

Dr. Jingyue (Ellie) Duan
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EMPLOYMENT

Assistant Professor	Cornell University Department of Animal Science	Jul. 2021 - present
Visiting Assistant Professor	Cornell University Department of Animal Science	Nov. 2020 - Jun. 2021
Postdoctoral associate	Brown University Molecular Biology, Cellular Biology, Biochemistry. Dr. Erica Larschan, PI	Mar. 2019 - Jun. 2021
Research associate	University of Connecticut Department of Animal Science Dr. Xiuchun (Cindy) Tian, PI	Dec. 2018 - Mar. 2019

EDUCATION

Ph.D.	University of Connecticut Department of Animal Science Dr. Xiuchun (Cindy) Tian, PI	Sep. 2014 - Dec. 2018
Certificate	University of Connecticut Department of Education Certificate in College Instruction	Sep. 2017 - May 2018
M.S.	University of Connecticut Department of Animal Science Dr. Xiuchun (Cindy) Tian, PI	Sep. 2014 - Oct. 2017
Non-degree	University of Connecticut Department of Animal Science Dr. Kumar Venkitanarayanan, advisor	Sep. 2013 - May 2014
B.S.	Sichuan University Department of Life Science and Biology Dr. Qun Sun, advisor	Sep. 2010 - Jun. 2014

PUBLICATION

1. Johnson, E.J., **Duan, J.**, Srirattana, K. et al. *Effects of intramuscularly injected plant-derived antimicrobials in the mouse model.* **Sci Rep** 12, 5937 (2022). <https://doi.org/10.1038/s41598-022-09705-9>
2. Anne M. Bronikowski, Richard P. Meisel, Peggy R. Biga, James R. Walters, Judith E. Mank, Erica Larschan, Gerald S. Wilkinson, Nicole Valenzuela, Ashley Mae Conard, João Pedro de Magalhães, **Jingyue (Ellie) Duan**, Amy E. Elias, Tony Gamble, Rita M. Graze, Kristin E. Gribble, Jill A. Kreiling, Nicole C. Riddle (2022) *Sex-specific aging in animals: Perspective and future directions.* **Aging Cell** Doi: <https://doi.org/10.1111/accel.13542>

3. **Duan JE***, Rieder L*, Colonna M, Huang A, Mckenney M, Watters S, Deshpande G, Jordan W, Fawzi N, Larschan E. (2021) *CLAMP and Zelda function together as pioneer transcription factors to promote Drosophila zygotic genome activation.* **eLife** DOI: 10.7554/eLife.69937
4. **Duan J** and Larschan E. (2019) *Dosage Compensation: How to Be Compensated...Or Not?* **Current Biology**. <https://doi.org/10.1016/j.cub.2019.09.065>
5. **Duan JE**, Jiang Z, Alqahtani F, Mandoiu I, Dong H, Zheng X, Marjani S, Chen J and Tian XC. (2019) *Whole genome bisulfite sequencing of bovine in vivo gametes and preimplantation embryos.* **Frontier of Genetics** doi: 10.3389/fgene.2019.00512
6. **Duan JE**, Flock K, Jue N, Zhang M, Jones A, Seesi S, Mandoiu I, Pillai S, Hoffman M, O'Neill R, Zinn S, Govoni K, Reed S, Jiang H, Jiang Z and Tian XC. (2019) *Dosage Compensation and Gene Expression of the X Chromosome in Sheep.* **G3: Genes Genomes Genetics** <https://doi.org/10.1534/g3.118.200815> selected to publish in **GSA Journal Spotlight 2019**
7. **Duan JE**, Jue NK, Jiang Z, O'Neill R, Wolf E, Blomberg LA, Talbot N, Dong H, Zheng X, Chen J, and Tian XC. (2019) *Dosage compensatory of X chromosome in bovine germline cells, early developmental embryos and somatic cells.* **Genome Biology and Evolution** doi: 10.1093/gbe/evy270
8. **Duan JE**, Zhu L, Dong H, Zheng X, Chen J, Jiang Z, and X. Tian. (2019) *Abundance of mRNA for histone variants, histone, and DNA modification enzymes in bovine in vivo oocytes and pre-implantation embryos.* **Scientific Reports** doi: 10.1038/s41598-018-38083-4
9. **Duan JE**, Zhang M, Flock K, Seesi S, Mandoiu I, Jones A, Johnson E, Pillai S, Hoffman M, Mcfadden K, Jiang H, Reed S, Govoni K, Zinn S, Jiang Z and Tian XC (2018). *Effects of Maternal Nutrition on the Expression of Genomic Imprinted genes in Ovine Fetuses.* **Epigenetics** doi: 10.1080/15592294.2018.1503489
10. Jiang Z, Lin J, Dong H, Zheng X, Marjani SL, **Duan JE**, Ouyang Z, Chen J, and Tian XC. (2018) *DNA methylomes of bovine gametes and in vivo produced preimplantation embryos.* **Biology of Reproduction** doi:10.1093/biolre/iory138
11. Wang L, Jiang Z, Huang D, **Duan J**, Huang C, Sullivan S, Vali K, Yin Y, Zhang M, Wegrzyn J, Tian XC, and Tang Y (2018) *JAK/STAT3 regulated global gene expression dynamics during late-stage reprogramming process.* **BMC Genomics** 19:183 doi:10.1186/s12864-018-4507-2
12. Huang D, Wang L, **Duan J**, Huang C, Tian XC, Zhang M, and Tang Y (2018) *LIF-activated Jak signaling determines Esrrb expression during late-stage reprogramming.* **Biology Open** doi:10.1242/bio.029264
13. Wen W, Luo X, Xia B, Guan J, Nie Y, Li L, **Duan J**, Suman SP, and Sun Q. (2015) *Post-mortem oxidative stability of three yak (Bos grunniens) muscles as influenced by animal age.* **Meat science** doi: 10.1016/j.meatsci.2015.03.014.
14. Feng Q, Jing Y, Huang Z, **Duan J**, Zhen C, Sun H, Zhong J, and Sun Q. (2014) *Genotyping of Beijing family of Mycobacterium tuberculosis isolates from Sichuan with MIRU-VNTR.* **Journal of Sichuan University (Medical Science Edition)** doi: 103969/j.issn.0490 6756.2014.04.036

