

Yanghua He
College of Tropical Agriculture and Human Resilience
Department of Human Nutrition, Food and Animal Sciences
University of Hawaii at Manoa

FTE Distribution: 60% I; 40% R; 0% E

Education

<u>Degree</u>	<u>University</u>	<u>Major</u>
PhD	China Agricultural University	Animal Genetics and Breeding
MS	China Agricultural University	Animal Genetics and Breeding
BS	Inner Mongolia Agricultural University	Animal Science

Professional Appointments

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Assistant Professor	University of Hawaii at Manoa	2019 to Present
Postdoctoral Research Fellow	St. Jude Children's Research Hospital	2017 to 2019
Postdoctoral Research Associate	University of Maryland	2012 to 2017
Research Assistant	Qingdao Agricultural University	2011 to 2012
Graduate Research Assistant	China Agricultural University	2007 to 2012
Sales Representative	Beijing Blest Biotechnology Development Co.	2006 to 2007

Courses Taught

Course ID and name (credits)

ANSC 200	Humans, Animals & Agriculture (3)	2020 Fall to Present
ANSC 201	Principal & Practice of Animal Science (3)	2020 Spring to 2022 Spring
ANSC 387	Lab Skills in Animal Science (2)	2021 Fall to Present
ANSC 445	Genetics and Animal Breeding (3)	2020 Spring to Present
ANSC/FSHN/MBBE650	DNA and Genetic Analysis (3)	2020 Fall to Present
FSHN 681	Departmental Graduate Student Seminar (1)	2023 Spring

Publications (reverse chronological order)

Note: Asterisk () stands for the first or co-first author and hashtag (#) stands for the corresponding or co-corresponding author.*

Book Chapters

1. **Yanghua He*** and Jiuzhou Song. 2016. Book Chapter 15 Bioinformatics analysis of Epigenetics. In: Bioinformatics in Aquaculture (edited by John Liu), Blackwell Publishing, Ames, IA. ISBN10: 1118782356. ISBN13: 9781118782354. Publication date: 03 February 2017. Publication City/Country New York, United States.
<https://onlinelibrary.wiley.com/doi/pdf/10.1002/9781118782392.ch15>

Patents

1. **Yanghua He***, Yuan Zhang, Ying Yu. The molecular method of detecting dairy cattle with different milking performance, China Agricultural University, Application No. 201010242552.5. July 2010.

Conference Proceedings

1. Mandeep Adhikari, Michael B Kantar, Ryan J Longman, CN Lee, Melelani Oshiro, Kyle Caires, **Yanghua He**, Kai Zhang, Guozhi Wang, Lihuan Wang, Bin Wen, Xiangchao Fu, Ning Liu, Zhiju Yu,

- Wensu Jian, Xiaolin Guo, Hanzhong Liu, Shi-Yi Chen. From Agriculture Genome to Phenome: Genome-Wide Association, Prediction and Selection. Frontiers Media SA. Frontiers Research Topics December 2023.
2. Jiuzhou Song, **Yanghua He***, Yi Ding, Fei Tian, Keji Zhao, Huanmin Zhang, Ying Yu, Ning Yang, Ling Lian, Juan Luo, Apratim Mitra. The Epigenetics and Plasticity of CD4+ T Cells in Poultry Health. Journal of Animal Science, Volume 99, Issue Supplement_3, November 2021, Page 55, <https://doi.org/10.1093/jas/skab235.098>. ASAS Annual 2021 Meeting.
 3. **Yanghua He***, Ning Yang, and Jiuzhou Song. The current and future of epigenetics in poultry health. Proceeding paper. THE XXV WORLD'S POULTRY CONGRESS. Beijing, China. 2016.
 4. **Yanghua He***, and Jiuzhou Song. The Current and Future of Epigenetics of Marek's Disease in Chickens. The 62nd Annual National Breeders Roundtable. Breeders Roundtable, 2013 Pages 19-25

