

JINZENG YANG, Ph.D.

Dept of Human Nutrition, Food and Animal Sciences
CTAHR, University of Hawaii at Manoa
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EDUCATION

- Ph.D.:** Animal Science, University of Alberta, Canada, 2000
- M.Sc.:** Animal Genetics, Huazhong Agricultural University, China 1988
- B.Sc.:** Animal Science, Hebei Agricultural University, China 1985

EMPLOYMENT EXPERIENCES

08/2016-2022, 08/2023-Present, Departmental Chairman

01/2018-12/2018, Associate Dean for Research (Interim), CTAHR

2015 - Present: Professor of Animal Molecular Genetics

70% Research and 30% Teaching, Tenured in 2009

2002 –07: Assistant Professor, 2008-14: Associate Professor, 2015-present: Full Professor

Dept of Human Nutrition, Food & Animal Sciences

College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa

Research Interests:

- Animal genetic research programs in beef cattle, shrimp and fish
- Molecular biology of skeletal muscle and diabetes prevention

08-12/2013, Sabbatical Leave, John A. Burns School of Medicine UHM, and China Academy of Agricultural Science, Beijing China

Creating transgenic animals by piggyBac transposon

01/2000 - 08/2002: Research Molecular Biologist/Postdoctoral fellow

Laboratory of Animal Bioscience and Biotechnology, USDA-ARS, Beltsville, Maryland

Research project: Transgenic approaches to study muscle development in mice and pigs

1994 - 2000: Research Assistant in Ph.D. program, University of Alberta

Research projects: Transcription factor Stat5 and hormonal regulation of bovine lactation

1989 - 1994: Research Scientist, Huazhong Agricultural University, Wuhan, China

Research Projects: Pig genetics on muscle growth and meat quality

1988 - 1989: Visiting Scientist, Fudan University Medical School, China

Research Project: Protein kinase C in relation to liver development and tumorigenesis.

1985 - 1988: Research Assistant in MSc program, HAU, China

Thesis: Serum CK, LDH and RYR1 Mutations in pigs.

TEACHING EXPERIENCES

- Genes and Animal Biology (ANSC446)
- DNA and Genetic Analysis (MBBE/ANSC650)
- Physiology of Domestic Animals (ANSC450)

AWARDS

- The Grand Prize of Best Poster, Beltsville Agricultural Research Center, USDA, 2001
- Visiting fellowship in the Canadian Government Laboratories (Declined), 1998
- University of Alberta Ph.D. Scholarship (\$18000/year), 1994 and 1995
- The First Prize Scientific Research Award, Ministry of Education, China, 1992

SCIENTIFIC AFFILIATIONS

Member, American Society of Animal Science 2021-present, American Society of Nutrition, The Endocrine Society; 2007-present; World Aquaculture Society,

PROFESSIONAL ACTIVITIES

Editorial Board: Scientific Reports, 2014-Present.

Editorial Board: Journal of Agricultural Biotechnology, 2011-Present.

Editorial Board: Animal (2005-2011)

Ad Hoc Reviewer, Genetics, Am J Physiol, J. Appl Physiol, Endocrinology, J Anim Sci, Int J Biol Sci. PlosOne, Dev Biol. Genetics, Genomics