Undergraduate Honor Thesis

Duan J (2014): *Effect of eugenol and rutin hydrate on virulence factors of Vibrio parahaemolyticus.* SCU

RESEARCH GRANTS

Current grants

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| 1. Cornell Center for Vertebrate Genomics Seed Grant Award. | 1/1/2022- |
| "Establishment of bovine embryos model to determine the effect of in vitro fertilization (IVF) on mammalian embryo DNA methylation and zygotic transcription." | 12/31/2026 |
| Role: PI | \$20,000 |

TEACHING AND MENTORING

- Nov 19th, 2021: Guest lecture **Epigenetics--Genomic Imprinting and X Chromosome Inactivation** in Contemporary perspectives in Animal Science (ANSC1101), ANSC, Cornell.
- Oct 12th, 2021: Guest lecture **Epigenetics overview** in Animal Embryology and Biotechnology (ANSC3323/5621), ANSC, UCONN.
- Mar 16th-18th, 2021: Guest lecture **"Molecular analysis and Biotechnology"** and three discussion sessions **"CRISPR/Cas9 and genome editing"** in Principle of Animal Genetics, ANSC, Cornell.
- Nov. 3rd, 2020: Guest lecture **"How to make GMO using genome editing"** in Animal Embryology and Biotechnology (ANSC3323/5621), ANSC, UCONN.
- Oct. 31th, 2019: Guest lecture **"Method in Genome engineering /Genome editing: ZFN, TALEN and CRISPR/Cas9"** in Animal Embryology and Biotechnology (ANSC3323/5621), ANSC, UCONN.
- Dec.4th, 2018: Guest lecture **"Epigenetics--Genomic Imprinting and X Chromosome Inactivation"** in Animal Embryology and Biotechnology (ANSC3323/5621), ANSC, UCONN.
- Apr. 18th, 2018: Guest lecture **"Animal Genetic Testing and Genomic Selection"** in Animal Breeding and Genetics (SAAS121), ANSC, UCONN.
- Nov. 10th, 2017: **"Ensembl genome browser tutorial"** in Principles of Animal Genetics (ANSC3121), ANSC, UCONN.
- Sep. 21st, 2017 and Sep.18th, 2018: Guest lecture **"Preimplantation Genetic Diagnosis"** in Embryo Biotechnology (ANSC3323/5621), ANSC, UCONN.
- Nov. 4th, 2016 Guest lecture **"X chromosome inactivation"** in Principles of Animal Genetics (ANSC3121), ANSC, UCONN.
- Fall 2016: Graduate Teaching Assistant in **Reproductive Physiology** (ANSC3122), ANSC, UCONN.
- Fall 2015, 2017, 2018: Graduate Teaching Assistant in **Animal Embryology and Biotechnology** (ANSC3323/5621), ANSC, UCONN.

Mentoring:

- 2021 - present: Mentoring one Ph.D. student and one M.S. student in research, scientific presentation, molecular biology experiments, bioinformatic analysis
- 2019 - 2021: Mentoring two Brown undergrad students in fly cross set up, fly dissection, molecular biology experiments, immunostaining and electrophoretic mobility shift assay.
- 2014 - 2019: Mentored UConn undergrad and fellow graduate students on RNA-seq data analysis, and use of Ensembl genome browser, UCSC genome browser, NCBI database search, DAVID and BLAST.

