

Drosophila is flying in China

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Drosophila melanogaster as a model system was first introduced to genetic research by T. H. Morgan more than a hundred years ago. Then, *Drosophila melanogaster*, the so-called fruitfly, served as the “jack of all trades” in the scientific research. Although it was one of the most popular models in biological research in western countries in the 20th century, the fruitfly was mostly used as experimental material for teaching genetics in universities in mainland China. In 1993, the first laboratory using *Drosophila* as model system to study visual learning and memory was setup by Prof. Guo AiKe in Institute of Biophysics, Chinese Academy of Sciences. At the end of the 20th century, there were a lot of difficulties to use *Drosophila* as model for doing research in mainland China, such as limited academic exchange and fly stock sharing. Prof. Guo insisted on his research direction and attained great achievements in neuroscience in China [1–3]. Since the Chinese Reform and Open Policy, increasingly more young scientists went abroad studying and came back to the motherland in succession to continue their research. Especially in the 21st century, many fly laboratories were setup in China in a wide variety of biological fields: genetics, development, metabolism, epigenetics, neuroscience and so on. Now, according to incomplete statistics, there are nearly a hundred fly laboratories, which are mainly distributed in universities and Chinese Academy of Sciences in mainland China. “Chinese Fruitfly Society” was gradually formed. On the basis of “Beijing Area Fly Meeting (BAFM)”, the First China *Drosophila* Research Conference (CDRC) was held in Nanjing in 2009. Chinese Fruitfly Society becomes an important platform for academic exchange and fruitfly stock sharing. In recent years, quite a lot excellent work has come

out from these fly laboratories, and greatly promoted the development of life science in China. In this special issue we have invited several scientists from fly laboratories to contribute six articles presenting their recent advances or summarizing their innovative research in neuroscience, developmental biology, and epigenetics [4–9].

Finally, I cordially thank all authors for contributing their articles in this special issue, and I apologize to other scientists for being unable to publish their valuable articles due to space limitations.

- 1 Tang S M, Guo A K. Choice behavior of *Drosophila* facing contradictory visual cues. *Science*, 2001, 294: 1543–1547
- 2 Guo J Z, Guo A K. Crossmodal interactions between olfactory and visual learning in *Drosophila*. *Science*, 2005, 309: 307–310
- 3 Zhang K, Guo J Z, Peng Y C, *et al.* Dopamine-mushroom body circuit regulates saliency-based decision-making in *Drosophila*. *Science*, 2007, 316: 1901–1904
- 4 Chen Z J, Wang Z R. Functional study of hyperpolarization activated channel (I_h) in *Drosophila* behavior. *Sci China Life Sci*, 2012, 55: 2–7
- 5 Gong Z F. Innate preference in *Drosophila melanogaster*. *Sci China Life Sci*, 2012, 55: 8–14
- 6 Huang H, Jiao R J. The roles of chromatin assembly factor 1 in the epigenetic control of chromatin plasticity. *Sci China Life Sci*, 2012, 55: 15–19
- 7 Sun M K, Xie W. Function of cell adhesion molecules in *Drosophila*. *Sci China Life Sci*, 2012, 55: 20–26
- 8 Tian Y, Hu W, Tong H W, *et al.* Phototransduction in *Drosophila*. *Sci China Life Sci*, 2012, 55: 27–34
- 9 Wang C, Huang X. Lipid metabolism and *Drosophila* sperm development. *Sci China Life Sci*, 2012, 55: 35–40

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