Yue Su

Curriculum Vitae

Ph.D. Candidate
Department of Animal Science
College of Agriculture, Health and Natural Resources
University of Connecticut
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EDUCATION

Ph.D. **University of Connecticut**, USA – Animal Science — Jan 2019 – Present
Advisor: Dr. Young Tang

M.S. **Nanjing Agriculture University**, China– Animal Husbandry — Sept 2016 – Jun 2018
Advisor: Prof. Yanmin Zhou

B.A. **Nanjing Agriculture University**, China – Animal Science — Sept 2012 – Jun 2016
Advisors: Prof. Yanmin Zhou and Prof. Tian Wang

TECHNIQUES & SKILLS

Molecular Biology: PCR, qRT-PCR, gel electrophoresis, *in vitro* transcription, gene cloning, CRISPR, ELISA, and protein purification.

Cell Biology: Cell culture, viral packaging, electroporation, immunofluorescence, flow cytometry, karyotyping, embryo thawing, cellular reprogramming, and cell differentiation.

Bioinformatics: Basic Bash, R & Python, RNA-seq analysis, and bisulfite sequencing analysis.

Animal Experiments: Teratoma assay (mice), drug testing (rats and pigs), interspecies chimera formation (mice), Cre-LoxP breeding (mice), and animal nutrition experiments (chickens and pigs)

RESEARCH EXPERIENCE

Molecular Embryology Laboratory Jan 2019 – Present
University of Connecticut Connecticut, USA

– Generating and characterizing bovine pluripotent stem cells (induced pluripotent stem cells and embryonic stem cells).

– Investigating human cellular reprogramming mechanism.

– *In vivo* testing for small chemicals against PRRSV infection.

– Investigating interaction between ACE2 and Spike in SARS-COVID2 infection.

– Generating Cre-LoxP mediated gene knockout mouse model.

Feed Processing Technology Laboratory Sept 2015 – Oct 2018
Nanjing Agriculture University Jiangsu, China

– Investigating the effects of modified palygorskite supplementation on the intestinal health of broilers and laying hens.

– Investigating the effects of synbiotics on the growth performance of growing pigs.

– Assessing the inhibitory effect of glycerin acetate, glycerin propionate and glycerin butyrate on E. coli.

Pig Nutrition and Feed Science Laboratory Feb 2014 – Mar 2015
Nanjing Agriculture University Jiangsu, China

– Investigating the effects of chromium methionine supplementation on the growth performance of growing pigs.

PUBLICATIONS

Peer-Reviewed:

Su Y, Wang L, Fan ZQ, Liu Y, Zhu JQ, Kaback D, Oudiz J, Patrick T, Yee SP, Tian XC, Polejaeva I, Tang Y. Establishment of Bovine-Induced Pluripotent Stem Cells [J]. International Journal of Molecular Sciences. 2021, DOI: 10.3390/ijms221910489.

Su Y, Zhu JQ, Salman S, Tang Y. Induced pluripotent stem cells from farm animals [J]. Journal of Animal Science, 2020, DOI: 10.1093/jas/skaa343.

Su Y, Chen YP, Cheng YF, Wen C, Zhou YM. Effects of modified palygorskite supplementation on egg quality and mineral element content, and intestinal integrity and barrier function of laying hens [J]. Biological Trace Element Research, 2018, DOI: 10.1007/s12011-018-1335-9.

Su Y, Chen YP, Chen LJ, Xu Q, Kang YR, Wang WB, Wang AQ, Wen C, Zhou YM. Effects of different levels of modified palygorskite supplementation on the growth performance, immunity, oxidative status, and intestinal integrity and barrier function of broilers [J]. Journal of Animal Physiology and Animal Nutrition, 2018, DOI: 10.1111/jpn.12974.

Wang L, **Su Y**, Huang C, Yin YX, Zhu JQ, Knupp A, Chu A, Tang Y. FOXH1 Is Regulated by NANOG and LIN28 for Early-stage Reprogramming [J]. Scientific Reports, 2019, DOI: 10.1038/s41598-019-52861-8.

Wang L, **Su Y**, Huang C, Yin YX, Chu A, Knupp A, Tang Y. NANOG and LIN28 Dramatically Improve Human Cell Reprogramming by Modulating LIN41 and Canonical WNT Activities [J]. Biology Open, 2019, DOI: 10.1242/bio.047225.

Wen C, **Su Y**, Tao ZG, Cheng Z, Zhou D, Wang T, Zhou YM. Dietary Supplementation with Microencapsulated Lutein Improves Yolk Color and Lutein Content in Fresh and Cooked Eggs of Laying Hens [J]. The Journal of Poultry Science, 2020, DOI: 10.2141/jpsa.0190139.