Ad Hoc Reviewer: USDA-NIFA Panelist, NSF Panelist, China NSF, Canada NSERC

PUBLICATIONS

1. Wetzlich B, Nyakundi BB, **Yang J.** 2024. Therapeutic applications and challenges in myostatin inhibition for enhanced skeletal muscle mass and functions. **Mol Cell Biochem.** doi: 10.1007/s11010-024-05120-y.
2. Nyakundi BB, Wall MM, **Yang J.** 2024. Supplementation of papaya leaf juice has beneficial effects on glucose homeostasis in high fat/high sugar-induced obese and prediabetic adult mice. **BMC Complement Med Ther.** 24:18. doi: 10.1186/s12906-023-04320-1. PMID: 38172797.
3. Zhan Z, He S, Cui Y, **Yang J.** Shi X, 2024. Development of a multiplex recombinase polymerase amplification coupled with lateral flow dipsticks for the simultaneous rapid detection of Salmonella spp., Salmonella Typhimurium and Salmonella Enteritidis. **Food Quality and Safety**, 8: fyad059, <https://doi.org/10.1093/fqsafe/fyad059>
4. Wang X, Zong X, Ye M, Jin C, Xu T, **Yang J.** Gao C, Wang X, Yan H. 2024. Lysine Distinctively Manipulates Myogenic Regulatory Factors and Wnt/Ca²⁺ Pathway in Slow and Fast Muscles, and Their Satellite Cells of Postnatal Piglets. **Cells.** 2024; 13(7):650. <https://doi.org/10.3390/cells13070650>
5. Nyakundi BB, **Yang J.** 2023. Uses of Papaya Leaf and Seaweed Supplementations for Controlling Glucose Homeostasis in Diabetes. **Int J Mol Sci.** 24(7):6846. doi: 10.3390/ijms24076846.
6. Li B, **Yang J.** Liu Y, Jiang M. 2023. Genome Variation Map of Domestic Qinghai-Tibet Plateau Yaks by SLAF-Seq Reveals Genetic Footprint during Artificial Selection. **Animals (Basel).** 13(18):2963. doi: 10.3390/ani13182963.
7. Huang Z, Cai Z, Zhang J, Gu Y, Wang J, **Yang J.** Lv G, Yang C, Zhang Y, Ji C, Jiang S. 2023. Integrating proteomics and metabolomics to elucidate the molecular network regulating of inosine monophosphate-specific deposition in Jingyuan chicken. **Poult Sci.** 102(12):103118. doi: 10.1016/j.psj.2023.103118.
8. Fu B, **Yang J.** Yang Y, Xia J, He Y, Wang Q, Zhao H, Yang H. 2022. Enhanced Muscle Fibers of Epinephelus coioides by Myostatin Autologous Nucleic Acid Vaccine. **International Journal of Molecular Sciences.** 2022; 23(13):6997. <https://doi.org/10.3390/ijms23136997>
9. Li B, **Yang J.** Gong Y, Xiao Y, Chen W, Zeng Q, Xu K, Duan Y, Ma H. 2022. Effects of age on subcutaneous adipose tissue proteins in Chinese indigenous Ningxiang pig by TMT-labeled quantitative proteomics. **J Proteomics.** 2022 Jun 8;265:104650. doi: 10.1016/j.jpro.2022.104650.

