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EDUCATION AND TRAINING

2014 – 2018

BACHELOR Xihua University

Field of study High-level athlete training

2018 – 2021

MASTER Sichuan University

Field of study Kinesiology

2021 – CURRENT

PH.D Hungarian University of Sports Science

Field of study Molecular exercise science

PUBLICATIONS

Zhou L, Chen SY, Han HJ, Sun JQ. Lactate augments intramuscular triglyceride accumulation and mitochondrial biogenesis in rats. *J Biol Regul Homeost Agents*. 2021 Jan-Feb;35(1):105-115. doi: 10.23812/20-624-A. PMID: 33593047.

Chen S, Zhou L, Sun J, Qu Y, Chen M. The Role of cAMP-PKA Pathway in Lactate-Induced Intramuscular Triglyceride Accumulation and Mitochondria Content Increase in Mice. *Front Physiol*. 2021 Sep 13;12:709135. doi: 10.3389/fphys.2021.709135. PMID: 34588991; PMCID: PMC8473783.

Chen M*, Zhou L*, Chen S, Shangguan R, Qu Y, Sun J. Acute and chronic effects of high-intensity interval training (HIIT) on postexercise intramuscular lipid metabolism in rats. *Physiol Res*. 2021 Nov 29;70(5):735-743. doi: 10.33549/physiolres.934722. Epub 2021 Sep 10. PMID: 34505529; PMCID: PMC8820523.

Zhou L, Pinho R, Gu Y, Radak Z. The Role of SIRT3 in Exercise and Aging. *Cells*. 2022 Aug 20;11(16):2596. doi: 10.3390/cells11162596. PMID: 36010672; PMCID: PMC9406297.

Qu Y, Chen S, Zhou L, Chen M, Li L, Ni Y, Sun J. The different effects of intramuscularly-injected lactate on white and brown adipose tissue in vivo. *Mol Biol Rep*. 2022 Sep;49(9):8507-8516. doi: 10.1007/s11033-022-07672-y. Epub 2022 Jun 26. PMID: 35753026.

Bakonyi P, Kolonics A, Aczel D, Zhou L, Mozaffaritarab S, Molnár K, László L, Kutasi B, Tanisawa K, Park J, Gu Y, Pinho RA, Radak Z. Voluntary exercise does not increase gastrointestinal motility but increases spatial memory, intestinal eNOS, Akt levels, and Bifidobacteria abundance in the microbiome. *Front Physiol*. 2023 Aug 16;14:1173636. doi: 10.3389/fphys.2023.1173636. PMID: 37664431; PMCID: PMC10468588.

Radak Z, Pan L, Zhou L, Mozaffaritarab S, Gu Y, A Pinho R, Zheng X, Ba X, Boldogh I. Epigenetic and "redoxogenetic" adaptation to physical exercise. *Free Radic Biol Med*. 2024 Jan;210:65-74. doi: 10.1016/j.freeradbiomed.2023.11.005. Epub 2023 Nov 17. PMID: 37977212.

Zhou L*, Mozaffaritarab S*, Kolonics A, Kawamura T, Koike A, Kéring J, Gu Y, Karabanov R, Radák Z. Long-term iron supplementation combined with vitamin B6 enhances maximal oxygen uptake and promotes skeletal muscle-specific mitochondrial biogenesis in rats. *Front Nutr*. 2024 Jan 15;10:1335187. doi: 10.3389/fnut.2023.1335187. PMID: 38288063; PMCID: PMC10823527.

Mozaffaritabar S, Koltai E, Zhou L, Bori Z, Kolonics A, Kujach S, Gu Y, Koike A, Boros A, Radák Z. PGC-1 α activation boosts exercise-dependent cellular response in the skeletal muscle. *J Physiol Biochem*. 2024 May;80(2):329-335. doi: 10.1007/s13105-024-01006-1. Epub 2024 Jan 23. PMID: 38261146; PMCID: PMC11074013.

Lei Z, Mozaffaritabar S, Kawamura T, Koike A, Kolonics A, Kéring J, Pinho RA, Sun J, Shangguan R, Radák Z. The effects of long-term lactate and high-intensity interval training (HIIT) on brain neuroplasticity of aged mice. *Heliyon*. 2024 Jan 10;10(2):e24421. doi: 10.1016/j.heliyon.2024.e24421. PMID: 38293399; PMCID: PMC10826720.

Kokas, M., Komlódi, T., Mozaffaritabar, S., Zhou, L., Téglás, T., Tóth, D., ... & Tretter, L. (2024). Mitochondrial malfunctions in alpha-ketoglutarate dehydrogenase heterozygous knock-out mice are associated with minor behavioural abnormalities and decreased performance on fatigue test. *Biochimica et Biophysica Acta (BBA)-Bioenergetics*, 1865, 149393.
