



中国科学院生物物理研究所

贝时璋讲座

Moving or anchoring mitochondria for the maintenance of synaptic transmission, nerve regeneration, and mitochondrial quality control

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报告时间：2017年4月14日 10:00-11:00

报告地点：生物物理所图书馆

主持人：张宏 研究员

报告人简介

Dr. Zu-Hang Sheng is a senior investigator of NIH. Using genetic mouse models, his group is addressing several fundamental questions: 1) how mitochondrial transport is regulated to sense changes in synaptic activity, mitochondrial integrity, axon injury and pathological stress; 2) how neurons coordinate late endocytic transport and autophagy—lysosomal function to maintain cellular homeostasis and synaptic function; 3) how impaired transport contributes to synaptic dysfunction and axonal pathology in several major neurodegenerative diseases.



代表论文简介

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4. Cheng, X.T., ..., and **Z.H. Sheng** (2015). Axonal autophagosomes acquire dynein motors for retrograde transport through fusion with late endosomes. *Journal of Cell Biology* **209**, 377--386.
5. Xie, Y., ..., and **Z.H. Sheng** (2015). Endolysosome deficits augment mitochondria pathology in spinal motor neurons of asymptomatic fALS-linked mice. *Neuron* **87**, 355--370.
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