10. Li B, **Yang J**, He J, Peng X, Zeng Q, Song Y, Xu K, Ma H. 2021. Characterization of the whole transcriptome of spleens from Chinese indigenous breed Ningxiang pig reveals diverse coding and non-coding RNAs for immunity regulation. **Genomics**. 113(4):2468-2482. doi: 10.1016/j.ygeno.2021.05.025.
11. Li B, Yang J, He J, Gong Y, Xiao Y, Zeng Q, Xu K, Duan Y, He J, Ma H. 2021. Spatio-temporal regulation and functional analysis of circular RNAs in skeletal muscle and subcutaneous fat during pig growth. **Biology (Basel)**. 10:841. doi: 10.3390/biology10090841.
12. Gu H, Zhou Y, **Yang J**, Li J, Peng Y, Zhang X, Miao Y, Jiang W, Bu G, Hou L, Li T, Zhang L, Xia X, Ma Z, Xiong Y, Zuo B. 2021. Targeted overexpression of PPAR γ in skeletal muscle by random insertion and CRISPR/Cas9 transgenic pig cloning enhances oxidative fiber formation and intramuscular fat deposition. **FASEB J**. 35(2):e21308. doi: 10.1096/fj.202001812RR. Cited by 49
13. Li B, **Yang J**, Gong Y, Xiao Y, Zeng Q, Xu K, Duan Y, He J, He J, Ma H. 2021. Integrated Analysis of Liver Transcriptome, miRNA, and Proteome of Chinese Indigenous Breed Ningxiang Pig in Three Developmental Stages Uncovers Significant miRNA-mRNA-Protein Networks in Lipid Metabolism. **Front Genet**. 12:709521. doi: 10.3389/fgene.2021.709521.
14. Yang H, Yang YL, Li GQ, Yu Q, **Yang J**, 2021 Identifications of immune-responsive genes for adaptative traits by comparative transcriptome analysis of spleen tissue from Kazakh and Suffolk sheep. **Sci Rep** 11:3157. <https://doi.org/10.1038/s41598-021-82878-x>
15. Xu Y, Xu H, Wall MW, **Yang J**. 2020. Roles of transcription factor SQUAMOSA promoter binding protein-like gene family in papaya (*Carica papaya*) development and ripening. **Genomics** <https://doi.org/10.1016/j.ygeno.2020.03.009>.
16. Zeng F, Zhao C, Wu X, Dong R, Li G, Zhu Q, Zheng E, Liu D, **Yang J**, Moisyadi S, Urschitz J, Li Z, Wu Z. 2020. Bacteria-induced expression of the pig-derived protegrin-1 transgene specifically in the respiratory tract of mice enhances resistance to airway bacterial infection. **Scientific Reports**. 2020 Sep 29;10(1):16020. doi: 10.1038/s41598-020-73084-2.
17. Li B, Cui W, **Yang J**. 2020. Enhanced skeletal muscle growth in myostatin-deficient transgenic pigs had improved glucose uptake in streptozotocin -induced diabetes. **Transgenic Research**. <https://doi.org/10.1007/s11248-020-00194-y>
18. Jin CL, Ye JL, **Yang J**, Gao CQ, Yan HC, Li HC, Wang XQ. 2019. mTORC1 Mediates Lysine-Induced Satellite Cell Activation to Promote Skeletal Muscle Growth. **Cells** 8, 1549.
19. Choi DH, **Yang J**, Kim YS. 2019. Rapamycin suppresses postnatal muscle hypertrophy induced by myostatin-inhibition accompanied by transcriptional suppression of the Akt/mTOR pathway. **Biochem Biophys Rep**. 17:182–190.
20. Xu X, Mishra B, Qin N, Sun X, Zhang S, **Yang J**, Xu R. 2019. Differential Transcriptome Analysis of Early Postnatal Developing Longissimus Dorsi Muscle from Two Pig Breeds Characterized in Divergent Myofiber Traits and Fatness. **Animal Biotechnology** 30, 63-74,
21. Jin CL, Zhang ZM, Ye JL, Gao CQ, Yan HC, Li HC, **Yang J**, Wang XQ. 2019. Lysine-induced swine satellite cell migration is mediated by the FAK pathway. **Food & Function**. 10(2):583-591.
22. Zhang P, Xu H, Li R, Wu W, Chao Z, Li C, Xia W, Wang L, **Yang J**, Xu Y. 2018. Assessment of myoblast circular RNA dynamics and its correlation with miRNA during myogenic differentiation. **Int J Biochem Cell Biol**. 99:211-218.

