal Sciences Congress (Sept 15-16, 2021, virtual), Iran.
15. Novel Animal Feedstuffs for Functional and Safe Human Food Production. 53<sup>rd</sup> Korean Society for Food Science of Animal Resources (KoSFA) International Symposium and Annual Meeting (May 27-29, 2021, virtual), Korea.
16. Feed enzymes and gut ecology of monogastric animals. Konkuk University (Oct 26, 2019), Seoul, South Korea.
17. Nutritional management to modulate gut health of poultry. Northwest Agriculture & Forestry University (Aug 29, 2019), Yangling, China.
18. Dietary fiber as a substrate to modulate gut health of poultry. Kyoto University (July 19, 2019), Kyoto, Japan.
19. Dietary fibers in poultry nutrition: Nutrient utilization and beyond. Tokyo University of Agriculture and Technology, (July 4, 2019), Tokyo, Japan.
20. Antibiotic-free poultry production for healthy chicken. 2<sup>nd</sup> International Forum on Food Nutrition and Health (June 13-15, 2019), Hebei Agricultural University, Baoding, China.
21. **Keynote speaker:** Poultry production in the post-antibiotic era: Challenges and Opportunities. Workshop on safe poultry meat and egg production (April 13, 2019, via video conference), Bangladesh Agricultural University, Bangladesh.
22. **Keynote Speaker:** Fermentable carbohydrates in poultry nutrition: focus on gut health. Poultry Nutrition and Health Forum (Oct 26-28, 2018), Beijing, China.
23. Dietary fibers to modulate gut health of monogastric animals. Hainan University (Oct 25, 2018), Haikou, China.
24. Strategies to modulate the gut microbiota of Tilapia. Can Tho University (June 12, 2018), Can Tho City, Vietnam.
25. Alternative feedstuffs for cost-effective and healthy monogastric animals and fish production. Sino-US Symposium on Food, Nutrition and Health (June 5, 2018), Haikou, China.
26. Fermentable carbohydrates in poultry diet to modulate its gut health. Konkuk University (May 11, 2018), Seoul, South Korea.
27. Nutrition programming to improve gut health of broiler chickens. Northwest A&F University (Aug 11, 2017), Yangling, China.
28. Evaluation of feedstuffs and feed additives for their effects on growth performance and gut health of monogastric animals. Konkuk University (April 1, 2017), Seoul, South Korea.
29. Growing healthy chicken in post-antibiotic era". Agriculture and Forestry University (February 10, 2017, via video conference), Rampur, Nepal.
30. Probiotics in poultry nutrition. Nepal Veterinary Association (Dec 29, 2016), Kathmandu, Nepal.
31. **Keynote Speaker:** Rapid techniques for feed evaluation: Scope and limitations. New Zealand Poultry Industry Conference (Oct 4-5, 2016), Wellington, New Zealand; Organized by World Poultry Science Association, New Zealand branch.
32. Tools and techniques for nutrition and gut health studies of monogastric animals. Feed Research Institute, China Academy of Agricultural Sciences (Sept 9, 2016), Beijing, China.
33. Dietary manipulation in swine to improve gut health and the environment. Kasetsart University (Sept 23, 2015), Bangkok, Thailand.
34. Animal feed to human food: Understanding the dynamics. Asian Institute of Technology (Sept 22, 2015), Pathumthani, Thailand.
35. Alternative feedstuffs in swine and poultry feeding: Opportunities and challenges. National Institute of Animal Sciences (July 3, 2014), Suwon, South Korea.
36. Tips and tricks of presenting works via peer-reviewed publications. Nepal Veterinary Association (May 24, 2013), Kathmandu, Nepal.
37. Co-products utilization in pig diets. Alberta Pork Regional Meeting (June 11, 2012), Grand Prairie, AB, Canada.
38. Probiotics, Prebiotics, Synbiotics, and Immunobiotics: are they alternative to Antibiotics? National meeting of Nepal Veterinary Association (June 12, 2011), Kathmandu, Nepal.
39. Agriculture in Nepal: System, Issues and Options. Annual Conference of World Association of Agricultural Councils (March 10-15, 2009), Saskatoon, SK, Canada.

### ***National presentation (invited)***

40. Maternal and in ovo nutrition program affect gut health of poultry. Comparative Gut Physiology Symposium. 2021 ASAS-CSAS-SSASAS Annual Meeting & Trade Show (July 14-18, 2021), Louisville, KY, USA.
41. Fiber in Swine diets: Nutrition and Beyond. University of Arkansas Fayetteville (March 10, 2014), Fayetteville, AR, USA.

### ***Local presentation (invited)***

42. Food Security, Food Animal Production, and Antimicrobial Resistance. Graduate Seminar Series of Department of HNFAS, UH Manoa (Sept 1, 2021).
43. Feeding program for sustainable fish farming. International Mini-symposium: Approaches for experimental challenges in aquaculture research (Jan 15, 2020), UH Sea-Grant College Program, Honolulu, HI, USA.
44. Nutrition programming for cost effective, sustainable, and healthy animal production. USDA-FAS Cochran Fellowship Program (participants from Thailand) at UH Manoa (Sept 19, 2017).
45. Can probiotics mitigate the ill-effects of antibiotic ban? Graduate Seminar Series of Department of HNFAS, UH Manoa (Jan 27, 2017).
46. Sustainable animal feeding program in Hawaii: Opportunities and challenges. US Pacific Basin Agricultural Research Center (August 7, 2015), Hilo, HI, USA.
47. Feeding fermented diets using local feedstuffs to pigs and poultry. Korean Natural Farming Association (February 10, 2015), Hilo, HI, USA. Video of the presentation is available online at <https://www.youtube.com/watch?v=mEQhtruiIkw>
48. Animal feedstuffs, supplements, and gut health: Unlocking the potential. CTAHR- TUAT (Tokyo University of Agriculture and Technology) Research Symposium (May 14-15, 2015), UH Manoa.
49. Connecting the dots of Agriculture, Nutrition and Health: A global perspective. Graduate Seminar Series of Department of HNFAS, UH Manoa (Jan 30, 2015).
50. Effective teaching and learning: keys to consider. CTAHR Instructional Innovations Workshop, UH Manoa (Sept 11, 2013).
51. Use of fiber in swine diet- Basics to applied research. Graduate Seminar Series of Department of HNFAS, UH Manoa (Mar 18, 2013).