Refereed Journal Publications

1. **Yanghua He***, Robert L. Taylor Jr., Hao Bai, Christopher M. Ashwell, Keji Zhao, Yaokun Li, Guirong Sun, Huanmin Zhang, Jiuzhou Song. Transgenerational epigenetic inheritance and immunity in chickens that vary in Marek's disease resistance. *Poultry Science*. August 2023. <https://doi.org/10.1016/j.psj.2023.103036>.
2. Guanjuan Xiang, Xi He, Belinda M. Giardine, Kathryn J. Weaver, Dylan J. Taylor, Rajiv C. McCoy, Camden Jansen, Cheryl A. Keller, Alexander Q. Wixom, April Cockburn, Amber Miller, Qian Qi, **Yanghua He**, Yichao Li, Jens Lichtenberg, Elisabeth F. Heuston, Stacie M. Anderson, Jing Luan, Marit W. Vermunt, Feng Yue, Michael E.G. Sauria, Michael C. Schatz, James Taylor, Berthold Gottgens, Jim R. Hughes, Douglas R. Higgs, Mitchell J. Weiss, Yong Cheng, Gerd A. Blobel, David Bodine, Yu Zhang, Qunhua Li, Shaun Mahony, Ross C. Hardison. Interspecies regulatory landscapes and elements revealed by novel joint systematic integration of human and mouse blood cell epigenomes. *Genome Research*. 2024 Jul; 34(7): 1089–1105. PubMed Central PMCID: [PMC11368181](https://pubmed.ncbi.nlm.nih.gov/PMC11368181/). doi: 10.1101/gr.277950.123.
3. Mandeep Adhikari, Michael B. Kantar, Ryan J. Longman, Christopher Aguirre, Melelani Oshiro, Kyle Caires, C. N. Lee, **Yanghua He#**. Genome-wide association study for carcass weight in pasture finished beef cattle in Hawaii. *Frontiers in Genetics*. Volume 14. 2023. PubMed Central PMCID: [PMC10203587](https://pubmed.ncbi.nlm.nih.gov/PMC10203587/). doi: 10.3389/fgene.2023.1168150
4. Jingyue Ellie Duan, Jicai Jiang, **Yanghua He#**. Editorial: Bridging (Epi-) Genomics and Environmental Changes: The Livestock Research. *Front. Genet.* 2022, 13:961232. PubMed Central PMCID: [PMC9294534](https://pubmed.ncbi.nlm.nih.gov/PMC9294534/). doi: 10.3389/fgene.2022.961232
5. Mandeep Adhikari, Ryan J Longman, Thomas W Giambelluca, C.N. Lee, **Yanghua He#**. Climate change impacts shifting landscape of the dairy industry in Hawai'i. *Translational Animal Science*, 2022. <https://doi.org/10.1093/tas/txac064>. PubMed Central PMID: [35755135](https://pubmed.ncbi.nlm.nih.gov/35755135/)
6. Jose Carrillo; Ying Bai; **Yanghua He**; Yaokun Li; Wentao Cai; Derek M. Bickhart; George Liu; Scott M. Barao; Tad Sonstegard; Jiuzhou Song. Growth curve, blood parameters and carcass traits of grass-fed Angus steers. *Animal*. 2021 Oct 29;15(11):100381. PubMed Central PMID: [34757288](https://pubmed.ncbi.nlm.nih.gov/34757288/). DOI: 10.1016/j.animal.2021.100381.
7. Cunling Jia, Ying Bai, Jianan Liu, Wentao Cai, Lei Liu, **Yanghua He**, and Jiuzhou Song. Metabolic Regulations by lncRNA, miRNA, and ceRNA Under Grass-Fed and Grain-Fed Regimens in Angus Beef Cattle. *Front. Genet.*, 04 March 2021. PubMed Central PMCID: [PMC7969984](https://pubmed.ncbi.nlm.nih.gov/PMC7969984/). DOI: [10.3389/fgene.2021.579393](https://doi.org/10.3389/fgene.2021.579393)
8. Xi Wang, Xi Li, Sujun Wu, Kerong Shi, **Yanghua He**. DNA methylation and transcriptome comparative analysis for Lvliang Black goats in distinct feeding pattern reveals epigenetic basis for environment adaptation. *Biotechnology & Biotechnological Equipment* 2021 v.35 no.1, pp. 788-795. [Catalog7770408](https://doi.org/10.1080/08930113.2021.1914088)
9. Qian Qi, Li Cheng, Xing Tang, **Yanghua He**, Yichao Li, Tiffany Yee, Dewan Shrestha, Ruopeng Feng, Peng Xu, Xin Zhou, Shondra M Pruett-Miller, Ross C. Hardison, Mitchell J. Weiss, Yong Cheng. Dynamic CTCF binding directly mediates interactions among cis-regulatory elements