23. Yang H, Xia J, Zhang JE, **Yang J**, Zhao H, Wang Q, Sun J, Xue H, Wu Y, Chen J, Huang J, Liu L. 2018. Characterization of the Complete Mitochondrial Genome Sequences of Three Croakers (*Perciformes, Sciaenidae*) and Novel Insights into the Phylogenetics. **Int J Mol Sci.** 19(6):1741.
24. Yang H, Zhang J-E, Xia J, **Yang J**, Guo J, Deng Z, Luo M. 2018. Comparative Characterization of the Complete Mitochondrial Genomes of the Three Apple Snails (*Gastropoda: Ampullariidae*) and the Phylogenetic Analyses. **International Journal of Molecular Sciences.** 2018; 19(11):3646.
25. Zhang X, Li Z, Yang H, Liu D, Cai G, Zheng E, Meng F, He X, Li G, Zhong G, Zhang M, Wang D, Sun Y, Shi S, Zhou R, Huang M, Zhang R, Li N, Fan MZ, **Yang J**, Wu Z. 2018. Generation of a novel growth-enhanced and reduced environmental impact transgenic pig. **eLife** 7:e34286. **Cited by 65**
26. Li B, Xie S, Cai C, Qian L, Jiang S, Ma D, Xiao G, Gao T, **Yang J**, Cui W. 2017. MicroRNA-95 promotes myogenic differentiation by down-regulation of aminoacyl-tRNA synthase complex-interacting multifunctional protein 2. **Oncotarget.** 8(67):111356-111368.
27. Zhang L, Zhou Y, Wu WJ, Hou LM, Chen HX, Zuo B, Xiong YZ, **Yang J**. 2017. Skeletal muscle-specific overexpression of PGC-1 α induces fiber-type conversion through enhanced mitochondrial respiration and fatty acid oxidation in mice and pigs. **International Journal of Biological Science** 13(9):1152-1162, **Cited by 112**
28. Qian L, Tang M, **Yang J**, et al. Targeted mutations in myostatin by zinc-finger nucleases result in double-muscle phenotype in Meishan pigs. **Scientific Reports.** 2015; 5:14435. doi:10.1038/srep14435. **Cited by 211**
29. Miao Y, **Yang J**, Xu Z, Jing L, Zhao S, Li X. 2015. RNA Sequencing Identifies Upregulated Kyphoscoliosis Peptidase and Phosphatidic Acid Signaling Pathways in Muscle Hypertrophy Generated by Transgenic Expression of Myostatin Propeptide. **International Journal of Molecular Sciences.** 16(4):7976-7994.
30. Javed R, Jing L, **Yang J**, Li X, Cao J, Zhao S. 2014. miRNA Transcriptome of Hypertrophic Skeletal Muscle with Overexpressed Myostatin Propeptide. **Biomed Res Int.** 328935. Epub 2014 Jul 24.
31. Zhou Y, **Yang J**, Huang J, Li T, Xu D, Zuo B, Hou L, Wu W, Zhang L, Xia X, Ma Z, Ren Z, Xiong Y. 2014. The formation of brown adipose tissue induced by transgenic over-expression of PPAR γ 2. **Biochem Biophys Res Commun.** 446:959-964.
32. **Yang J**, 2014. Enhanced skeletal muscle for effective glucose homeostasis. **Progress in Molecular Biology and Translational Science** 121:133-63. **Cited by 134**
33. Hou L, Ma F, **Yang J**, Riaz H, Wang Y, Wu W, Xia X, Ma Z, Zhou Y, Zhang L, Ying W, Xu D, Zuo B, Ren Z, Xiong Y. 2014. Effects of histone deacetylase inhibitor oxamflatin on in vitro porcine somatic cell nuclear transfer embryos. **Cell Reprogram.** 16:253-265.
34. Wang K, Li Z, Li Y, Zeng J, He C, **Yang J**, Liu D, Wu Z. 2013. Muscle-specific transgenic expression of porcine myostatin propeptide enhances muscle growth in mice. **Transgenic Res.** 22:1011-9.
35. **Yang J**, 2013. Roles of myostatin propeptide in promoting skeletal muscle growth and metabolism (Book Chapter. In "Skeletal Muscle: Physiology, Classification and Disease" edited by M. Willems, Nova Sci. Publisher. Page 207-218.
36. Wu L, **Yang J**. 2012. Identifications of captive and wild tilapia species existing in

Hawaii by mitochondrial DNA control region sequence. **PLoS One.** 7(12):e51731. **Cited by 41**