### ***Podcast (invited):***

Livestock Wala'au- Poultry Nutrition with Dr. Rajesh Jha [\[LINK\]](#)

### **Presentation in Professional Meetings (\*Presenter)**

(I am in the supervisory role if I am not the presenter since 2012 when I joined UHM, and the underlined author(s) are my Mentees)

1. P. L. Mahato, V. Khadka, **R. Jha**, and B. Mishra. Genes and pathways involved in egg white biosynthesis in broiler breeder magnum (**Poster**). CTAHR Student Research Symposium (April 4, 2025), Honolulu, HI, USA (Received **CTAHR Best PhD Student Poster Presentation Award**).
2. A. H. Shahid, **R. Jha**, and B. Mishra. Interaction of microbiome and age on egg production (**Poster**). CTAHR Student Research Symposium (April 4, 2025), Honolulu, HI, USA (Received **HNFAS Best PhD Student Poster Presentation Award**).
3. S. Al Amaz, S. Poudel, **R. Jha**, and B. Mishra. Embryonic thermal modulation enhanced gut-brain axis coordination (appetite and taste) with or without heat stress in broiler chickens. (**Poster**). CTAHR Student Research Symposium (April 4, 2025), Honolulu, HI, USA.
4. S. Poudel, V. Khadka, **R. Jha**, and B. Mishra. Age-related changes in the transcriptomic profile related to ovarian follicle recruitment in commercial laying hens (**Poster**). CTAHR Student Research Symposium (April 4, 2025), Honolulu, HI, USA.
5. S. Burlakoti, P. Mishra, B. K. Pandey, A. Youkhana, T. W. Idol, and **R. Jha**. Forage quality of seedless leucaena hybrid for sustainable grass-fed beef production (**Poster**). CTAHR Student Research Symposium (April 4, 2025), Honolulu, HI, USA.
6. B. K. Pandey, P. Mishra, S. Burlakoti, D. Autufuga, N. Lincoln, and **R. Jha**. Starch content and in vitro glycemic index of breadfruit cultivars (**Poster**). CTAHR Student Research Symposium (April 4, 2025), Honolulu, HI, USA.
7. N. Stoehr\*, J. G. Brettschneider, L. Schneider, J. Stracke, **R. Jha**, and G. Dusel. Live black soldier fly larvae as a substitute for soybean meal and oil in free range laying hens' diet– effects on laying performance and egg quality parameters (**Poster**). BOKU-Symposium (Feb 27, 2025), Vienna, Austria.

8. N. Stoehr\*, T. Stiem, L. Schneider, J. Stracke, **R. Jha**, and G. Dusel. Feeding live black soldier fly larvae to suckling piglets increases their voluntary feed intake and enables a higher dietary diversity (**Poster**). BOKU-Symposium (Feb 27, 2025), Vienna, Austria.
9. P. Mishra\*, B. Mishra, and **R. Jha**. Dietary supplementation of microalgae and xylanase influences nutrient transporter and tight junction gene expression in broiler chickens (**Poster**). International Poultry Scientific Forum (Jan 27-28, 2025), Atlanta, GA, USA.
10. S. Al Amaz\*, S. Poudel, **R. Jha**, and B. Mishra. Embryonic thermal manipulation improved gut-brain axis coordination (appetite and taste) with or without heat stress in broiler chickens (**Poster**). International Poultry Scientific Forum (Jan 27-28, 2025), Atlanta, GA, USA.
11. S. Al Amaz\*, M. A. H. Shahid, **R. Jha**, and B. Mishra. Early thermal programming and post-hatch baicalein supplementation enhanced immune response in broiler chickens (**Poster**). International Poultry Scientific Forum (Jan 27-28, 2025), Atlanta, GA, USA.
12. P. Mahato\*, V. Khadka, K. Macklin, **R. Jha**, and B. Mishra. Transcriptional regulation of albumen biosynthesis in the magnum of broiler breeder hens (**Poster**). International Poultry Scientific Forum (Jan 27-28, 2025), Atlanta, GA, USA.
13. N. Stoehr\*, T. Stiem, L. Schneider, J. Stracke, **R. Jha**, and G. Dusel. Live black soldier fly larvae in the nutrition of suckling piglets (**Poster**). Pig Research Summit (Nov 20-21, 2024), Copenhagen, Denmark.
14. L. Kovanda\*, K. Y. Lee, E. R. Atwill, **R. Jha**, Y. Liu, ....., and X. Li. Prevalence and Antimicrobial Resistance of *E. coli* and *Enterococcus* from Retail Pork in Hawaii (**Poster**). IAFP Annual Meeting (July 14-17, 2024), Long Beach, CA, USA.
15. S. Talukder\*, K. Y. Lee, E. R. Atwill, **R. Jha**, Y. Liu, ....., and X. Li. Prevalence of Common Foodborne Bacteria in Retail Poultry Meat In Hawaii (**Poster**). IAFP Annual Meeting (July 14-17, 2024), Long Beach, CA, USA.
16. P. Mahato\*, K. Macklin, P. Regmi, V. Khadka, **R. Jha**, and B. Mishra (**Poster**). Age-associated changes in the shell gland transcriptomics and eggshell quality of broiler breeder hens. PSA Annual Meeting (July 15-18, 2024), Louisville, KY, USA.
17. N. Stoehr\*, F. Geisel, J. G. Brettschneider, L. Schneider, C.K. Weiss, **R. Jha** and G. Dusel. Effects of feeding live black soldier fly larvae (BSFL) on growth performance and fatty acid profile in muscle and liver of broilers (**Poster**). Insects to Feed the World (June 19-22, 2024), Singapore.
18. L. Schneider\*, N. Stoehr, B. Kisinga, **R. Jha** and G. Dusel. Effect of dietary protein in isoenergetic diets on energy and nitrogen digestibility and retention of black soldier fly (**Oral**). Insects to Feed the World (June 19-22, 2024), Singapore.
19. P. Mishra\*, R. Das, B. Mishra, and **R. Jha**. Dietary microalgae and xylanase influence cecal microbiota and microbial pathways in broiler chickens (**Oral**). Annual Meeting of the American Society for Microbiology-Hawaii Branch (Apr 27, 2024), Honolulu, HI, USA.
20. R. Das\*, P. Mishra, G. González-Ortiz, M. R. Bedford, B. Mishra, and **R. Jha**. Effect of In Ovo Xylooligosaccharides and Dietary Stimbiotics on Enhancing Gut Health of Broiler Chickens (**Poster**). Annual Meeting of the American Society for Microbiology- Hawaii Branch (Apr 27, 2024), Honolulu, HI, USA.
21. P. Mishra\*, R. Das, B. Mishra, and **R. Jha**. Microalgae and xylanase in broiler diet: effects on growth performance, nutrient transporter and tight junction gene expression (**Oral**). CTAHR Showcase and Research Symposium (Apr 11, 2024), Honolulu, HI, USA.
22. R. Das, P. Mishra\*, G. González-Ortiz, M. R. Bedford, B. Mishra, and **R. Jha**. Interaction of in ovo xylooligosaccharides feeding and dietary stimbiotic supplementation with enzyme: Effects on cecal microbiota and metabolic pathways in broiler chickens (**Oral**). CTAHR Showcase and Research Symposium (Apr 11, 2024), Honolulu, HI, USA.
23. P. Mahato\*, **R. Jha** and B. Mishra. Eggshell Quality Variation in Aged Broiler Breeder (**Oral**). CTAHR Showcase and Research Symposium (Apr 11, 2024), Honolulu, HI, USA.
24. N. Stoehr\*, F. Geisel, J. G. Brettschneider, L. Schneider, **R. Jha**, and G. Dusel. Feeding live black soldier fly larvae affects growth performance and fatty acid profile in muscle and liver of broiler chickens (**Oral**). BOKU-Symposium (Feb 29, 2024), Vienna, Austria.
25. M. Gaa\*, E. R. Atwill, K. Lee, Y. Liu, M. Pitesky, **R. Jha**, ....., and X. Li. The National Antimicrobial Resistance Monitoring System Extending Retail Food Surveillance to Hawaii (**Oral**). IAFP Annual Meeting (July 16-19, 2023), Toronto, ON, Canada.
26. P. Mishra\*, R. Das, A. Chaudhary, B. Mishra, and **R. Jha**. Microalgae and xylanase in diet modulate cecal microbial diversity and metabolic pathways of broiler chickens (**Poster**). PSA Annual Meeting (July 10-14, 2023), Philadelphia, PA, USA.

