Curriculum Vitae

Shyh-Chang Ng

Professor
Institute of Zoology, Chinese Academy of Sciences, China

Educational Background & Professional Experience

2017–Present	Principal Investigator, Institute of Zoology, Chinese Academy of Sciences (CAS)
2017–Present	Professor, University of Chinese Academy of Sciences (UCAS)
2013–2017	Junior PI / Senior Research Scientist, Genome Institute of Singapore
2009–2013	Ph.D. in Biomedical Sciences, Harvard Medical School (Mentors: George Daley, Lewis Cantley)
2005–2008	A.B. in Molecular Biology, Summa Cum Laude, Princeton University (Mentor: Eric Wieschaus, Nobel Laureate 1995)

Research Interests

Stem cell metabolism and regenerative biology; spatial metabolomics and metabolic programming in stem cell differentiation, muscle regeneration, and placental development; metabolic mechanisms underlying muscle atrophy, sarcopenic obesity, diabetes, and pre-eclampsia.

Publications

1. Yao Z, Jiang Z, Liu X, Zhang L, Guo S, Chen Y, Luo L, Ma S, Wang P, Shyh-Chang N#. Muscle Organoids Reveal Exercise-Like Contractions Rapidly Promote Muscle Health Via Lamtor1's Signaling to Both AMPK and mTOR. Adv Sci. 2025.
2. Guang L, Ma S, Yao Z, Song D, Chen Y, Liu S, Wang P, Su J, Wang Y, Luo L, Shyh-Chang N#. An obesogenic FTO allele causes accelerated development, growth and insulin resistance in human skeletal muscle cells. Nat Commun. 2025.
3. Yu D*, Wan H*, Tong C*, Guang L*, Chen G*, Su J*, Zhang L, Wang Y, Xiao Z, Zhai J, Yan L, Ma W, Liang K, Liu T, Wang Y, Peng Z, Luo L, Yu R, Li W#, Qi H#, Wang H#, Shyh-Chang N#. A multi-tissue metabolome atlas of primate pregnancy. Cell. 2024.
4. Luo L, Ma W, Liang K, Wang Y, Su J, Liu R, Liu T, Shyh-Chang N#. Spatial metabolomics reveals skeletal myofiber subtypes. Science Advances. 2023.
5. Liu X, Yao Z, Zhang L, Shyh-Chang N#. Muscle-Derived Bioactive Factors: MyoEVs and Myokines. Cell Prolif. 2025.