37. Li Z, Zeng F, Mitchell AD, Kim YS, Wu Z, **Yang J***. 2011. Transgenic overexpression of bone morphogenetic protein 11 propeptide in skeleton enhances bone formation. **Biochem Biophys Res Commun.** 416: 289-92.
38. Pan G and **Yang J.** 2010. Analysis of Microsatellite DNA Markers Reveals no Genetic Differentiation between Wild and Hatchery Populations of Pacific Threadfin in Hawaii. **International Journal of Biological Science** 6:827-833
39. Li Z, Kawasumi M, Zhao B, Moisyadi S, **Yang J.** 2010. Transgenic Over-expression of Growth Differentiation Factor 11 Propeptide in Skeleton Results in Transformation of the Seventh Cervical Vertebra into a Thoracic Vertebra **Molecular Reproduction and Development** 77: 990-997, **Cited by 38**
40. Kim KH, Kim YS, **Yang J.** 2010. The muscle-hypertrophic effects of clenbuterol is additive to the hypertrophic effect of myostatin suppression. *Muscle & Nerve* 43:700-707
41. Yang Y, **Yang J.**, Liu R, Li H, Luo X, Yang G. 2010. Accumulation of beta-catenin by lithium chloride in porcine myoblast cultures accelerates cell differentiation. **Molecular Biology Reports** 38:2043-2049
42. Watanabe S, Zhao B, Ako H, **Yang J***. 2010. Identifications of expressed sequence tags from Pacific threadfin skeletal muscle cDNA library. *Aquaculture Research* 41: 572-578.
43. Wang H, Iwai TJ, Zhao B, Lee CS, **Yang J***. 2010. Identification of microsatellite DNA markers for Pacific threadfin parentage assignment. **J. World Aquaculture Society**, 41: 640-647. **Cited by 16.**
44. Pan G and **Yang J.** 2010. Analysis of Microsatellite DNA Markers Reveals no Genetic Differentiation between Wild and Hatchery Populations of Pacific Threadfin in Hawaii. **International Journal of Biological Science** 6:827-833
45. Zhao B, Li EJ, Wall RJ, **Yang J***. 2009. Coordinated patterns of gene expression for adult muscle build-up in transgenic mice expressing myostatin propeptide. **BMC Genomics.** 10:305-315.
46. Li Z, Zhao B, Kim YS, Hu, CY, **Yang J.** 2009. Administration of a mutated myostatin propeptide to neonatal mice significantly enhances skeletal muscle growth. **Molecular Reproduction and Development** 77:76-82.
47. Laoong-u-thai Y, Zhao B, Phongdara A, Ako H, **Yang J.** 2009. Identifications of SUMO-1 cDNA and its expression patterns in Pacific white shrimp *Litopenaeus vannamei*. **Int J Biol Sci.** 5:205-14.
48. Li Z, B. Cao, Zhao B, Yang X, Fan MZ, **Yang J.** 2009. Decreased expression of calpain and calpastatin mRNA during development are highly correlated with muscle protein accumulation in neonatal pigs. **Comp. Biochem. Physiol. A: Mol. Integrat. Physiol.** 152:498-503.
49. **Yang J.**, Wang H, Iwai TJ, Zhao B, Lee CS, 2008. Development of DNA-based Testing for Pacific threadfin parentage assignment. *CTSA Regional Notes* 19: 4-5.
50. Cesar, JR, Zhao B, **Yang J.** 2008. Analysis of expressed sequence tags from abdominal muscle cDNA library of the pacific white shrimp *Litopenaeus vannamei*. **Animal.** 2: 1377-83.
51. Suzuki,ST, Zhao B, **Yang J.** 2008. Enhanced muscle by myostatin propeptide increases adipose tissue adiponectin, PPAR- α and PPAR- γ expressions. **Biochem. Biophys. Res. Commun.** 369: 767-73.