27. R. Das\*, P. Mishra, B. Mishra, and **R. Jha**. Effects of in ovo injection of xylobiose and xylotriose on immunity, cecal metabolites, microbial ecology, and metabolic pathways in broiler chickens (**Poster**). PSA Annual Meeting (July 10-14, 2023), Philadelphia, PA, USA.
28. R. Das\*, P. Mishra, G. Gonzalez Ortiz, M. Bedford, B. Mishra, and **R. Jha**. Effect of in ovo injection of xylooligosaccharides and diets supplemented with xylanase or a combination of xylanase and xylooligosaccharides on hatchability, growth performance, and ileal gene expressions of broilers (**Poster**). PSA Annual Meeting (July 10-14, 2023), Philadelphia, PA, USA.
29. N. Stohr\*, P. Harig, R. Ibrahim, K. Schuh-van Graevenitz, **R. Jha**, and G. Dusel. Black soldier fly larvae meal as an alternative protein source in broiler chicken's diet (**Poster**). 23<sup>rd</sup> European Symposium on Poultry Nutrition (June 21-24, 2023), Rimini, Italy.
30. N. Stohr\*, P. Harig, R. Ibrahim, K. Schuh-van Graevenitz, **R. Jha**, and G. Dusel. Black soldier fly larvae (*Hermetia illucens*) meal in low inclusion rates is a suitable protein source for broiler chickens (**Poster**). BOKU-Symposium (Apr 20, 2023), Vienna, Austria. (Received **Best Poster Presentation Award**).
31. R. Das\*, P. Mishra, B. Mishra, and **R. Jha**. In ovo injections of xylooligosaccharides modulate growth performance and immunity in broiler chickens (**Oral**). CTAHR Showcase and Research Symposium (Mar 27, 2023), Honolulu, HI, USA.
32. P. Mishra\*, R. Das, A. Chaudhary, B. Mishra, and **R. Jha**. Dietary supplementation of microalgae with xylanase influences growth performance and gut health of broiler chickens (**Oral**). CTAHR Showcase and Research Symposium (Mar 27, 2023), Honolulu, HI, USA.
33. K. Ebisuya\* and **R. Jha**. The effect of in ovo injection of xylooligosaccharide on immune response of broilers (**Oral**). CTAHR Showcase and Research Symposium (Mar 27, 2023), Honolulu, HI, USA.
34. A. Chaudhary\*, P. Mishra, R. Das, S. Amaz, P. Mahato, **R. Jha**, and B. Mishra. Dietary supplementation of microalgae is a novel strategy for broiler farming in the tropics (**Oral**). CTAHR Showcase and Research Symposium (Mar 27, 2023), Honolulu, HI, USA.
35. S. Amaz\*, A. Chaudhary, P. Mishra, P. Mahato, **R. Jha**, and B. Mishra. Pre-hatch thermal manipulation of chicks' embryo to mitigate heat stress in broiler chickens (**Oral**). CTAHR Showcase and Research Symposium (Mar 27, 2023), Honolulu, HI, USA.
36. P. Mishra\*, R. Das, A. Chaudhary, B. Mishra, and **R. Jha**. Effects of microalgae, with or without xylanase supplementation, on serum immunoglobulins, cecal short-chain fatty acids, and microbiome of broiler chickens (**Poster**). International Poultry Scientific Forum (Jan 23-24, 2023), Atlanta, GA, USA.
37. P. Mishra\*, R. Das, A. Chaudhary, B. Mishra, and **R. Jha**. Effects of microalgae, with or without xylanase supplementation, on growth performance and gut health parameters of broiler chickens (**Poster**). International Poultry Scientific Forum (Jan 23-24, 2023), Atlanta, GA, USA.
38. A. Chaudhary\*, P. Mishra, R. Das, S. Amaz, P. Mahato, **R. Jha**, and B. Mishra. Mitigation of heat stress in broiler chickens using dietary supplementation of microalgae (*Spirulina platensis*) (**Poster**). International Poultry Scientific Forum (Jan 23-24, 2023), Atlanta, GA, USA.
39. R. Das\*, P. Mishra, B. Mishra, and **R. Jha**. Effects of in ovo injection of xylobiose and xylotriose on growth performance, carcass traits, and immune-related gene expression of broilers (**Oral**). International Poultry Scientific Forum (Jan 23-24, 2023), Atlanta, GA, USA.
40. A. Chaudhary, **R. Jha**, and B. Mishra. Broiler chickens farming in the tropics: potential challenges and opportunities (**Poster**). Hawaii Agriculture Conference (Sept 27-28, 2022), Honolulu, HI, USA.
41. K. Ebisuya\* and **R. Jha**. The effect of xylooligosaccharide on immune response of broilers (**Oral**). UROP Spring Symposium (Apr 22, 2022), UH Manoa, Honolulu, HI, USA.
42. **R. Jha\***, R. Das, B. Mishra, and A. J. Cowieson (2021). Sources of corn and soybean meal and carbohydrase enzyme supplementation differently affect cecal volatile fatty acid production and microbiota profile in broiler chickens (**Poster**). PSA Virtual Annual Meeting (July 19-22, 2021).
43. **R. Jha\***, R. Das, B. Mishra, and A. J. Cowieson (2021). Sources of corn and soybean meal and carbohydrase enzymes supplementation differently affect growth performance and nutrient digestibility in broiler chickens (**Poster**). PSA Virtual Annual Meeting (July 19-22, 2021).
44. G. Martinez\*, **R. Jha**, V. Fellner, and E. van Heugten (2021). In vitro evaluation of purified fiber sources for production of short-chain fatty acids using pig cecal content as an inoculum (**Poster**). ASAS Midwest Section meeting (Mar 8-10, 2021), Omaha, NE, USA.
45. J. Zhang, K. Cai, R. Mishra, and **R. Jha\*** (2020). Effects of in ovo inoculation of chicken embryos with chitooligosaccharide and chlorella polysaccharide on the gut health parameters of broiler chickens (**Oral**). PSA Virtual Annual Meeting (July 20-23, 2020).

