

## DONGSHENG DUAN'S PUBLICATIONS

### Books

- 2011 — Muscle Gene Therapy: Methods and Protocols. Humana Press, New York, NY (Duan, D. editor)
- 2010 — Muscle Gene Therapy, Springer, New York, NY (Duan, D. editor) All Publications

### All Publications

#### 2024

- [Duan D.](#) Full-length dystrophin gene therapy for Duchenne muscular dystrophy. **Molecular Therapy** 2024 Aug 12: S1525-0016(24)00483-0
- [Kwak SE, Zheng A, Arias EB, Wang H, Pan X, Yue Y, Duan D, Cartee GD.](#) *A novel genetic model provides a unique perspective on the relationship between postexercise glycogen concentration and increases in the abundance of key metabolic proteins after acute exercise.* **PLoS ONE** 19(1): e0295964, **2024.**
- [Rana J, Herzog RW, Yamada K, Kumar SRP, Munoz-Melero M, Lam AK, Marusic DM, Duan D, Terhorst C, Byrne BJ, Corti M, Biswas M.](#) *B Cell Focused Transient 1 Immune Suppression Protocol for Efficient AAV Readministration to the Liver.* **Molecular Therapy-Methods & Clinical Development** 32(1):101216, **2024.**
- [Wang H, Kwak SE, Zheng A, Arias EB, Pan X, Duan D, Cartee GD.](#) *Phosphorylation of AS160-Serine 704 is not essential for the exercise-induced increase in insulin-stimulated glucose uptake by skeletal muscles from female or male rats.* **American Journal of Physiology-Endocrinology and Metabolism** 326(6):E807-E818, **2024.**
- [Duan D.](#) *Dystrophin and associated proteins.* **Encyclopedia of the Neurological Sciences.** (Third edition). Elsevier. Online April 09, **2024.**
- [Cao D, Byrne BJ, de Long YP, Terhorst C, Duan D, Herzog RW, Sandeep RP.](#) *Innate immune sensing of AAV vectors.* **Human Gene Therapy** 35(13-14):451-463, **2024**
- [Kodippili K, Hakim HH, Burke MJ, Yue Y, Teixeira JA, Zhang K, Yao G, Babu GJ, Herzog RW, Duan D.](#) *SERCA2a overexpression improves muscle function in the canine Duchenne muscular dystrophy model.* **Molecular Therapy-Methods & Clinical Development** 32(2):101268, **2024.**
- [Wang D, Duan D.](#) *Humoral and cellular immune responses to AAV delivery in the airway.* **Molecular Therapy-Methods & Clinical Development** 32(3):101274, **2024.**

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- [Hakim CH, Perez-Lopez D, Burke M, Teixeira J, Duan D](#). Molecular and biochemical assessment of gene therapy in the canine model of Duchenne muscular dystrophy. **Methods in Molecular Biology** 2587:255-301, **2023**
- [Hakim CH, Burke M, Teixeira J, Duan D](#). Histological assessment of gene therapy in the canine DMD model. **Methods in Molecular Biology** 2587:303-338, **2023**
- [Hakim CH, Teixeira J, Leach SB, Duan D](#). Physiological assessment of muscle, heart, and whole-body function in the canine model of Duchenne muscular dystrophy. **Methods in Molecular Biology** 2587:67-103, **2023**
- [Kumar SRP, Duan D, Herzog RW](#). Immune Responses to Muscle-Directed AAV Gene Transfer in Clinical Studies. **Human Gene Therapy** 34(9-10):365-371, **2023**
- [Duan D](#). *Duchenne muscular dystrophy gene therapy in 2023: Status, perspective, and beyond*. **Human Gene Therapy** 34(9-10):345-349, **2023**
- [Wang H, Zheng A, Arias EB, Kwak SE, Pan X, Duan D, Cartee GD](#). AS160 Expression, but not AS160 Serine-588, Threonine-642, and Serine-704 Phosphorylation, is Essential for Elevated Insulin-stimulated Glucose Uptake by Skeletal Muscle from Female Rats after Acute Exercise. **FASEB Journal** 37(7):e23021, **2023**.
- [Duan D](#).: *Lethal immunotoxicity in high-dose systemic AAV gene therapy*. **Molecular Therapy** 31(11):3123-3126, **2023**.
- [Onyali V, Nourian Z, Boerman EM, Hanft LM, Krenz M, Baines CP, Duan D, McDonald KS, Domeier TL](#). *Calcium handling dysfunction and cardiac damage following acute ventricular preload challenge in a mouse model of Duchenne muscular dystrophy*. **American Journal of Physiology-Heart and Circulatory Physiology** 325(5):H1168-H1177, **2023**
- [Shoti J, Qing K, Keeler GD, Duan D, Byrne BJ, Srivastava A](#). Development of capsid- and genome-modified optimized AAVrh74 vectors for muscle gene therapy. **Molecular Therapy-Methods & Clinical Development** 31(4):101147, **2023**.
- [Morales ED, Yue Y, Watkins TB, Han J, Pan X, Gibson AM, HB, B-E O, Yao G, Makarewich CA, Babu GJ, Duan D](#). *Dwarf open reading frame (DWORF) gene therapy ameliorated Duchenne muscular dystrophy cardiomyopathy in aged mdx mice*. **Journal of American Heart Association (JAHA)**, **2023**. In-press
- [Chamberlain JS, Robb M, Braun S, Brown KJ, Danos O, Ganot A, Gonzalez-Alegre P, Hunter N, McDonald C, Morris C, Tobolowsky M, Wagner KR, Ziolkowski O, Duan D](#). *Micro-dystrophin expression as a surrogate endpoint for Duchenne muscular dystrophy clinical trials*. **Human Gene Therapy** **2023**. In-press.
- [Wasala LP, Watkin TB, Wasala NB, Burke MJ, Yue Y, Lai Y, Yao G, Duan D](#). *The implication of hinge 1 and hinge 4 in micro-dystrophin gene therapy for Duchenne muscular dystrophy*. **Human Gene Therapy** **2023**. In-press
- [Wasala NB, Yue Y, Hu B, Shin J-H, Yao G, Duan D](#). *Life-long outcomes of systemic AAV micro-dystrophin gene therapy in a murine Duchenne muscular dystrophy model*. **Human Gene Therapy** **2023**. In-press
- [Birch SM, Law MW, Conlon TJ, Guo L-J, Crudele JM, Hawkins EC, Nghiem PP, Ahn M, Meng H, Beatka MJ, Fickau BA, Prieto JC, Styner MA, Struharik MJ, Shanks C, Brown KJ,](#)