52. **Yang J**, Ferreira R, DuPonte MW, Fukumoto GK, Zhao B. 2008. Growth performances of F1 Angus Plus calves grazing on pasture in Hawaii's tropical climate. **Tropical Animal Health and Production**. 40: 1438-1444.
53. Wu Z, Li Z, **Yang J**. 2008. Transient transgene transmission to piglets by intrauterine insemination of spermatozoa incubated with DNA fragments. **Molecular Reproduction and Development** 75: 26-32.
54. Bobbili NK, Kim YS, Dunn MA, **Yang J**, Ong A. 2008. Effects of maternal immunisation against myostatin on post-natal growth and skeletal muscle mass of offspring in mice. **Food and Agricultural Immunology**. 19: 93-106.
55. Cesar J and **Yang J**. 2007. Expression patterns of ubiquitin, heat shock protein 70, alpha-actin and β -actin over the molt cycle in the abdominal muscle of marine shrimp *Litopenaeus vannamei*. **Molecular Reproduction and Development** 74: 554-559. **Cited by 114**
56. Li EJ, Zhao B, **Yang J**. 2007. Enhanced myogenesis in adult muscle by transgenic expression of myostatin propeptide. **Ethnicity and Disease** 17: S563-564.
57. **Yang J**, Zhao B. 2006. Postnatal expression of myostatin propeptide cDNA maintained high muscle growth and normal adipose tissue mass in transgenic mice fed a high-fat diet. **Molecular Reproduction and Development** 73:462-469.
58. Cesar J, Zhao B, Malecha S, Ako H, **Yang J**. 2006. Morphological and biochemical changes in the muscle of the marine shrimp *litopenaeus vannamei* during the molt cycle. **Aquaculture** 261:688 -694. **Cited by 116**.
59. Borthakur G, Zhao B, **Yang J**. 2006. Effects of enhanced muscle growth on fatty acid uptake in the skeletal muscle. **Ethnicity and Disease** 16: S53-54.
60. **Zhao B**, Wall RJ, **Yang J**. 2005. Transgenic expression of myostatin propeptide prevents diet-induced obesity and insulin resistance. **Biochemical and Biophysical Research Communications**. 337:248-255. **Cited by 285**
61. **Yang J**, Zhao B, Baracos VE, Kennelly JJ. 2005. Effects of bovine somatotropin on beta-casein mRNA levels in mammary tissue of lactating cows. **Journal of Dairy Science**. 88: 2806-2812. **Cited by 44**
62. **Yang J**, Ratovitski T, Brady JP, Solomon MB, Wells KD, Wall RJ. 2001. Expression of Myostatin Pro Domain Results in Muscular Transgenic Mice. **Molecular Reproduction and Development** 60: 351-361. **Cited by 224**
63. **Yang J**, Kennelly JJ and Baracos VE. 2000. Transcription factor Stat5 responses to prolactin, growth hormone and IGF-I in rat and bovine mammary gland explant, **Journal of Animal Science** 78: 3114-25. **Cited by 58**
64. **Yang J**, Kennelly JJ and Baracos VE. 2000. Physiological levels of Stat5 protein and activity in bovine mammary gland. **Journal of Animal Science** 78: 3126-34.
65. **Yang J**, Zhao B, Deng C, Xiong Y. 1993. Pig muscle enzyme activity of glycolysis in relation to halothane genotype and meat quality. **Journal of Huazhong Agricultural University** 12: 478-481.
66. Zhao B, **Yang J**. 1993. Pig muscle enzyme activity of glycolysis in relation to PSE meat. **Journal of Huazhong Agricultural University** 12: 482-485.

67. **Yang J**, Xiong Y, Wang H. 1990. Studies on serum enzymes and halothane sensitivity in relation to porcine muscle quality. **Scientia Agricultura Sinica** 23: 67-71.
68. Xiong Y, Deng C, **Yang J**, Fan C, Chen S. 1990. Studies on swine halothane test and carcass and meat quality. **Journal of Huazhong Agricultural University** 9: 264-270.

RESEARCH GRANTS (J YANG AS PI)

