

2007 年「中央研究院年輕學者研究著作獎」得獎人著作簡評

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代表作名稱：

1. Yi-Kai Chen, Chih-Hsiang Leng, Heidi Olivares, Ming-Hui Lee, Yuan-Chih Chang, Wen-Mei Kung, Shih-Chieh Ti, Yu-Hui Lo, Andrew H.-J. Wang, Chia-Seng Chang, Douglas, K. Bishop, Yi-Ping Hsueh, and **Ting-Fang Wang*** (2004) Heterodimeric complexes of meiosis-specific Hop2 and Mnd1 promote DNA recombination and homolog juxtaposition. *Proceedings of the National Academy Sciences USA* 101, 10572-10577
2. Ming-Hui Lee, Yuan-Chih Chang, Eurie L. Hong, Jennifer Grubb, Chia-Seng Chang, Douglas K. Bishop and **Ting-Fang Wang*** (2005) Calcium ion promotes yeast Dmc1 activity via formation of long and fine helical filaments with single-stranded DNA. *Journal of Biological Chemistry* 280, 40980-40984.
3. Chung-Hsu Cheng, Yu-Hui Lo, Shu-Shan Liang, Shih-Chieh Ti, Feng-Ming Lin, Chia-Hui Yeh, Han-Yi Huang and **Ting-Fang Wang*** (2006) SUMO Modifications control assembly of synaptonemal complex and polycomplex in meiosis of *Saccharomyces cerevisiae*. *Gene and Development* 20, 2067-2081.

得獎簡評：

王廷方博士從事於研究酵母菌之細胞減數分裂時之 DNA 重組，研究集中於 DNA 進位同序列 DNA 重組，這些成果發表於美國科學院雜誌(*PNAS*, 2004)。王博士也發現酵母菌於細胞減數分裂時發生 Small Ubiquitin Related Modifier (SUMO 修飾)修飾細胞減數分裂時染色體複合體來調控酵母菌細胞分裂，該研究成果發表於國際著名學術刊物 *Genes and Development* (2007)。其成果闡明酵母菌減數分裂重要機轉，且具創見性及學術價值，故極力推薦。