46. A. K. Singh\*, T. Park, J. Legaspi, K. Neupane, and **R. Jha** (2020). Effect of NSPase enzyme and residual fiber from digested feed on cecal short chain fatty acids production and cecal microbiota diversity in broilers, studied in vitro (**Oral**). PSA Virtual Annual Meeting (July 20-23, 2020).
47. A. K. Singh\*, B. Mishra, M. R. Bedford, and **R. Jha** (2020). Effects of xylanase and xylooligosaccharides supplementation on productive performance and gut health variables of broilers (**Oral**). PSA Virtual Annual Meeting (July 20-23, 2020).
48. S. Wasti\*, C. N. Lee, **R. Jha**, and B. Mishra (2020). Dietary supplementation of alpha-lipoic acid mitigates the negative effects of heat stress in poultry (**Oral**). PSA Virtual Annual Meeting (July 20-23, 2020).
49. R. Mishra\*, **R. Jha**, B. Mishra, and Y. S. Kim (2020). Effects of maternal immunization against myostatin on the post-hatch growth performance of their chicks (**Poster**). PSA Virtual Annual Meeting (July 20-23, 2020).
50. B. Adhikari\*, C. N. Lee, V. S. Khadka, Y. Deng, **R. Jha**, and B. Mishra (2020). RNA-sequencing based analysis of bovine endometrium during the maternal recognition of pregnancy (**Oral**). SRS Virtual Annual Meeting (July 8-12, 2020).
51. A. MacDonald\*, A. Garcia-Ortega, and **R. Jha** (2020). The effect of microalgae as a fish meal and fish oil replacement on the intestinal microbiota of Tilapia (*Oreochromis niloticus* × *O. mossambicus*) aquaculture from gut health perspective (**Poster**). Aquaculture America 2020 (Feb 9-12, 2020) Honolulu, HI, USA.
52. A. Garcia-Ortega\*, A. MacDonald, and **R. Jha** (2020). Algal meals from *Arthrospira platensis* and *Schizochytrium limacinum* as complete replacement of fish meal, fish oil and soy protein concentrate in feeds for Tilapia (**Oral**). Aquaculture America 2020 (Feb 9-12, 2020) Honolulu, HI, USA.
53. A. K. Singh\*, B. Mishra, and **R. Jha** (2020). Early post-hatch feeding of resistant starch can influence cell-mediated immunity and gut microbiota diversity in broilers (**Poster**). International Poultry Scientific Forum (Jan 27-28, 2020), Atlanta, GA, USA.
54. A. K. Singh\*, R. K. Mandal, M. R. Bedford, and **R. Jha** (2020). Xylanase improves growth performance, enhances cecal short chain fatty acids production and increases relative abundance of fiber fermenting cecal microbiota in broilers (**Oral**). International Poultry Scientific Forum (Jan 27-28, 2020), Atlanta, GA, USA.
55. A. K. Singh\*, B. Mishra, and **R. Jha** (2019). Effects of early feeding with resistant starch during post-hatch on growth performance and gut health parameters of broilers (**Poster**). PSA Annual Meeting (July 15-18, 2019), Montréal, QC, Canada.
56. A. K. Singh\*, U. P. Tiwari, B. Mishra, and **R. Jha**. Comparative effects of in ovo injection of oligosaccharides (xylotriose, xyloetraose, mannotriose, and mannotetraose) on growth performance and gut health parameters of broilers (**Poster**). PSA Annual Meeting (July 15-18, 2019), Montréal, QC, Canada.
57. K. D. Caliboso, J. E. Nanquil, S. Yadav\*, H. Kae, K. Neupane, B. Mishra, and **R. Jha**. Cecal microbiota profile of Hawaiian feral chickens and pasture-raised broiler chickens (**Poster**). PSA Annual Meeting (July 15-18, 2019), Montréal, QC, Canada.
58. S. Wasti\*, D. L. Kuehu, N. Sah, A. K. Singh, **R. Jha**, and B. Mishra. Dietary supplementation of dried plum: A novel strategy to mitigate heat stress in poultry (**Poster**). PSA Annual Meeting (July 15-18, 2019), Montréal, QC, Canada. (Received "**Certificate of Excellence for Best Project in Metabolism and Nutrition Section**")
59. N. Sah\*, D. L. Kuehu, S. Wasti, **R. Jha**, and B. Mishra. New transcriptomic insights into processes associated with formation of egg-white in the magnum of laying hens (**Poster**). PSA Annual Meeting (July 15-18, 2019), Montréal, QC, Canada.
60. B. Mishra\*, N. Sah, D. L. Kuehu, S. Wasti, and **R. Jha**. Transcriptional regulation of albumen biosynthesis and eggshell biomineralization in the oviduct of laying hens (**Oral**). PSA Annual Meeting (July 15-18, 2019), Montréal, QC, Canada.
61. A. M. MacDonald\*, A. Garcia, and **R. Jha**. Modulation of the intestinal histology and microbiome using microalgae as a fishmeal/fish oil replacement in the diets of tilapia (**Oral**). 31<sup>st</sup> Annual CTAHR Student Research Symposium (April 15, 2019), Honolulu, HI, USA.
62. D. L. Kuehu\*, N. Sah, C. N. Lee, **R. Jha**, and B. Mishra. Heat stress impacts the health of the laying hen through altering the regulation of heat shock and reactive oxidative stress genes in the liver (**Oral**). 31<sup>st</sup> Annual CTAHR Student Research Symposium (April 15, 2019), Honolulu, HI, USA.
63. S. Wasti\*, D. L. Kuehu, N. Sah, A. K. Singh, **R. Jha**, and B. Mishra. Dietary supplementation of dried plum: A novel strategy to mitigate heat stress in poultry (**Oral**). 31<sup>st</sup> Annual CTAHR Student Research Symposium (April 15, 2019), Honolulu, HI, USA.
64. S. N. Haverly\*, S. Wasti, D. L. Kuehu, N. Sah, A. K. Singh, **R. Jha**, and B. Mishra. The effects of environmental heat stress on the spleens of broiler chickens (**Oral**). 31<sup>st</sup> Annual CTAHR Student Research Symposium (April 15, 2019), Honolulu, HI, USA (Received **CTAHR Best BS Student Oral Presentation Award**).