- essential for hematopoiesis. *Blood* (IF 22.113). 2021. PubMed Central PMCID: [PMC7955410](#). doi: [10.1182/blood.2020005780](#)
10. Jianan Liu, Fang Liu, Wentao Cai, Cunling Jia, Ying Bai, **Yanghua He**, Weiyun Zhu, Robert W. Li, Jiuzhou Song. Diet-induced changes in bacterial communities in the jejunum and their associations with bile acids in Angus beef cattle. *Animal Microbiome* 2020; 2: 33. PubMed Central PMCID: [PMC7807434](#). doi: [10.1186/s42523-020-00051-7](#)
11. Hao Bai, **Yanghua He**, Yanli Lin, Qixin Leng, José A Carrillo, Jianan Liu, Feng Jiang, Jilan Chen, Jiuzhou Song. Identification of a novel differentially methylated region adjacent to ATG16L2 in lung cancer cells using methyl-CpG binding domain protein enriched genome sequencing. *Genome*. 2021. PubMed Central PMID: [33113339](#). DOI: [10.1139/gen-2020-0071](#)
12. Hao Bai, **Yanghua He**, Yi Ding, Qin Chu, Ling Lian, Eliyahu M Heifetz, Ning Yang, Hans H Cheng, Huanmin Zhang, Jilan Chen, Jiuzhou Song. Genome-wide characterization of copy number variations in the host genome in genetic resistance to Marek's disease using next generation sequencing. *BMC Genetics*. 2020 Jul 16; 21(1):77. PubMed Central PMCID: [PMC7364486](#). doi: [10.1186/s12863-020-00884-w](#)
13. Ying Bai, José A. Carrillo, Yaokun Li, **Yanghua He**, Jiuzhou Song. Diet induced the change of mtDNA copy number and metabolism in Angus cattle. *Journal of Animal Science and Biotechnology*, volume 11, Article number: 84 (2020). PubMed Central PMCID: [PMC7372754](#). doi: [10.1186/s40104-020-00482-x](#)
14. Cicera R. Lazzarotto, Nikolay L. Malinin, Yichao Li, Ruochi Zhang, Yang Yang, **Yanghua He**, Xin Lan, Kasey Jividen, Varun Katta1, Natalia G. Kolmakova, Christopher T. Petersen, Qian Qi, Evgheni Strelcov, Samantha Maragh, Giedre Krenciute, Jian Ma, Yong Cheng, Shengdar Q. Tsai. CHANGE-seq reveals genetic and epigenetic effects on CRISPR–Cas9 genome-wide activity. *Nature Biotechnology* (IF 68.164). volume 38, (2020) PubMed Central PMCID: [PMC7652380](#). doi: [10.1038/s41587-020-0555-7](#)
15. **Yanghua He**^{*}, Bo Han, Yi Ding, Huanmin Zhang, Li Zhang, Chunfang Zhao, Ning Yang, and Jiuzhou Song. *LincGALMD1* regulates viral gene expression in the chicken. *Frontiers in Genetics*, 10:1122. 2019 doi: 10.3389/fgene.2019.01122. PubMed Central PMCID: [PMC6868033](#). doi: [10.3389/fgene.2019.01122](#)
16. Hao Bai, **Yanghua He**^{*}, Yi Ding, José A. Carrillo, Huanmin Zhang, Ramesh K. Selvaraj, Jilan Chen, Jiuzhou Song. Allele-Specific Expression (ASE) and Differential Expression (DE) of CD4+ T Cells in response to Marek's Disease Virus Infection. *Genes* 2019, 10, 718; PubMed Central PMCID: [PMC6770979](#). doi: [10.3390/genes10090718](#)
17. Yaokun Li, José A. Carrillo, Yi Ding, **Yanghua He**, Chunping Zhao, Jianan Liu, Linsen Zan, Jiuzhou Song. DNA methylation, microRNA expression profiles and their relationships with transcriptome in grass-fed and grain-fed Angus Cattle rumen tissue. *PLoS One*. 2019 Oct 17;14(10): e0214559. PubMed Central PMCID: [PMC6797229](#). doi: [10.1371/journal.pone.0214559](#)
18. Hao Bai, **Yanghua He**, Yi Ding, Shuang Chang, Huanmin Zhang, Jilan Chen, Jiuzhou Song. Parent-of-origin has no detectable effect on survival days of Marek's disease virus infected White Leghorns. *Poultry Science*. 2019 Oct 1;98(10):4498-4503. PubMed Central PMID: [31076761](#). doi: [10.3382/ps/pez209](#).
19. Lingyang Xu, **Yanghua He**^{*}, Yi Ding, George E. Liu, Huanmin Zhang, Hans H. Cheng, Robert L. Taylor Jr, Jiuzhou Song. Genetic assessment of inbred chicken lines indicates genomic signatures of resistance Marek's disease. *Journal of Animal Science and Biotechnology*. December 2018, 9:65. PubMed Central PMCID: [PMC6136188](#)
20. **Yanghua He**^{*}, Qisheng Zuo, John Edwards, Keji Zhao, Jinzhi Lei, Wentao Cai, Qing Nie, Bichun Li, and Jiuzhou Song. DNA Methylation and Regulatory Elements during Chicken Germline Stem Cell Differentiation. *Stem Cell Reports* (IF 7.294). Cell Press. 2018 Jun 5; 10(6): 1793–1806. PubMed Central PMCID: [PMC5989647](#)

