

**Young Scientist Award 2008
Biological and Biomedical Sciences**

Dr Wang Hongyan
Duke-NUS Graduate Medical School

***“For her research on neural stem cells self-renewal and differentiation
and study on brain tumors”***

Dr Wang's research focuses on understanding the mechanism of neural stem cell self-renewal and differentiation and its relation to brain tumour formation. She has made fundamental contributions in establishing fruit fly *Drosophila melanogaster* as a novel model for the study of stem cell self-renewal and differentiation. Her work is pioneering in the field, also through her contribution in identifying two novel brain tumour suppressors in *Drosophila* and discovering their critical functions during asymmetric division of neural stem cells. Her work has revealed a novel and key pathway that is composed of several brain tumour suppressors and a proliferating factor that regulates the delicate balance of neural stem cell self-renewal and differentiation.

Dr Wang's achievements have gained international recognition amongst her peers. Her work has been published in top international journals such as *Nature*, *Nature Cell Biology*, *Genes and Development*, and *Journal of Cell Biology*. In addition, Dr Wang together with her collaborators, have suggested that human homologues of *Drosophila* brain tumour suppressors may have similar functions during brain tumour development in humans. This is very likely to provide novel insights in the mechanism of brain tumours formation and facilitate the development of more efficient treatment of brain tumours.

For her research on neural stem cells self-renewal and differentiation and study on brain tumors, Dr Wang Hongyan is awarded the 2008 Young Scientist Award.