65. L. Li\*, A. K. Singh, B. Mishra, and **R. Jha**. Effect of *in ovo* injection of probiotic, prebiotic and synbiotic on growth performance and gut health parameters of broiler chickens (**Poster**). PSA Annual Meeting (July 23-26, 2018), San Antonio, TX, USA.
66. S. Yadav, Y. Li, Y. S. Kim, C. N. Lee, and **R. Jha\***. Effect of feeding lactic acid bacteria isolated from taro (*Colocasia esculenta*) skins on growth performance, gut microbiota and muscle growth of broiler chickens (**Poster**). PSA Annual Meeting (July 23-26, 2018), San Antonio, TX, USA.
67. N. Sah\*, D. L. Kuehu, V. S. Khadka, **R. Jha**, and B. Mishra. Transcriptomic analysis of the shell gland in layers identifies novel genes in eggshell biomineralization (**Poster**). PSA Annual Meeting (July 23-26, 2018), San Antonio, TX, USA. (Received "**Certificate of Excellence for Best Project in Physiology and Reproduction Section**" and "**PSA Graduate Student Travel Award**").
68. U. P. Tiwari, and **R. Jha\***. Fermentation characteristics of xylo- and manno-oligosaccharides and soluble and insoluble arabinoxylan studied using an in vitro model of swine (**Poster**). ASAS/CSAS Annual Meeting and Trade Show (July 8-12, 2018), Vancouver, BC, Canada.
69. U. P. Tiwari, B. Kerr, and **R. Jha\***. Nutrient and amino acids digestibility of animal protein byproduct in swine, determined using an in vitro model (**Poster**). ASAS/CSAS Annual Meeting and Trade Show (July 8-12, 2018), Vancouver, BC, Canada.
70. B. A. Castle\*, J. Odani, **R. Jha**, N. Ogasawara, and H. M. Zaleski. Survey of disease, management and biosecurity practices of Hawaii swine farmers (**Poster**). ASAS/CSAS Annual Meeting and Trade Show (July 8-12, 2018), Vancouver, BC, Canada.
71. A. MacDonald\*, and **R. Jha**. Evaluation of cassava chips as an alternative feed ingredient in hybrid tilapia (*Oreochromis niloticus* × *Oreochromis mossambicus*) aquaculture from gut health perspective (**Poster**). The International Symposium on Fish Nutrition and Feeding (June 3-7, 2018), Las Palmas de Gran Canaria, Spain.
72. S. Yadav\*, A. K. Singh, U. P. Tiwari, B. Mishra, and **R. Jha**. Cassava root chips an alternative to corn in broiler diet: effect on growth performance and gut health parameters (**Oral**). 30th Annual CTAHR/COE Student Research Symposium (April 6-7, 2018), Honolulu, HI, USA (Received **HNFAS Best PhD Student Oral Presentation Award**).
73. A. K. Singh\*, T. Park, J. Legaspi, K. Neupane, and **R. Jha**. Effect of fiber degrading enzyme and feed's residual fiber on cecal short-chain fatty acids production and microbial diversity as revealed by metagenomics during in vitro study in broilers (**Poster**). 30th Annual CTAHR/COE Student Research Symposium (April 6-7, 2018), Honolulu, HI, USA.
74. U. P. Tiwari\*, B. Kerr, and **R. Jha**. Nutrient profile and in vitro digestibility of nutrients (energy, protein and amino acids) of animal protein byproducts (**Oral**). 30th Annual CTAHR/COE Student Research Symposium (April 6-7, 2018), Honolulu, HI, USA.
75. A. Mau\*, J. Arios, A. Valdez, P. Nicodemus, **R. Jha**, and J. P. Bingham. Chemical Synthesis of a Novel Peptide (oGnRH) for Pheromone Stimulation of Spawning in 'Opihi (*Cellana spp.*) (**Poster**). 30th Annual CTAHR/COE Student Research Symposium (April 6-7, 2018), Honolulu, HI, USA (Received **CTAHR 30th Annual Best PhD Student Poster Presentation Award**).
76. L. Li\*, A. K. Singh, B. Mishra, and **R. Jha**. Effect of in ovo injection of probiotic, prebiotic and synbiotic on growth performance and gut health of broiler chickens (**Poster**). 30th Annual CTAHR/COE Student Research Symposium (April 6-7, 2018), Honolulu, HI, USA.
77. D. L. Kuehu\*, N. Sah, C. N. Lee, **R. Jha**, and B. Mishra. Effects of heat stress on the oviductal gene expression and egg qualities in the laying hen (**Poster**). 30th Annual CTAHR/COE Student Research Symposium (April 6-7, 2018), Honolulu, HI, USA.
78. N. Sah\*, D. L. Kuehu, V. S. Khadka, **R. Jha**, and B. Mishra. RNA sequencing of the shell gland reveals novel genes related to calcium remodeling during eggshell formation in laying hens (**Oral**). 30th Annual CTAHR/COE Student Research Symposium (April 6-7, 2018), Honolulu, HI, USA (Received **HNFAS Best MS Student Oral Presentation Award**).
79. S. Wasti\*, N. Sah, D. L. Kuehu, Y.S. Kim, **R. Jha**, and B. Mishra. Expression of follistatin and myostatin in the oviduct of laying hen (**Poster**). 30th Annual CTAHR/COE Student Research Symposium (April 6-7, 2018), Honolulu, HI, USA.
80. B. A. Castle\*, J. Odani, **R. Jha**, N. Ogasawara, H. M. Zaleski. Survey of Disease, Management and Biosecurity Practices of Hawai'i Swine Farmers (**Oral**). 30th Annual CTAHR/COE Student Research Symposium (April 6-7, 2018), Honolulu, HI, USA (Received **Gamma Sigma Delta MS Student Oral Presentation Award**).
81. K. Rednour\*, J. Yoshioka, A. M. MacDonald, K. Neupane, and **R. Jha**. Effects of replacing corn with sun-dried cassava chips in diets on the intestinal microbiota of hybrid tilapia (*Oreochromis niloticus* × *O. mossambicus*) (**Poster**). 30th Annual CTAHR/COE Student Research Symposium (April 6-7, 2018), Honolulu, HI, USA.