21. Bo Han, **Yanghua He***, Li Zhang, Yi Ding, Ling Lian, Chunfang Zhao, Jiuzhou Song, and Ning Yang. Long intergenic non-coding RNA *GALMD3* in chicken Marek's disease. *Scientific Reports*. 2017 Aug 31;7(1):10294. PubMed Central PMCID: [PMC6868033](#)
22. Lingyang Xu, **Yanghua He***, Yi Ding, Guirong Sun, Jose Carrillo, Yaokun Li, Mona Ghaly, Li Ma, Huanmin Zhang, George Liu, Jiuzhou Song. Characterization of copy number variation's potential role in Marek's Disease. *International Journal of Molecular Sciences*. 2017, 18(5), 1020; PubMed Central PMCID: [PMC5454933](#)
23. Tahir Usman, Yachun Wang, Chao Liu, **Yanghua He**, Xiao Wang, Yichun Dong, Hongjun Wu, Airong Liu, Ying Yu. Novel SNPs in IL-17F and IL-17A genes associated with somatic cell count in Chinese Holstein and Inner-Mongolia Sanhe cattle. *Journal of Animal Science and Biotechnology*. Journal of Animal Science and Biotechnology. 2017. 8:5. PubMed Central PMCID: [PMC5237346](#)
24. Dong Li, **Yanghua He**, Jiuzhou Song, Yani Zhang and Bichun Li. Regulation of crucial lncRNAs in differentiation of chicken embryonic stem cells to spermatogonia stem cells. *Animal Genetics*. 2017 Apr;48(2):191-204. PubMed Central PMID: [27862128](#)
25. **Yanghua He***, Minyan Song, Yi Zhang, Xizhi Li, Jiuzhou Song, Yuan Zhang and Ying Yu. Whole-genome regulation analysis of histone H3 lysin 27 trimethylation in subclinical mastitis cows infected by *Staphylococcus aureus*. *BMC Genomics*. 2016 Aug 8; 17:565. PubMed Central PMCID: [PMC4977872](#)
26. Minyan Song, **Yanghua He**, Huangkai Zhou, Yi Zhang, Xizhi Li, Ying Yu. Combined analysis of DNA methylome and transcriptome reveal novel candidate genes relevant with susceptibility to bovine *Staphylococcus aureus* subclinical mastitis. *Scientific Reports* 2016 Jul 14; 6:29390. PubMed Central PMCID: [PMC4944166](#)
27. José A. Carrillo, **Yanghua He**, Yaokun Li, Richard A. Erdman, Tad Sonstegard, Jiuzhou Song. Integrated metabolomic and transcriptome analyses reveal finishing forage affects metabolic pathways related to beef quality and animal welfare. *Scientific Reports* 2016 May 17; 6:25948. PubMed Central PMCID: [PMC4869019](#)
28. **Yanghua He***, Yi Ding, Fei Zhan, Huanmin Zhang, Gangqing Hu, Keji Zhao, Ning Yang, Jiuzhou Song. The conservation and signatures of lincRNAs in Marek's disease of chicken. *Scientific Reports*, 2016 Jan 27;6:19422. PubMed Central PMCID: [PMC4728745](#)
29. Nan Liu, J. N. He, W. M. Yu, Kaidong Liu, Ming Cheng, Jifeng Liu, **Yanghua He**, Jinshan Zhao, X. X. Qu. Transcriptome analysis of skeletal muscle at prenatal stages in Polled Dorset versus Small-tailed Han sheep. *Genet Mol Res*. 2015 Feb 6;14(1):1085-95. PubMed Central PMID: [25730048](#)
30. Yaokun Li, José A. Carrillo, Jianan Liu, George Liu, **Yanghua He**, Yi Ding, Chunping Zhao, Linsen Zan, and Jiuzhou Song. Transcriptomic profiling of spleen in grass-fed and grain-fed Angus cattle. *PLoS One*. 2015 Sep 14;10(9): e0135670. PubMed Central PMCID: [PMC4569079](#)
31. José A. Carrillo, **Yanghua He**, Juan Luo, Kimberly R. Menendez, Nathaniel L. Tablante, Keji Zhao, Joseph N. Paulson, Bichun Li, Jiuzhou Song. Methylome Analysis in Chickens Immunized with Infectious Laryngotracheitis Vaccine, *PLoS One*. 2015 Jun 24;10(6): e0100476. PubMed Central PMCID: [PMC4481310](#)
32. Yaokun Li, José A. Carrillo, Yi Ding, **Yanghua He**, Chunping Zhao, Linsen Zan, and Jiuzhou Song. Ruminal Transcriptomic Analysis of Grass-Fed and Grain-Fed Angus Beef Cattle. *PLoS One*. 2015 Jul 21;10(7): e0134067. PubMed Central PMCID: [PMC4510587](#)
33. Apratim Mitra, Juan Luo, **Yanghua He**, Yulan Gu, Huanmin Zhang, Keji Zhao, Kairong Cui and Jiuzhou Song. Histone modifications induced by MDV infection at early cytolytic and latency phases. *BMC Genomics*. 2015 Apr 18;16(1):311. PubMed Central PMCID: [PMC4404578](#)
34. **Yanghua He***, Jose A. Carrillo, Juan Luo, Yi Ding, Fei Tian and Jiuzhou Song. Genome-wide mapping of DNase I hypersensitive sites and association analysis with gene expression in MSB1 cells. *Front Genet*. 2014 Oct 13; 5:308. PubMed Central PMCID: [PMC4195362](#)
35. Nan Liu, Hegang Li, Kaidong Liu, Juanjuan Yu, Ming Cheng, Wei De, Jifeng Liu, Shuyan Shi, **Yanghua He**, and Jinshan Zhao. Differential expression of genes and proteins associated with wool follicle cycling. *Mol Biol Rep*. 2014 Aug;41(8):5343-9. PubMed Central PMID: [24847760](#)

