

Chau-Ti TING, Ph.D.

Date of Birth: July 31, 1966

Affiliation:

Department of Life Science, Institute of Ecology and Evolution
& Genome and Systems Biology Degree Program

College of Life Science, National Taiwan University

E-mail address: ctting@ntu.edu.tw



URL: <http://homepage.ntu.edu.tw/~ctting/Home.html>

Academic History:

1989	Department of Plant Pathology and Entomology,	BS in Entomology National Taiwan University, Taiwan
1991	Department of Plant Pathology and Entomology,	MS in Entomology National Taiwan University, Taiwan
1996	Department of Ecology and Evolution	Visiting student (non-degree) University of Chicago, USA
1997	Department of Plant Pathology and Entomology,	PhD in Population Genetics National Taiwan University, Taiwan

Professional/Scientific Career:

1997-2000	Postdoctoral Fellow	Department of Ecology and Evolution, University of Chicago, USA
2000-2004	Assistant Professor	Department of Life Science National Tsing Hua University, Taiwan Studies, Japan
2004-2006	Associate Professor	Department of Life Science National Tsing Hua University, Taiwan
2005	Visiting Scholar	Population Biology University of California, Davis, USA
2006-present	Associate Professor	Department of Life Science National Taiwan University, Taiwan

Awards/Professional Societies:

2000	Research Award, National Science Council, Taiwan		
2004	Wu Ta-You Memorial Award for Research Excellency		
2005	Young Investigator Award for Research Excellency, National Tsing Hua University		
2006	Junior Research Investigators award, Academia Sinica		
2014	Teaching Award, National Taiwan University		
2015	Teaching	Award,	National Taiwan University

Research Area/ Interests:

My research has motivated by the genetic and morphological diversity of the living creatures. Our laboratory focuses on understand the genetic basis underlying reproductive changes during speciation. Some of our works showed that proteins involved in hybrid incompatibility and reproductive traits evolved rapidly due to positive Darwinism selection. In recent years, we applied genomic approaches to understand transcriptomic changes related to ecological adaptation, such as host specificity and feather formation. We also analyzed the molecular patterns of genomes to address lineage-specific codon usage evolution, dynamics of copy number variation (CNV) and the facts of gene duplication.

Publications * corresponding author

Selected publications (Original article, 20; Review, 2)

1. Chen, C K, Yu CP, Li SC, Wu SM, Lu MJ, Chen JH, Chen RD, Ng SC, Ting CT*, and Li WH*. 2017. Identification and evolutionary analysis of long non-coding RNAs in zebra finch. *BMC Genomics* **18**: 117. (doi: 10.1186/s12864-017-3506-z)
- 2.
3. Chen CK, Ng CS, Wu SM, Chen JJ, Cheng PL, Wu P, Lu MJ, Chen DR, Chuong CM, Cheng HC*, Ting CT* and Li WH*. 2016. Regulatory differences in natal down development between altricial zebra finch and precocial chicken. *Mol Biol Evol* **33**: 2030–2043
4. Yang H, He B, Ma H, Tsaur SC, Ma C, Wu Y, Ting CT, Zhang YE*. 2015. Expression profile and gene age jointly shaped the genome-wide distribution of premature termination codons in *Drosophila* populations. *Mol Biol Evol* **32**: 216-28
5. Chang C[@], Ting CT[@], Chang CH, Fang S, Chang H. 2014. The persistence of facultative parthenogenesis in *Drosophila albomicans*. *PLoS One* **9**: e113275. ([@]equal contribution)
6. Hungate EA, Earley EJ, Boussy IA, Turissini DA, Ting CT, Moran RJ, Wu ML, Wu CI, Jones CD*. 2013. A locus in *Drosophila sechellia* affecting tolerance of a host plant toxin. *Genetics* **195**:1063-1075.
7. Poh YP*, Ting CT, Begun DJ, and Langley CH. 2012. Population genomic analysis of base composition evolution in *Drosophila melanogaster*. *Genome Biol and Evol* **4**: 1245-1255.
8. Cheng YJ, Fang S, Tsaur SC, Chen YL, Fu HW, Patel NH, and Ting CT*. 2012. Reduction of germ cells in the *Odysseus* null mutant causes male fertility defect in *Drosophila melanogaster*. *Gene Genet. Syst.* **87**: 273-276.
9. Lu X, Shapiro JA, Ting CT, Li Y, Li C et al. 2010. Genome-wide misexpression of X-linked versus autosomal genes associated with hybrid male sterility. *Genome Res.* **20**: 1097-1102.
10. Fang S[@], Ting CT[@], Lee CR, Chu KH, Wang CC, Tsaur SC. 2009. Molecular evolution and functional diversification of fatty acid desaturases after recurrent gene duplication in *Drosophila*. *Mol Biol Evol.* **26**: 1447-56. ([@]equal contribution)
11. Ting CT*, Tsaur SC, Sun S, Browne WE, Patel NH, Chen YC and Wu CI. 2004 Gene duplication and speciation in *Drosophila* – Evidence from the *Odysseus* locus. *Proc. Natl. Acad. Sci. USA* **101**: 12232-12235.
12. Sun S, Ting CT and Wu CI. 2004 On the normal function of a speciation gene, *Odysseus*, and its hybrid sterility effect. *Science* **305**: 81-83.
13. Wu CI and Ting CT. 2004 Genes and Speciation. *Nat. Rev. Genetics* **5**:114-122.
14. Takahashi A and Ting CT. 2004. Genetic basis of sexual isolation in *Drosophila melanogaster*. *Genetica* **120**: 273-284.