82. A. K. Singh\*, R. Kida, M. Bedford, and **R. Jha**. Effect of xylanase on growth performance and cecal short-chain fatty acid production in broilers fed different levels of fiber (**Poster**). PSA Annual Meeting (July 17-20, 2017), Orlando, FL, USA (**Received "Certificate of Excellence for Best Project in Metabolism and Nutrition Section" and "PSA Graduate Student Travel Award"**).
83. S. Yadav\*, and **R. Jha**. Cassava chips as an alternative feedstuff for broiler chickens: effect on growth performance and ileal morphology (**Poster**). PSA Annual Meeting (July 17-20, 2017), Orlando, FL, USA.
84. S. Yadav\*, K. Neupane, and **R. Jha**. Macadamia nut cake as an alternative feedstuff for broiler chickens: effect on growth performance and gut microbiota profile (**Poster**). PSA Annual Meeting (July 17-20, 2017), Orlando, FL, USA.
85. U. P. Tiwari, and **R. Jha\***. Supplementation of xylanase and mannanase influences in vitro fermentation characteristics of distiller's dried grain with solubles in the large intestine of swine (**Oral**). ASAS/CSAS Annual Meeting and Trade Show (July 8-12, 2017), Baltimore, MD, USA.
86. A. K. Singh, R. Kida, M. Bedford, and **R. Jha**. Growth performance and cecal short-chain fatty acid production in broilers fed different levels of wheat bran without or with xylanase (**Oral**). 29th Annual CTAHR/COE Student Research Symposium (April 7-8, 2017), Honolulu, HI, USA (**Received CTAHR PhD Student Oral Presentation Award of Merit**).
87. U. P. Tiwari\*, and **R. Jha**. Supplementation of enzymes affects in vitro fermentation characteristics of distillers dried grain with solubles in swine (**Poster**). 29th Annual CTAHR/COE Student Research Symposium (April 7-8, 2017), Honolulu, HI, USA (**Received HNFAS Best PhD Student Poster Presentation Award**).
88. A. Mau\*, and **R. Jha**. The effect of protein-energy ratio in diets on the growth performance of 'opihi (*Cellana sandwicensis*) in a novel rearing system (**Oral**). 29th Annual CTAHR/COE Student Research Symposium (April 7-8, 2017), Honolulu, HI, USA (**Received CTAHR MS Student Oral Presentation Award of Merit**).
89. S. Yadav\*, K. Neupane, and **R. Jha**. Macadamia nut cake as an alternative feedstuff for broiler chickens: effect on growth performance and gut microbiota (**Oral**). 29th Annual CTAHR/COE Student Research Symposium (April 7-8, 2017), Honolulu, HI, USA (**Received HNFAS Best MS Student Oral Presentation Award**).
90. J. Kai\*, J. P. Bingham, A. Franke, G. Agbor, M. Stewart, and **R. Jha**. Nutrient profile of Hawaii and Cameroon grown avocados (**Poster**). 29th Annual CTAHR/COE Student Research Symposium (April 7-8, 2017), Honolulu, HI, USA.
91. N. Ogasawara\*, J. Odani, **R. Jha**, B. Castle, and H. M. Zaleski. Evaluating swine herd health and farm practices in Hawaii (**Poster**). 29th Annual CTAHR/COE Student Research Symposium (April 7-8, 2017), Honolulu, HI, USA.
92. D. Inouye\*, J. Miller, S. Yadav, K. Neupane, and **R. Jha**. Effect of Macadamia Nut Cake on Gut Microbial Diversity in Broiler Chickens (**Poster**). 29th Annual CTAHR/COE Student Research Symposium (April 7-8, 2017), Honolulu, HI, USA (**Received HNFAS Best BS Student Poster Presentation Award**).
93. J. D. Berrococo, A. K. Singh, and **R. Jha\***. Effect of macadamia nut cake inclusion on growth performance of pasture raised broiler chickens (**Poster**). World's Poultry Congress (Sept 5-9, 2016), Beijing, China.
94. Y. S. Kim\*, G. Fukumoto, M. Stevenson, M. Thorne, and **R. Jha**. Carcass traits and tenderness of grass-fed beef from subtropical pastures in Hawaii (**Oral**). AAAP Animal Science Congress (Aug 22-25, 2016), Fukuoka, Japan.
95. U. P. Tiwari\*, and **R. Jha**. Nutrient profile and in vitro digestibility of cassava silages in swine (**Poster**). ASAS/ADSA/CSAS/WSASAS Joint Annual Meeting (July 19-23, 2016), Salt Lake City, UT, USA.
96. U. P. Tiwari\*, H. Chen, S. W. Kim, and **R. Jha**. Effect of supplemental enzyme on growth performance, digesta viscosity, apparent total tract digestibility of nutrients in nursery pigs (**Oral**). ASAS/ADSA/CSAS/WSASAS Joint Annual Meeting (July 19-23, 2016), Salt Lake City, UT, USA.
97. U. P. Tiwari\*, M. Mattus, K. Neupane, and **R. Jha**. In vitro fermentation characteristics of agricultural products and coproducts and its effect on the large intestinal microbiota of swine (**Oral**). ASAS/ADSA/CSAS/WSASAS Joint Annual Meeting (July 19-23, 2016), Salt Lake City, UT, USA.
98. C. Liu, A. K. Singh, M. Stewart, J. H. Uyehara-Lock, and **R. Jha\***. Effects of dietary fibers on obesity related physiological parameters in C57BL/6 mice (**Oral**). ASAS/ADSA/CSAS/WSASAS Joint Annual Meeting (July 19-23, 2016), Salt Lake City, UT, USA.
99. B. S. McNeill, J. Odani, **R. Jha\***, and H. M. Zaleski. Prevalence of *Brucella suis* in hunting dogs in Hawai'i (**Poster**). ASAS/ADSA/CSAS/WSASAS Joint Annual Meeting (July 19-23, 2016), Salt Lake City, UT, USA.
100. A. K. Singh\*, J. D. Berrococo, R. Kida, Y. S. Kim, and **R. Jha**. In ovo inoculation of raffinose improves hatchability, vitalizes gut mucosa and enhances immune response in broiler chickens (**Oral**). Poultry Science Association Annual Meeting (July 11-14, 2016), New Orleans, LA, USA.
101. S. Yadav\*, J. D. Berrococo, and **R. Jha**. Nitrogen-corrected apparent metabolizable energy value of macadamia nut cake for broiler chickens (**Poster**). Poultry Science Association Annual Meeting (July 11-14, 2016), New

