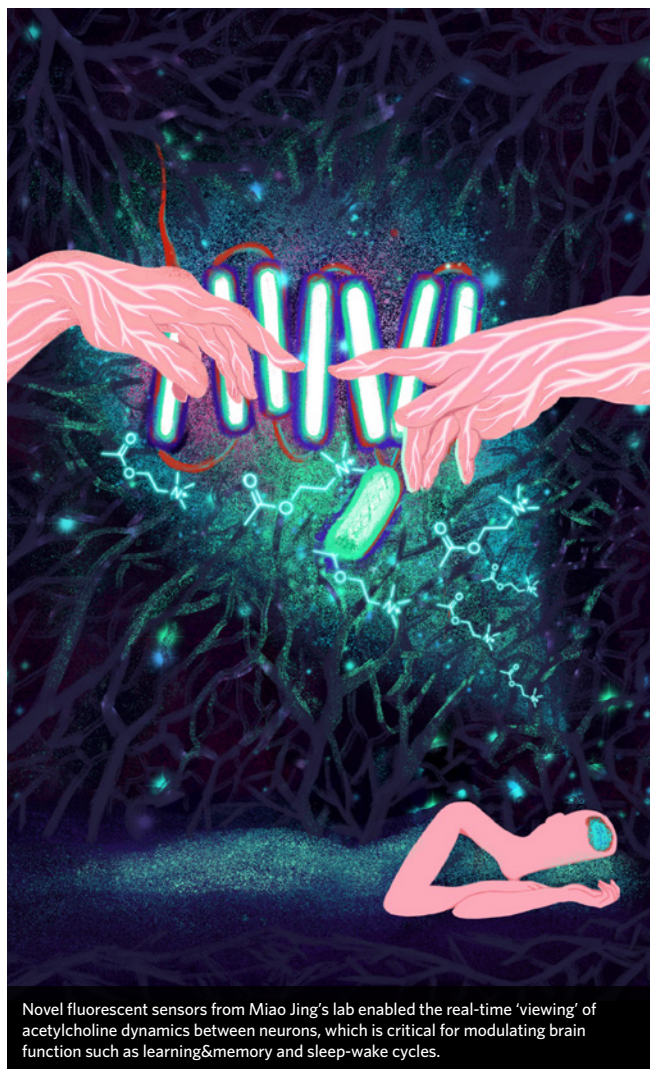


Building a world-class centre for brain science

At Zhongguancun Life Science Park in Beijing, CIBR is accelerating the global development of **NEUROSCIENCE RESEARCH AND EXCHANGE**.



Novel fluorescent sensors from Miao Jing's lab enabled the real-time 'viewing' of acetylcholine dynamics between neurons, which is critical for modulating brain function such as learning&memory and sleep-wake cycles.

Miao Jing's research

into genetically-encoded neurotransmitter sensors is a great example of talent incubation at The Chinese Institute for Brain Research, Beijing (CIBR). Jing, one of CIBR's researchers under the age of 40, finished his graduate research at Peking University to join CIBR in 2019 and set up his own laboratory through CIBR's rich resources.

Jing's recent paper in *Nature Methods* presented a brain sensor that precisely measures acetylcholine, one of the chief neurotransmitters in control of arousal, attention, muscle contraction, and other activities in the nervous system.

Jing's lab is one of 24 labs at CIBR, four of which are led by international scientists. The research areas being investigated at CIBR include the neural basis of cognition, neural computation, brain diseases, and neurotechniques. These labs are supported by 10 cutting-edge core facilities, including imaging, instrumentation, vector cores, high-performance computing, and other key techniques and resources.

Established in March 2018 by the Beijing Municipal Government and seven premier institutions in Beijing, CIBR has been dedicated to basic and applied research in neuroscience and brain-inspired computation. With improving human health its ultimate goal, CIBR operates institutes and programmes under the guidance of the China Brain Initiative and Beijing Brain Initiative, contributing to making Beijing the world capital for brain science by nurturing young researchers and investing in world-class infrastructure.

"We are interested in

supporting the best scientists," explains CIBR co-director, Yi Rao. As part of a national demonstration zone, the park has been supporting biotechnical advances via start-up incubation and academic residencies, including CIBR.

"The academia-business synergy at ZSP will see CIBR soon complete a 55,000 m² research building, hosting international talent and new laboratories for biomedical and computational studies," adds CIBR co-director, Minmin Luo.

WITH IMPROVING HUMAN HEALTH ITS ULTIMATE GOAL, CIBR CONTRIBUTES TO MAKING BEIJING THE WORLD CAPITAL FOR BRAIN SCIENCE

Rao's work includes the proposal of a new 'chemoconnectome' concept as the entire set of neurotransmitters, neuromodulators, neuropeptides, and their receptors. Luo leads neural circuit studies, which includes the brain reward system and the behavioural functions of neuromodulators.

Meanwhile, the biomolecular mechanism stream includes Woo-Ping Ge's studies on brain metabolism, including tumour metabolic consumption analysis of different brain cancer subtypes. ■



Phone: +86-010-89738997
Email: zgcsmkxy@163.com
Website: www.lifesciencepark.com.cn