Zhu J, **Su Y**, Tang Y. Disrupting ACE2 Dimerization Mitigates the Infection by SARS-COV-2 Pseudovirus [J]. Frontiers in Virology, 2022, DOI: 10.3389/fviro.2022.916700.

Cheng YF, Chen YP, Chen R, **Su Y**, Zhang RQ, He QF, Wang K, Wen C, Zhou YM. Dietary mannan oligosaccharide ameliorates cyclic heat stress-induced damages on intestinal oxidative status and barrier integrity of broilers [J]. Poultry Science, 2019, DOI: 10.3382/ps/pez192.

Xu Q, Chen YP, Cheng YF, **Su Y**, Wen C, Wang WB, Wang AQ, Zhou YM. An evaluation of dietary modified palygorskite supplementation on growth performance, zearalenone residue, serum metabolites and antioxidant capacities in broilers fed the zearalenone contaminated diet[J]. Clays and Clay Minerals, 2018, DOI: 10.1346/CCMN.2018.064113.

Cheng YF, Xu Q, Chen YP, **Su Y**, Wen C, Zhou YM. Modified Palygorskite Improves Immunity, Antioxidant Ability, Intestinal Morphology, and Barrier Function in Broiler Chickens Fed Naturally Contaminated Diet with Permitted Feed Concentrations of Fusarium Mycotoxins [J]. Toxins, 2018, DOI: 10.3390/toxins10110482.

Li J, Cheng YF, **Su Y**, Tao ZG, Zhou D, Zhou YM, Wen C. Effects of Aposter Combined with Canthaxanthin on Antioxidant Function, Egg Quality and Yolk Pigment Deposition in Laying Hens (in Chinese) [J]. Hubei Agricultural Sciences, 2018, DOI: 10.14088/j.cnki.issn0439-8114.2018.18.022.

He QF, **Su Y**, Wang K, Chen R, Tao ZG, Wang H, Zhou YM, Wen C. Effects of different compound pigments on performance and egg quality of laying hens (in Chinese) [J]. Jiangsu Agricultural Sciences, 2018, DOI: 10.15889/j.issn.1002-1302.2019.09.048.

Xu Q, Cheng YF, **Su Y**, Chen YP, Wen C, Zhou YM. Effects of modified palygorskite supplementation to the feed of mold-contaminated corn on the growth performance, serum biochemistry and antioxidant capacities in broilers (in Chinese) [J]. Animal Husbandry and Veterinary Medicine, 2018, DOI: CNKI:SUN:XMYS.0.2018-05-006.

Yang MX, Kou T, Li Y, Zhang H, Jin SS, **Su Y**, Zhang LL, Wang T. Effect of *Bacillus amyloliquefaciens* ES-2 on carcass characteristics, meat quality and antioxidative status of broilers (in Chinese) [J]. Journal of Nanjing Agricultural University, 2016, DOI: 10.7685/jnau.201505040.

MEETING PRESENTATIONS

CAHNR Graduate Student Research Forum, UConn April 2022

Oral presenter Storrs, CT, USA

–Establishment of Bovine Induced Pluripotent Stem Cells

International Embryo Technology Society Annual Conference, IETS January 2022

Poster presenter Savannah, GA, USA

–Establishment of Bovine Induced Pluripotent Stem Cells

SCIENTIFIC FELLOWSHIPS/AWARDS

Doctoral Dissertation Fellowship, the Graduate School, UConn. 2022

Student Best Poster Award, 48th International Embryo Technology Society Annual Conference, IETS. 2022

Conference Participation Award, the Graduate School, UConn. 2022

Outstanding Master's Thesis Award, the Academic Degree Evaluation Committee of Jiangsu Province, China. 2019

Outstanding Master's Thesis Award, Nanjing Agricultural University, China. 2019

Outstanding Graduated Graduate Student, Nanjing Agricultural University, China. 2018

First-class Academic Scholarship, Nanjing Agricultural University, China. 2017

TEACHING AND MENTORING EXPERIENCE

Teaching Assistant

Introduction to Animal Science (ANSC 1001), University of Connecticut 2021
Main Instructor: Dr. Amy Safran

Principles of Animal Genetics (ANSC 3121), University of Connecticut 2019 & 2020
Instructor: Dr. Breno Fragomeni

Guest Lecturer

Introduction to Animal Science (ANSC 1001), University of Connecticut 2021

Undergraduate Research Mentoring

Julia Oudiz 2021-2022