1. Assembly Of The Bovine Pan-Transcriptomes For Improved Genome Annotation And Phenome Prediction, USDA-NIFA, 2023-2027, \$1.4 Million (Co-PD with WSU/Zhihua Jiang)
2. Enhancing skeletal muscle and insulin sensitivity by administration of myostatin propeptide mRNA in diet-induced prediabetes. Hawaii Community Foundation, 2024-2025, \$59K
3. Health and Nutrition Studies of Hawaii Specialty Crops and Fruits for promoting local food production and preventions of obesity and diabetes. UHM Strategic Award, 2024-2026. \$320K.
4. Monitoring Inbreeding for Local Fish Farms by DNA Testing, 2022-2026. USDA-NIFA-CTSA, \$63K
5. Target Disruption of fish PGC for enhanced growth, USDA-NIFA-CTSA, 2021-2025, \$72K
6. Nutrient Bioavailability-Phytonutrients and Beyond, USDA-Hatch, 2019-present, \$60K Post-harvest food technology and nutrition/ Bioactive Compound. USDA-ARS, 2018-2023. \$120K
7. Postharvest Treatments and Functional Nutrients Studies of Hawaii Tropical Commodities, USDA-ARS, \$250K, 2022-2026
8. Genetic improvement of broodstock shrimp breeding. USDA and OI 2015-2018. \$80,000
9. Thailand Cochran Fellows on Resilient Agriculture, USDA-FAS. 2017-18. \$60,000.
10. Grass-fed beef production and evaluation in Hawaii, Ulupono Initiative. 2014-18, \$160,000
11. Role of bone morphogenic protein 11 in musculoskeletal formation and development Hawaii Community Foundation, 2013-2015, \$49,000.
12. DNA-based shrimp genetic program, Oceanic Institute, 2013-2015, \$45,000.
13. Genetic Improvement of Muscle Growth for Grass-fed Beef Production. CTAHR Supplemental Fund, 2013-2015, \$49,000
14. Development of DNA-based testing for shrimp broodstock breeding program. CTAHR USDA-HATCH, 2012-2013.
15. Down-regulation of bone morphogenic protein-11 by its propeptide during embryonic development. NIH-NCRR, 2010-2011, \$72,203
16. DNA-based selection of high-growth tilapia for local aquaculture USDA-NIFA-CTSA, 2011-2013. \$100,000
17. Development of DNA markers for pacific threadfin aquaculture. USDA-NIFA-CTSA, 2006-2010. \$200,000
18. Role of myostatin (GDF-8) prodomain in promoting animal growth. USDA-CSREES, 2003-2009, \$202,300
19. Growth hormone receptor DNA polymorphisms and their associations with cattle growth USDA-CSREES, 2005-2009, \$210,588,

20. Identification of shrimp muscle regulatory genes.
USDA-CSREES. 2004-2009. \$240,468
21. Muscle-fat Interactions and Obesity Prevention
Hawaii Community Foundation, 2004-2008, \$98,000
22. Selection of beef cattle through DNA and Ultrasound Technology
Hawaii Farm Bureau Federation, 2007-2008, \$70,000.

**GRADUATE STUDENTS, POSTDOCTORAL FELLOWS AND VISITING SCHOLARS
IN DR. YANG'S LAB**

1. Biao Li, Postdoctoral Associate, 2024-Present
2. Vikas Jha, Graduate Student, January 2025.
3. Andrea, Chavez, Graduate Student, 2024-Present
4. Benard Nyakundi, Postdoctoral fellow, 2022-2024
5. Wei-Hsuan Chung, Graduate Student, ANSC, 2023-Present
6. Brock Wetzlich, Graduate Student, MBBE, 2022-present
7. Justin Legaspi, Graduate student in Ph.D. Nutrition Sciences, 2020-2021, Transferred.
8. Dionne Sesepasara, Graduate Student in ANSC program, 2020-2023
9. Yongjie Xu, Research Associate Visiting Scholar, 2016-2017; 2018-2020
10. Fang Zeng, Visiting Scholar from South China Agricultural University, 2019-2020
11. Danita Dahl, Graduate Student in ANSC program, 2016-2018.
12. Micheal Wong, Graduate Student in Ph.D. Nutrition, 2017-2018, Transferred
13. Donna Kuehu, Graduate student in ANSC program, 2014-2017
14. Xiaoxing Xu, Graduate student in ANSC program, 2015-2016
15. Lehua Wall, Graduate student in ANSC program, 2015-2016 (not registered)
16. Awat Yousif, Graduate student in MBBE Ph.D. program, 2007 to 2013
17. Ahmed Hussein, Graduate student in MBBE Ph.D. Program, 2008 to 2013
18. Dustin Moss, Graduate Student in MBEE Ph.D. Program, 2005-2013
19. Zicong Li, Graduate student in MBBE Ph.D. Program, 2006-2010
20. Jose Renato Cesar, Graduate Student in MBBE Ph.D. Program, 2003-2006
21. Mohhana G. Valmik, Graduate student in MBBE Ph.D. Program, 2003-2005, transferred.
22. Yanisa Laoong-u-thai, Visiting Ph.D. Student from Thailand, 2008-2010
23. Waraporn Sakaew, Visiting Ph.D. Student from Thailand, 08/2011 to 12/2011
24. Sharon, Agacid, Graduate student in MBBE MSc Program, 2011-2014
25. Yevvon Lee, Graduate Student in ANSC MSc Program, 2010 to 2013
26. Xin Zhang, Graduate Student in NREM MSc Program, 2012-2013, transferred.
27. Shizu Watanabe, Graduate student in MBBE MSc program, 2007-2010
28. Gavin Iwai, Graduate student in ANSC MSc Program, 2004-2010
29. Shana Suzuki, Graduate student in Nutrition MSc Program, 2005-2008
30. Nicole Sullivan, Graduate student in ANSC MSc Program, 2005-2008, Transferred
31. Lisa Corpus, Graduate student in MBBE MSc Program, 2004-2006
32. Dr. Liang Wu, Postdoctoral Fellow, 2010 to 2013
33. Dr. Gang Pan, Postdoctoral fellow, 2009-2010
34. Dr. Heng Wang, Postdoctoral Fellow, 2007 to 2009
35. Dr. Wentao Cui, Visiting Scholar from China, 2013-2014
36. Dr. Wenhui Pi, Visiting scientist from China, 2011 to 2012
37. Nine undergraduate and high school students in summer research program, 2005-2018
38. Hua Yang, Visiting Scholar from Xinjiang China, 2017-2018.