36. Xiaoshuo Wang, Yuan Zhang, **Yanghua He**, Peipei Ma, Lijun Fan, Yachun Wang, Yi Zhang, Dongxiao Sun, Shengli Zhang, Chuduan Wang, Jiuzhou Song and Ying Yu. Aberrant promoter methylation of the CD4 gene in peripheral blood cells of mastitic dairy cows. *Genetics and molecular research*. 2013 Dec 4;12(4):6228-39. PubMed Central PMID: [24338418](#)
37. **Yanghua He***, Ying Yu, Yuan Zhang, Jiuzhou Song, Apratim Mitra, Yi Zhang, Yachun Wang, Dongxiao Sun, Shengli Zhang. Genome-wide bovine H3K27me3 modifications and the regulatory effects on genes expressions in peripheral blood lymphocytes. *Plos One*. 2012;7(6): e39094. PubMed Central PMCID: [PMC3386284](#)
38. Jian Gao, Han-qi Zhang, Jian-zhong He, **Yanghua He**, Shu-mei Li, Rong-guang Hou, Qiao-xing Wu, Yang Gao, Bo Han. Characterization of Prototheca zopfii Associated with Outbreak of Bovine Clinical Mastitis in Herd of Beijing, China. *Mycopathologia*. 2012 Apr;173(4):275-81. PubMed Central PMID: [22160589](#)
39. **Yanghua He***, Qin Chu, Peipei Ma, Yachun Wang, Qin Zhang, Dongxiao Sun, Yi Zhang, Ying Yu, Yuan Zhang. Association of bovine *CD4* and *STAT5b* single nucleotide polymorphisms with somatic cell scores and milk production traits in Chinese Holsteins. *Journal of Dairy Research*. 2011 May;78(2):242-9. PubMed Central PMID: [21435309](#)
40. **Yanghua He***, Ying Yu, Yuan Zhang. Relationships between copy number variations and human disease and its perspective in animal disease-resistant breeding. [Article in Chinese] *HEREDITAS (Beijing)*. 2008 Nov;30(11):1385-91. PubMed Central PMID: [19073544](#)