- Orleans, LA, USA (Received **Certificate of Excellence for Best Presentation in Nutrition and Metabolism section**).
102. A. M. Haygood\*, and **R. Jha**. Evaluation of moringa leaves as a prebiotic in tilapia aquaculture from a production and health perspective. The International Symposium on Fish Nutrition and Feeding (June 5-10, 2016), Sun Valley, ID, USA.
  103. A. K. Singh\*, J. D. Berrocoso, R. Kida, Y. S. Kim, and **R. Jha**. In ovo inoculation of raffinose improves hatchability, gut mucosal health and immune response in broiler chickens (**Oral**). 28<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 8-9, 2016), Honolulu, HI, USA (Received **HNFAS Best PhD Student Oral Presentation Award**).
  104. A. M. Haygood\*, and **R. Jha**. Evaluation of moringa leaves as an alternative feed ingredient in tilapia (*Oreochromis niloticus*) aquaculture from production, gut health, and economic perspective (**Oral**). 28<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 8-9, 2016), Honolulu, HI, USA (Received **MBBE Best PhD Student Oral Presentation Award**).
  105. U. P. Tiwari\*, S. W. Kim, and **R. Jha**. Effect of supplemental enzymes on growth performance, digesta viscosity, nutrient and fiber digestibility of nursery pigs (**Oral**). 28<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 8-9, 2016), Honolulu, HI, USA.
  106. S. Yadav\*, J. D. Berrocoso, and **R. Jha**. Apparent metabolizable energy content of Macadamia nut cake for broiler chickens (**Oral**). 28<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 8-9, 2016), Honolulu, HI, USA (Received **HNFAS Best MS Student Oral Presentation Award**).
  107. A. K. Singh\*, J. D. Berrocoso, J. Ludovico, and **R. Jha**. Effect of macadamia nut cake inclusion in diets on growth performance and cost of production of pasture raised broiler chickens in Hawaii (**Poster**). 28<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 8-9, 2016), Honolulu, HI, USA (Received **Gamma Sigma Delta PhD Student Poster Presentation Award**).
  108. U. P. Tiwari\*, and **R. Jha**. Nutrient profile and in vitro digestibility of cassava silages in swine (**Poster**). 28<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 8-9, 2016), Honolulu, HI, USA (Received **HNFAS Best PhD Student Poster Presentation Award**).
  109. K. Butler\*, G. K. Fukumoto, Y. S. Kim, and **R. Jha**. Seasonal and locational variation of nutrient profile and in vitro digestion kinetics of guinea grass and kikuyu grass for grass-fed beef production system on Hawaii Island (**Poster**). 28<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 8-9, 2016), Honolulu, HI, USA.
  110. C. Malabad\*, K. Balagso, A. Haygood, K. Neupane, and **R. Jha**. Effects of in vitro fermentation of alternative feedstuffs on intestinal microbiota of chicken analyzed using 16S ribosomal DNA typing (**Oral**). 28<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 8-9, 2016), Honolulu, HI, USA.
  111. S. Mattus\*, U. P. Tiwari, K. Neupane, and **R. Jha**. In vitro fermentation of Hawaiian feedstuffs and its effect on the intestinal microbiota of swine (**Poster**). 28<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 8-9, 2016), Honolulu, HI, USA (Received **CTAHR Best BSc Student Poster Presentation Award**).
  112. T. Peterson\*, L. Galicia, A. Haygood, K. Neupane, and **R. Jha**. In vitro fermentation of cassava silages and its effect on the intestinal microbiota of chicken (**Poster**). 28<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 8-9, 2016), Honolulu, HI, USA.
  113. A. P. Langlois\*, W. L. Ribeiro, and **R. Jha**. Nutritional value of rendered products in swine studied in vitro (**Poster**). 28<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 8-9, 2016), Honolulu, HI, USA.
  114. T. Tashiro\*, T. Mendiola, A. K. Singh, A. Haygood, K. Neupane, and **R. Jha**. Supplementing Enzymes and Probiotics affect Gut Microbiota of Broiler Chicken Fed Fibrous Diets (**Poster**). NIH IDeA Western Regional Conference (Oct 12-14, 2015), Coeur d'Alene, ID, USA.
  115. U. P. Tiwari, and **R. Jha\***. Nutrient profile and in vitro digestibility of fresh and ensiled cassava in swine (**Oral**). International Seminar on Animal Industry (Sept 17-18, 2015) Bogor, Indonesia.
  116. A. K. Singh\*, J. D. Berrocoso, Y. Dersjant-Li, A. Awati, and **R. Jha**. Effect of supplemental multi-enzymes and direct fed microbial on nutrients digestibility in broilers fed low and high fiber diets (**Oral**). Poultry Science Association Annual Meeting (July 27-30, 2015), Louisville, KY, USA.
  117. A. K. Singh\*, J. D. Berrocoso, U. P. Tiwari, Y. Dersjant-Li, A. Awati, and **R. Jha**. Effect of supplemental multi-enzymes on growth performance of broilers fed low and high fiber diets (**Poster**). Poultry Science Association Annual Meeting (July 27-30, 2015), Louisville, KY, USA.
  118. U. P. Tiwari and **R. Jha\***. Nutrient profile and digestibility of macadamia nut cake as determined using an in vitro model of swine (**Oral**). ASAS/ADSA Joint Annual Meeting (July 12-16, 2015), Orlando, FL, USA.
  119. U. P. Tiwari\*, H. M. Zaleski, and **R. Jha**. Nutrient profile and digestibility of agro-industrial coproducts as determined using an in vitro model of swine (**Oral**). ASAS/ADSA Joint Annual Meeting (July 12-16, 2015), Orlando, FL, USA.

120. U. P. Tiwari\* and **R. Jha**. Nutritional value of macadamia nut cake for swine (**Oral**). 27<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 10-11, 2015), Honolulu, HI, USA (Received **HNFAS Best PhD Student Oral Presentation Award**).
121. A. K. Singh\*, J. D. Berrocoso, Y. Dersjant-Li, A. Awati, and **R. Jha**. Supplemental multi-enzymes and probiotics enhance nutrient digestibility in broilers fed low and high fiber diets (**Oral**). 27<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 10-11, 2015), Honolulu, HI, USA.
122. U. P. Tiwari\*, H. M. Zaleski, and **R. Jha**. Nutritional value of agro-industrial co-products in swine (**Poster**). 27<sup>th</sup> Annual CTAHR/COE Student Research Symposium, Honolulu, HI, USA.
123. A. K. Singh\*, J. D. Berrocoso, Y. Dersjant-Li, A. Awati, and **R. Jha**. Supplemental multi-enzymes affect growth performance of broilers fed low and high fiber diets (**Poster**). 27<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 10-11, 2015), Honolulu, HI, USA (Received **HNFAS Best PhD Student Poster Presentation Award**).
124. A. K. Singh\*, M. W. DuPonte, and **R. Jha**. Growth performance and economics of raising pastured broiler chicken fed with diet based on local feedstuffs in Hawaii (**Poster**). 27<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 10-11, 2015), Honolulu, HI, USA.
125. C. Liu\*, A. K. Singh, M. Stewart, J. Uyehara-Lock, and **R. Jha**. Effects of fibers with varying viscosity and solubility on obesity related physiological parameters of mice (**Poster**). 27<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 10-11, 2015), Honolulu, HI, USA (Received **HNFAS Best MS Student Poster Presentation Award**).
126. K. Butler\*, G. K. Fukumoto, Y. S. Kim, and **R. Jha**. Nutrient profile of leucaena and guinea grass and growth performance and carcass quality of beef cattle grazed on these pastures in Hawaii (**Poster**). 27<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 10-11, 2015), Honolulu, HI, USA.
127. B. S. McNeill\*, H. M. Zaleski, A. M. Stokes, and **R. Jha**. *Brucella suis* in hunting dogs (**Poster**). 27<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 10-11, 2015), Honolulu, HI, USA.
128. M. Sakuda\* and **R. Jha**. Nutritional value of macadamia nut cake for tilapia (*Oreochromis honorum*) (**Poster**). 27<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 10-11, 2015), Honolulu, HI (Received **HNFAS Best BSc Student Poster Presentation Award**).
129. S. Mattus\*, C. Bednarczyk, U. P. Tiwari, A. Haygood, K. Neupane, and **R. Jha**. Effect of in vitro fermentation of Hawaiian feedstuffs on intestinal microbial communities of pigs (**Poster**). 27<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 10-11, 2015), Honolulu, HI, USA.
130. T. Tashiro\*, T. Mendiola, A. K. Singh, A. Haygood, K. Neupane, and **R. Jha**. Effects of Supplementing Multi-Enzymes and Probiotics on Gut Microbiota of Broiler Chicken Fed High and Low Fiber Diets (**Poster**). 27<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 10-11, 2015), Honolulu, HI, USA.
131. U. P. Tiwari, B. Turano, and **R. Jha\***. Nutritional characteristics and in vitro digestibility by near-infrared spectroscopy of local and hybrid napiergrass varieties grown in rain-fed and irrigated conditions (**Oral**). Joint ISNH/ISRP International Conference (Sept 8-12, 2014), Canberra, Australia.
132. U. P. Tiwari\*, A. K. Singh, H. M. Zaleski, and **R. Jha**. Nutrient profile and in vitro digestibility of tubers in swine (**Oral**). ASAS/ADSA/CSAS Joint Annual Meeting (July 20-24, 2014), Kansas City, MO, USA.
133. T. A. Woyengo\*, **R. Jha**, E. Beltranena, and R. T. Zijlstra. In vitro digestion and fermentation characteristics and in vivo digestibility of canola co-products in the pigs (Oral). ASAS/ADSA/CSAS Joint Annual Meeting (July 20-24, 2014), Kansas City, MO, USA.
134. M. Sakuda\* and **R. Jha**. Effect of macadamia nut cake on growth performance and carcass quality of tilapia (*Oreochromis honorum*) (**Oral**). UROP Spring Symposium (May 8, 2014), UH Manoa, Honolulu, HI, USA.
135. U. P. Tiwari\*, B. Turano, and **R. Jha**. Nutritional profile and in vitro digestibility of local and hybrid napiergrass varieties grown in rain-fed and irrigated conditions (**Poster**). 26<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 11-12, 2014), Honolulu, HI, USA.
136. U. P. Tiwari\*, A. K. Singh, H. M. Zaleski, and **R. Jha**. Tubers can be used as alternative feedstuffs for swine feeding in Hawaii (**Oral**). 26<sup>th</sup> Annual CTAHR/COE Student Research Symposium (April 11-12, 2014), Honolulu, HI, USA.
137. **R. Jha\***, P. Wasti, K. Thapa, and C. Chan-Halbrendt. Impact of farming system on nutritional status of women and children of Chepang Community of Nepal (**Oral**). International Conservation Agriculture Conference (Dec 9-13, 2013), Battambang, Cambodia.
138. **R. Jha\***, L. F. Wang, P. R. Regmi, A. Pharazyn, and R. T. Zijlstra. Nutrient profile and in vitro vs. in vivo energy digestibility of legumes in growing pigs (**Oral**). ASAS/ADSA Joint Annual Meeting (July 8-12, 2013), Indianapolis, IN.