HONORS

- 2020 Postdoc Conference Award, Brown University, RI

2. 2019 Postdoc Travel Award, Brown University, RI
3. 2019 International Travel and Registration Award for six student competition finalists. International Embryo Technology Society (IETS) Foundation, New Orleans, Louisiana
4. 2018 Travel and Registration award, Institute for Teaching and Mentoring, Arlington, Virginia
5. 2018 Epigenetics & Chromatin Meeting Financial aid, Cold Spring Harbor Laboratory
6. 2018 Preparing Future Faculty Scholarship and Travel Fund, Stony Brook University
7. 2018 ANSC Outstanding Graduate (Ph.D.) Student award, UCONN
8. 2018 3 Minute Thesis Competition finalist, UCONN
9. 2018 Doctoral Dissertation Fellowship, UCONN
10. 2018 Doctoral Student Travel Award, UCONN
11. 2017 Travel and Registration Scholarship to attend the 22nd Summer Institute in Statistical Genetics, University of Washington in Seattle
12. 2017 Best Poster Presentation Runner-up Award, IETS
13. 2016 Outstanding Self-financed Xinjiang Students Studying Abroad Scholarship
14. 2016 Jerry Yang Summer Fellowship, ANSC, UCONN
15. 2016 Oral Presentation Award, Graduate Research Forum, CANHR, UCONN
16. 2012-2014 First-Class Scholarship at Sichuan University each year for three years, SCU
17. 2011 Third-Class Scholarship at Sichuan University, SCU

PROFESSIONAL DEVELOPMENT

Academia Conferences

1. Aug. 2021: Mechanism of Eukaryotic Transcription, (Virtual), CSHL
2. Mar. 2021: The 62nd Drosophila conference, Virtual.
3. Jan. 2021: The 47th Annual meeting of IETS, Virtual.
4. Oct. 2020: Frontiers in Single Cell Genomics (Virtual), CSHL
5. Sep. 2020: Epigenetics & Chromatin (Virtual), CSHL
6. Apr. 2020: Genome Organization & Nuclear Function (Virtual), CSHL
7. Mar. 2020: The Allied Genetics Conference (Virtual), GSA
8. Sep. 2019: Mechanism of Eukaryotic Transcription, CSHL, NY
9. Mar. 2019: The 60th Drosophila conference, Dallas, TX
10. Jan. 2019: The 45th Annual meeting of IETS, New Orleans, LA
11. Sep. 2018: Epigenetics & Chromatin, CSHL, NY
12. Jan. 2018: Plant & Animal Genome XXVI conference. San Diego, CA
13. Jun. 2017: Impact of CRISPR on Imprinting Disorders. Institute for Systems Genomics, Storrs, CT
14. Jan. 2017: The 43rd Annual meeting of the IETS, Austin TX
15. Jan. 2016: The 42nd Annual meeting of International Embryo Tech. Society (IETS), Louisville KY

Professional Trainings

1. Sep. 2021: Grant writing workshop, Cornell
2. Oct. 2020: NIH grant writing workshop, Virtual Event
3. Jul. 2020: 23rd Annual NIEHS Biomedical Career Symposium, Virtual Event
4. Jul. 2020: Diversity & Inclusion in STEM Community Conversation, Brown University, RI
5. Oct. 2019: Women in STEM Symposium, Brown University, RI
6. Oct. 2018: Invited participant: Institute on Teaching and Mentoring, VA
7. Jun. 2018: Preparing Future Faculty workshop, Stony Brook university, NY

8. Apr. 2018: 3 Minute Thesis competition, UCONN, Storrs, CT
9. Jul. 2017: The 22nd Summer Institute in Statistical Genetics at UW in Seattle, Seattle, WA
10. May 2013: Institute Pasteur of Shanghai Course: Detection, isolation, identification, collection and storage of Respiratory Virus, Institute Pasteur, Shanghai, China
11. Aug. 2012: Summer Camp "Swedish Nature". Uppsala University, Uppsala, Sweden
12. Jul. 2011: The "Environment and natural resources" Fieldwork Research at Ruorgai Grasslands, Tibet Plateau, China
13. 2010-2014: Undergrad Training Plan in Basic Disciplines (**Mount Everest Plan**), Life Science department, SCU, China

Professional Memberships

1. 2021 - present International Society of Animal Genetics (ISAG)
2. 2019 - present Genetics Society of America (GSA)
3. 2017 - present Plant & Animal Genome (PAG)
4. 2015 - present International Embryo Technology Society (IETS)

Publication Services

Journal Editor history: Guest Associate Editor in Livestock Genomics, Frontiers in Genetics
Journal reviewer history: Frontiers in Genetics, Journal of Developmental Origin, Life Science Alliance, Molecular ecology, Developmental Cell, BMC Biology, Animal Genetics, Nature Communication, EMBO Reports, PLOS One, Molecular Biology and Evolution, Theriogenology, Cellular reprogramming, Journal of Reproduction, BMC Genomics, Scientific Data, *Cells*, Reproduction, Fertility and Development, Biology of Reproduction