Extension Publications

1. Jinzeng Yang, Michael DuPonte, Douglas Vincent, Kyle Caires, **Yanghua He**, Nicole Correa, Lehua Wall, Keala Cowell, Marla Fergerstrom. DNA-Based Bull Selection and Artificial Insemination for Grass-Fed Beef Cattle Production. 2020 June. <http://www.ctahr.hawaii.edu/oc/freepubs/pdf/AAS-1.pdf>

Creative Works (ex. Extension Videos, Websites, Blogs, Creative Designs and Exhibitions, etc.)

1. **2020** **Yanghua He et. al., UNIVERSITY of HAWAI'I NEWS**, Outstanding article on *Nature Biotechnology* as a co-author "Genome editing for children's diseases could boost agricultural production" with the link: <https://www.hawaii.edu/news/2020/06/26/change-seq-target-gene-editing/>
2. **2018** Jiuzhou Song, **Yanghua He, et. al., MARYLAND FARM & HARVEST TV**. "The study of genetic variations in Angus populations shows their diversity in performance". Interviewed regarding genetic studies in Angus beef cattle. The link: <https://video.mpt.tv/video/episode-605-tuerqo/> and the segment begins at 18:10 and ends at 19:10. December 11, 2018
3. **2018** **Yanghua He et. al., CISION PRWeb News**, "UMD Researcher Discovers Mechanisms and Epigenetic Markers with Implications for Diseases Ranging from Cancers to Infertility" with the link: <http://www.prweb.com/releases/2018/05/prweb15452301.htm>

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

- 2023-2028** **Coordinator for Aim 3** (Education, training, and outreach to develop a data-savvy workforce) of the USDA Multistate Research Project, NRSP8 (National Animal Genome Research Program: <https://www.nimss.org/projects/18969?search=NRSP8>). Aim 3 specifically addresses the need to ensure that we are developing the 21st-century agricultural workforce in the areas of informatics science, which can keep US agriculture globally competitive and resilient. I was nominated and elected to join [the eight-member leadership team](#).
- 2024-present** **Instructional Committee**, Department of Human Nutrition, Food and Animal Sciences, UH Manoa
- 2020-present** **Guest Editor** for a Special Issue "Climate Change and Animal Genetics and Breeding" for the Journal *Animals* (ISSN 2076-2615)
- 2020-present** **Guest Editor** for a Research Topic "Bridging (Epi-) Genomics and Environmental