139. **R. Jha\***, P. R. Regmi, L. F. Wang, A. Pharazyn, and R. T. Zijlstra. Nutrient profile and in vitro vs. in vivo energy digestibility of wheat co-products from flour milling in growing pigs (**Oral**). ASAS/ADSA Joint Annual Meeting (July 8-12, 2013), Indianapolis, IN.
140. **T. A. Woyengo\***, **R. Jha**, E. Beltranena, and R. T. Zijlstra. In vitro degradation and fermentation characteristics of expeller-pressed canola meal and cold-pressed canola cake simulating the pig intestine (**Oral**). ASAS/ADSA Joint Annual Meeting (July 8-12, 2013), Indianapolis, IN, USA.
141. **T. A. Woyengo\***, **R. Jha**, E. Beltranena, A. Pharazyn, and R. T. Zijlstra. Nutritional value of lentil and micronized full-fat soybean fed to growing pigs (**Oral**). ASAS/ADSA Joint Annual Meeting (July 8-12, 2013), Indianapolis, IN, USA.
142. **R. Jha**, P. Regmi, L. Wang\*, A. Pharazyn, and R. T. Zijlstra. Nutrient profile and energy digestibility of wheat co-products from flour milling differ in growing pigs (**Poster**). Banff Pork Symposium (Jan 15-17, 2013), Banff, AB, Canada.
143. **T. A. Woyengo\***, **R. Jha**, E. Beltranena, A. Pharazyn, and R. T. Zijlstra (2013). Nutritional value of lentil and micronized full-fat soybean fed to growing-finishing pigs (**Poster**). Banff Pork Symposium (Jan 15-17, 2013), Banff, AB, Canada.
144. **R. Jha\***, P. Leterme, A. G. Van Kessel, and R. T. Zijlstra. Fermentation characteristics of fibers in the matrix of cereals (barley and oats) or isolated from cereals in the pig intestine (**Oral**). 7th Canadian Barley Symposium (July 8 - 10, 2012), Calgary, AB, Canada.
145. **R. Jha\***, J. Li, M. R. Bedford, C. R. Christensen, T. Vasanthan, and R. T. Zijlstra. Microscopic matrix and in vitro pig model fermentation of wheat and corn distillers dried grains with solubles with supplemental carbohydrases and protease (**Poster**). 12<sup>th</sup> International Symposium on Digestive Physiology of Pigs (May 29 - Jun 1, 2012), Keystone, CO, USA.
146. **R. Jha\***, A. Owusu-Asiedu, P. H. Simmins, A. Pharazyn, and R. T. Zijlstra. Microscopic matrix and in vitro degradation and fermentation characteristics of wheat co-products from flour milling in the pig intestine (**Poster**). 12<sup>th</sup> International Symposium on Digestive Physiology of Pigs (May 29 - Jun 1, 2012), Keystone, CO, USA.
147. R. T. Zijlstra\*, **R. Jha**, A. D. Woodward, J. Fohse, and T. A. T. G. van Kempen. Starch and fiber properties affect their kinetics of digestion and thereby digestive physiology in pigs (**Oral- Invited**). 12<sup>th</sup> International Symposium on Digestive Physiology of Pigs (May 29 - Jun 1, 2012), Keystone, CO, USA.
148. **R. Jha\***, J. Li, M. R. Bedford, C. R. Christensen, T. Vasanthan, and R. T. Zijlstra. In vitro fermentation and microscopic matrix of distillers dried grains with solubles following enzyme treatment (**Oral**). ASAS/ADSA Midwestern Conference (Mar 19-21, 2012), Des Moines, IA, USA.
149. R. T. Zijlstra\* and **R. Jha**. Novel swine feeding programs to enhance competitiveness and pork differentiation: Feedstuffs and Carbohydrates (**Oral- invited**). Banff Pork Seminar (Jan 17-20, 2012), Banff, AB, Canada.
150. **R. Jha\***, J. Li, M. R. Bedford, C. R. Christensen, T. Vasanthan, and R. T. Zijlstra. Enzymes enhance degradation of DDGS, revealed by in vitro gas production and microscopic examination (**Poster**). Banff Pork Seminar (Jan 17-20, 2012), Banff, AB, Canada.
151. **R. Jha\*** and R. T. Zijlstra. Evaluation of fermentation characteristics and volatile fatty acids production of unique fiber and starch sources using an in vitro model of the pig large intestine (**Oral**). ASAS/ADSA Midwestern Conference (Mar 14-16, 2011), Des Moines, IA, USA.
152. **R. Jha\***, J. K. Htoo, M. G. Young, E. Beltranena, and R. T. Zijlstra. Dietary co-products enhances pork omega-3 fatty acid and reduce feed costs without affecting carcass quality and growth (**Poster**). Banff Pork Seminar (Jan 18-21, 2011), Banff, AB, Canada.
153. **R. Jha\***, J. K. Htoo, M. G. Young, E. Beltranena, and R. T. Zijlstra. Effects of dietary crude protein and co-product level on growth performance and carcass quality of grower-finisher pigs (**Poster**). Banff Pork Seminar (Jan 18-21, 2011), Banff, AB, Canada.
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