SSBH 2025

Symposium 7

Rewiring Muscle Biology: From Stem Cells to Therapeutic Innovations

Xingxing Kong

Professor

School of Life Sciences, Fudan University, China

Educational Background & Professional Experience

2021.4-Present	Professor, School of Life Sciences, Fudan university
2017.5-2021.4	Assistant Professor, University of California, Los Angeles (UCLA)
2015.10-2017.4	Instructor, Beth Israel Deaconess Medical Center, Harvard University
2011.2-2015.9	Postdoctoral, Beth Israel Deaconess Medical Center, Harvard University

Research Interests

The presenter focuses on the metabolism and interactions of fat and muscle, specifically how the dialogue between adipose tissue and skeletal muscle occurs during exercise, the molecular mechanisms by which exercise ameliorates metabolic diseases such as diabetes, the relationship and mechanisms by which adipose tissue inflammation is associated with the development of diabetes, and the role of the inflammatory factor interferon regulatory factor 4 (IRF4) in tissues other than adipose tissue.

Publications

- 1. Hui Wang; Shanshan Guo; Huanqing Gao; Jiyang Ding; Hongyun Li; Xingyu Kong; Shuang Zhang; Muyang He; Yonghao Feng; Wei Wu; Kexin Xu; Yuxuan Chen; Hanyin Zhang; Tiemin Liu; Xingxing Kong; Myostatin regulates energy homeostasis through autocrine—and paracrine—mediated microenvironment communications, Journal of Clinical Investigation, 2024
- 2. Ying Lei; Xian Liang; Yunong Sun; Ting Yao; Hongyu Gong; Zhenhua Chen; Yuanqing Gao; Hui Wang; Ru Wang; Yunqi Huang; Tao Yang; Miao Yu; Longqi Liu; Chun–Xia Yi; Qing–Feng Wu; Xingxing Kong; Xun Xu; Shiping Liu; Zhi Zhang; Tiemin Liu; Region–specific transcriptomic responses to obesity and diabetes in macaque hypothalamus, Cell Metabolism, 2024
- 3. Yixiao Zhuang; Xinyi Zhang; Shuang Zhang; Yunpeng Sun; Hui Wang; Yuxuan Chen; Hanyin Zhang; Penglai Zou; Yonghao Feng; Xiaodan Lu; Peijie Chen; Yi Xu; John Zhong Li; Huanqing Gao; Li Jin; Xingxing Kong; Chaperone-mediated autophagy manipulates PGC1a stability and governs energy metabolism under thermal stress, Nature Communications, 2025
- 4. Shanshan Guo; Yonghao Feng; Xiaopeng Zhu; Xinyi Zhang; Hui Wang; Ruwen Wang; Qiongyue Zhang; Yiming Li; Yan Ren; Xin Gao; Hua Bian; Tiemin Liu; Huanqing Gao; Xingxing Kong; Metabolic crosstalk between skeletal muscle cells and liver through IRF4–FSTL1 in nonalcoholic steatohepatitis, Nature Communications, 2023