Changes: the Livestock Research" on the Journal *Frontiers in Genetics*

- 2020-present** **Faculty Senator**, College of Tropical Agriculture and Human Resources, UH Manoa
- 2019-present** **Research Committee**, Department of Human Nutrition, Food and Animal Sciences, UH Manoa
- 2018** **Organizing Committee and Leadership Committee**, The Conference "International Conference & Exhibition on Genome Science" in San Diego, USA
- 2018-2019** **Secretary**, St. Jude Toastmasters Club, Toastmasters International, St. Jude Club, Memphis, USA
- Primary duties:** maintain all club records, manage club files, handle club correspondence, and take the minutes at each club and executive committee meeting; help the president to make the club more successful.
- 2012-2017** **Laboratory manager**, University of Maryland, College Park, USA
- Primary duties:** Lab routine management and maintenance; reagents and lab equipment orders; negotiation with companies; lab environment and safety training; new members training; project progress tracking of graduate students and visiting scholars; troubleshooting of project problems; transfer work with outgoing members; installation, management, and maintenance of our computational server and storage server; edit and revise grant proposals for the supervisor.

Honors and Awards

- 2024** Western Region New Teaching Award for Excellence in College and University Teaching in the Food and Agricultural Sciences hosted by USDA. The award was presented at the Western Region Joint Summer Meeting in Fairbanks, Alaska, held from June 25-27, 2024.
- 2024** Locations Foundation Teacher Award for exceptional teaching in support of Hawaii's education, Locations Foundation. Awarded a \$500 grant to support class activities. Locations Foundation (<https://www.locationshawaii.com/about-us/locations-foundation/?aid=4114>).
- 2024** Honorable Mention Award for exceptional teaching, CTAHR, UH Manoa
- 2023** The UH Excellence in Teaching Award Nominee, UH System.
- 2023** The UH Manoa Innovation and Impact Showcase (IIS) on Teaching Practice Nominee, UH Manoa System.
- 2023** A Faculty Travel Grant for \$2,000 from the University of Hawaii at Manoa, supporting the travel for the Plant and Animal Genome 30 Conference in San Diego, California, USA
- 2022** The UH Excellence in Teaching Award Nominee, UH System.
- 2022** Association of College and University Educators (ACUE) [The year 2022 credential was issued] Credential URL: <https://api.badgr.io/public/assertions/EnZVF7i4Q-GhUba4wDBtOg>
- 2020** A Faculty Travel Grant for \$1,700 from the University of Hawaii at Manoa, supporting the travel for the Plant and Animal Genome XXVIII Conference in San Diego, California, USA
- 2017** Shaffner Award, **First Place** Presentation of Research in Poultry, 31st Annual Symposium, Department of Animal and Avian Sciences, University of Maryland, USA
- 2015** Travel fellowship with the International Plant & Animal Genome Conference XXIII. Animal Epigenetics workshop, San Diego, CA, USA
- 2014** Travel scholarship with the 10th International Symposium on Marek's Disease and Avian Herpesviruses. East Lansing, MI. USA

Graduate Students

<u>Category</u>	<u>Current Number of Students</u>	<u>Number Graduated (Career)</u>
Chair of Master Committees	3	1
Chair of PhD Committees	0	1
Member of Master Committees	1	1
Member of PhD Committees	4	2

Grant Support

Title of Grant: Wearable Multi-modal Heat-Stress Detecting Sensor for Cattle

Source of Grant: CTAHR CARES Pilot Research Project

Total Dollar Value (Your share of the grant value): \$70,006 (\$70,006)

Dates of Grant: 2024-2025

Role: (PI, Co-PI) PI

Title of Grant: Uncovering Genetic Markers of Thermal Tolerance in Pacific white shrimp

Source of Grant: USDA NIFA CTSA Grant

Total Dollar Value (Your share of the grant value): \$100,000 (\$78,854)

Dates of Grant: 2024-2025

Role: (PI, Co-PI) PI

Title of Grant: An integrated transcriptomic and epigenetic atlas of chicken embryonic stem cells

Source of Grant: USDA NIFA AFRI Competitive Grant

Total Dollar Value (Your share of the grant value): \$650,000 (\$29,880)

Dates of Grant: 2023-2027

Role: (PI, Co-PI) Co-PI

Title of Grant: Genetic Improvements of Hawaii Beef Cattle Using Cutting-edge Genomic Approaches

Source of Grant: USDA NIFA Hatch

Total Dollar Value (Your share of the grant value): \$150,000 (\$150,000)