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- [Hakim CH, Sandeep RP, Perez-Lopez D, Teixeira J, Herzog RW, Duan D.](#) *Assessment of the gene therapy immune response in the canine muscular dystrophy models.* **Methods in Molecular Biology** 2587:353-375, **2023**.
- [Hakim CH, Teixeira J, Leach SB, Duan D.](#) *Physiological assessment of muscle, heart, and whole-body function in the canine model of Duchenne muscular dystrophy.* **Methods in Molecular Biology** 2587:67-103, **2023**.
- [Hakim CH, Perez-Lopez D, Burke M, Teixeira J, Duan D.](#) *Molecular and biochemical assessment of gene therapy in the canine model of Duchenne muscular dystrophy.* **Methods in Molecular Biology** 2587:255-301, **2023**.
- [Hakim CH, Burke M, Teixeira J, Duan D.](#) *Histological assessment of gene therapy in the canine DMD model.* **Methods in Molecular Biology** 2587:303-338, **2023**.

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- [Ebner J, Pan, X, Yue Y, Sideromenos S, Koenig X, Hilber K, Duan D.](#) *No current rescue in dystrophic cardiac Purkinje fibers by micro-dystrophin.* **Circulation: Arrhythmia and Electrophysiology** 15(8): e011161, **2022**. PMID: 35917466; PMCID: PMC9396648; DOI: [10.1161/CIRCEP.122.011161](https://doi.org/10.1161/CIRCEP.122.011161).
- [Pan X, Yue Y, Bofitis M, Wasala LP, Tran NT, Zhang K, Pintel DJ, Tai PWL, Duan D.](#) *Rational engineering of a functional CpG-free ITR for AAV gene therapy.* **Gene Therapy**, 29(6):333-345, 2022. doi: [10.1038/s41434-021-00296-0](https://doi.org/10.1038/s41434-021-00296-0)
- [Duan D\\*, Flanigan KM, Aartsma-Rus A.](#) Regarding the article, “Therapeutic Exon Skipping via a CRISPR-guided Cytidine Deaminase Rescues Dystrophic Cardiomyopathy In Vivo” *Circulation* 145(18):e872-e873, 2022 (\*, corresponding author)
- [Wasala NB, Million ED, Watkins T, Wasala LP, Han J, Yue Y, Lu B, Chen SJ, Hakim CH, Duan D.](#) *The gRNA vector level determines the outcome of systemic AAV CRISPR therapy for Duchenne muscular dystrophy.* *Human Gene Therapy* 33(9-10):518-528,, 2022. PMID: 35350865; DOI: [10.1089/hum.2021.130](https://doi.org/10.1089/hum.2021.130)
- [Zhang X, Jenkins JG, Hakim CH, Duan D\\*, Yao G\\*.](#) *Four-limb wireless IMU sensor system for automatic gait detection in canines* (\*, co-corresponding author) **Scientific Reports** 12:4788, **2022**
- [Zheng A, Arias EB, Wang H, Kwak SE, Pan X, Duan D, Cartee GD.](#) *The exercise-induced improvement in insulin-stimulated glucose uptake by rat skeletal muscle is absent in male AS160-knockout rats, partially restored by muscle expression of phosphomutated AS160, and fully restored by muscle expression of wildtype AS160.* **Diabetes**, 72(2):219-232, **2022**.

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