39. Huirong Yang, Visiting Scholar from South China Agricultural University, 2016-2017
40. Jun Xia, Visiting Scholar from Xinjiang China, 2016-2017
41. Yongjie Xu, Visiting Scholar from Xinyang Normal University, 2016-2017

Serve as a member of thesis committee for following graduate students

- Arthur Wong, Ph.D graduate student in MBBE program, 2013-2020
- Huong Vg, MS graduate student in MBBE program, 2019-2022
- Nicole Correa, MSc graduate student in ANSC program, 2014 to 2017
- Thomas J. Hynd, Ph.D. Student in DRB Program, 2008-2013
- Joel Marh, MSc DBR student, 2013-2015
- Donghyuck Choi, MBBE MSc Student, 2012-2015
- Malina Ivey, MBBE MSc Student, 2011-2013
- Isabel Rushanaedy, M.Sc. Student in MBBE Program, 2009-2013
- Kyoung Ho Kim, Ph.D. Student in MBBE Program, 2007-2011
- Srivani Yarlagaadda, M.Sc. Student in ANSC Program, 2008-2010
- Naveen Bobbili, M.Sc. Student in ANSC Program, 2006-2008
- Yun Kyung Lee, M.Sc. Student in ANSC Program, 2001-2003

Conferences Abstracts in Refereed Journals

1. Li B, Jiang Z, **Yang J**, 2024 Large-scale profiling of non-conventional peptides in several tissues of Yak (*Bos mutus*) by peptidogenomic pipeline, Journal of Animal Science, Volume 102, Supplement_3, September 2024, Pages 716–717, <https://doi.org/10.1093/jas/skae234.806>
2. Nyakundi B, Wall M, **Yang J**. 2023. Antidiabetic Supplementation of Papaya Leaf Juice in High Fat/ High Sugar-Induced Obese and Prediabetic Adult Mice. P31-072-23 Current Developments in Nutrition, V7, Supplement 1,
3. Hussein A, Kim YS, **Yang J**. 2023. Synergistic Effects of Double Transgenes of Myostatin and GDF11 Propeptides on Growth Performances and Muscle Mass. P32-026-23. Current Developments in Nutrition, V7, Supplement 1,
4. Yang H, Xia J, Yang Y, Wang Q, Zhao H. **Yang J**. 2020. DNA Vaccine targeting to mature myostatin increases growth performances in orange-spotted grouper *Epinephelus coioides*, Aquaculture America 2020, February 9-12, 2020 Honolulu, HI USA.
5. Kurkjian K, Yamasaki L, **Yang J**, Odani J. 2020. Developing a shrimp disease diagnosis laboratory in Hawaii. Aquaculture America 2020, February 9-12 2020, Honolulu, HI USA.
6. Dahl D*, Haverly SN, Wagenman I, Nakamura T, Odani J, **Yang J**. 2020. Investigation of copepods as a live feed for larval shrimp culture. Aquaculture America 2020, February 9-12 2020, Honolulu, HI USA.
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