Dates of Grant: 2019-2023

Role: (PI, Co-PI) PI

Presentations at Conferences (*Presenter, #Corresponding Author)

1. Mandeep Adhikari, Cedric Gondro, Michael B. Kantar, C.N. Lee, Ryan J. Longman, **Yanghua He**[#]. Genetic Ancestry, Admixture, Divergence, and Evolutionary History of Hawaiian Cattle. International Plant & Animal Genome Conference 32. San Diego, CA, USA. January 10-15, 2025.
2. Jacey Mitchell^{*} and **Yanghua He**[#]. Exploring Mitochondrial DNA Diversity in Hawaiian Cattle to Trace Crossbreeding History. John A. Burns School of Medicine. University of Hawai'i. April 19, 2024.
3. Casey Ku^{*} and **Yanghua He**[#]. Evaluating Impacts of Transportation Stressors on Cattle through cfDNA Methylation. 2024 INBRE meeting & Undergraduate Biomedical Research Symposium. John A. Burns School of Medicine. University of Hawai'i. April 19, 2024.
4. Angela Camino^{*} and **Yanghua He**[#]. A Meta Analysis of Epigenetic Insights in Aquaculture Species. 2024 INBRE meeting & Undergraduate Biomedical Research Symposium. John A. Burns School of Medicine. University of Hawai'i. April 19, 2024.
5. Mandeep Adhikari^{*} and **Yanghua He**[#]. Diet-Induced Effects on Jejunum Gene Expression and Disease Incidence in Beef Cattle. International Plant & Animal Genome Conference 31. San Diego, CA, USA. January 12-17, 2024.
6. Jacey Mitchell^{*} and **Yanghua He**[#]. Slick Mutation Identification in Hawaii Beef Cattle. 2023 Biomedical Symposium. John A. Burns School of Medicine. University of Hawai'i. April 20-21, 2023
7. Mandeep Adhikari, Ryan J. Longman, T.W. Giambelluca, C. N. Lee, Kyle Caires, **Yanghua He**[#]. The Genetic Architecture of Climate Adaptation of Beef Cattle. International Plant & Animal Genome Conference 30. San Diego, CA, USA. January 13 - 18, 2023

8. Mandeep Adhikari*, Ryan J. Longman, Thomas Giambelluca, C.N. Lee, **Yanghua He**[#]. Genetic Ancestry, Divergence, and Admixture of Beef Cattle in Hawai'i. CTAHR 3 Min Elevator Pitch. University of Hawaii at Manoa. April 19, 2022
9. Mandeep Adhikari, Ryan J. Longman, T.W. Giambelluca, C. N. Lee, Kyle Caires, **Yanghua He**^{**}. Environmental Genome-Wide Association Reveals Climate Adaptation of Beef Cattle in Hawai'i. International Plant & Animal Genome Conference XXIX. San Diego, CA, USA. January 8 - 12, 2022, Virtual.
10. Huong Thanh Vul*, Jinzeng Yang, and **Yanghua He**[#]. DNA Methylation Dynamics in Fetal-Neonatal Skeletal Muscle Influenced by Myostatin Inhibition. ANNUAL BIOMEDICAL SCIENCES SYMPOSIUM. John A. Burns School of Medicine, University of Hawaii Cancer Center. APRIL 15 – 16, 2021
11. Mandeep Adhikari*, C.N. Lee, **Yanghua He**[#]. Diverse Climatic Condition of Beef Cattle Production in Hawaii. 2020 SACNAS Virtual Conference. The National Diversity in Stem. October 19-24, 2020.
12. **Yanghua He**^{**}, Huong Thanh Vu, Yongjie Xu, Haixia Xu, Jinzeng Yang. Epigenetic mechanisms of myogenesis in myostatin transgenic mice. International Plant & Animal Genome Conference XXIII. San Diego, CA, USA. January 11 - 15, 2020
13. **Yanghua He**^{*}, *et. al.*, Epigenetic studies in Chicken Marek's Disease. 31st Annual Symposium of Department of Animal and Avian Sciences, University of Maryland, College Park, Maryland, United States. May 25, 2017
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