

March, 2011

CURRICULUM VITAE

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EDUCATION:

1985 B.S. in Chemistry, National Taiwan University, Taipei, Taiwan.
1993 Ph.D. in Biochemistry and Cell Biology, SUNY at Stony Brook, NY, USA

RESEARCH AND PROFESSIONAL EXPERIENCE:

2004- Research Fellow, Institute of Molecular Biology, Academia Sinica, Taipei
2008- Coordinator, Neuroscience Program in Academia Sinica (NPAS),
<http://proj3.sinica.edu.tw/~npas/index.ch.html>
2008/7-2009/6 Visiting Fellow, Stanford University, CA, USA
2005/11-2007/12 Associate Director, Institute of Molecular Biology, Academia Sinica, Taipei
2000-2004 Associate Research Fellow, Institute of Molecular Biology, Academia Sinica,
Taipei
1996-2000 Assistant Research Fellow, Institute of Molecular Biology, Academia Sinica,
Taipei
1993-1996 Postdoctoral Research, Howard Hughes Medical Institute and University of
California, San Francisco, CA, USA. Mentor: Dr. Yuh Nung Jan
1988-1993 Graduate Study for Ph.D. in Biochemistry and Cell Biology, SUNY at Stony
Brook, NY, USA. Advisor: Rolf Sternglanz
1989-1990 Teaching Assistant in Biology and Biochemistry, Department of Biochemistry
and Cell Biology, SUNY at Stony Brook, NY, USA
1987-1988 Teaching Assistant in Analytical Chemistry, Department of Chemistry, National
Taiwan University

PRESENT POSITIONS AND AFFILIATIONS:

Research Fellow, Institute of Molecular Biology, Academia Sinica, Taipei, Taiwan
Coordinator, Neuroscience Program in Academia Sinica (NPAS), Academia Sinica, Taipei
Professor, Institute of Molecular Medicine, National Taiwan University, Taipei, Taiwan
Associate Professor, Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan
Professor, Graduate Institute of Medical Sciences, Taipei Medical University, Taipei, Taiwan
Professor, Graduate Institute of Life Sciences, National Defense Medical College, Taipei, Taiwan

HONORS AND AWARDS:

Taiwan France Science and Technology Award, 2009
Academia Sinica Investigator Award, 2005-2009, 2010-2014
National Science Council Frontier Research Grant, 2002-2007, 2007-2012

National Science Council Excellence in Research Award, 2001-2002, 2003-2005, 2009
 Academia Sinica Outstanding Young Scientist Award, 2000
 Postdoc. Fellowship, The Jane Coffin Childs Memorial Fund for Medical Research, 1994/9- 1997/8

ACADEMIC ACTIVITIES

Professional Association

Genetic Society of American
 American Society for Cell Biology
 The Chinese Society of Cell and Molecular Biology (Board Member 2008-2009)
 Taiwan Genomics and Genetics Society (Current Board Member 2009-2010)

Review for Journals

Cell, PNAS, Trends Biomedical Science, Molecular and Cellular Biology, Journal of Biomedical Science, Developmental Biology, BMC Developmental Biology, Developmental Dynamics, Development Genes and Evolution, Genes to Cells, PLoS One.

Grant/Department Review Panels

National Science Council: (2005, 2007, 2008, 2010)
 Institute for Brain and Mind, NTU (2009)
 Taida Neurobiology and Cognitive Science Center's advisory board meeting (2010)

MEETING OR ACADEMIA GROUP ORGANIZATION:

Organizing Committee for NHRI Developmental Biology Symposia I, II, III, IV (2002-2005)
 Organizing Symposium on Signaling Mechanisms in *Drosophila* Development in IMB, Academia Sinica (2001, founded by NSC).
 Organizing Neuroscience Meeting in IMB, Academia Sinica (2002, IMB collaborate with Center of Neuroscience, National Yang-Ming University).
 Organizing Taiwan-Scotland Bi-Lateral Symposium on Developmental Biology in IMB, Academia Sinica (2006, founded by NSC).
 Organizing the 1st Molecular Cellular Neuroscience Symposium, in IMB, Academia Sinica (2006).
 Organizing 2nd Taiwan-Japan Bi-lateral Symposium on Cellular and Developmental Biology in IMB, Academia Sinica (2007).
 Organizer for the Neuroscience Consultation Meeting in Academia Sinica (2008/5).
 Organizing Committee for Frontier of Science between Taiwan and France (2008/6).
 Organizing NPAS symposium on neuroscience (2009/8).
 Session chair for the 8th Japanese *Drosophila* Research Conference, Japan (2007/7)
 Session chair for the 22nd Biennial Meeting of the ISN/APSN Joint Meeting Satellite Conference: Novel Strategies for Intervention in Neurodegenerative Diseases, IBMS, Academia Sinica (2009/9)
 Session chair for the 9th Japanese *Drosophila* Research Conference, Japan (2009/7).
 Session chair for the ION-NHIM-NPAS-HKUST, 10th Joint Retreat Symposium, Shanghai, China (2009/9)
 Session chair for the Tohoku University-Taiwan Neuroscience Workshop for Young Scientists 2010 (2010/1)

INVITED LECTURES (since 2003):

2003

Dept. of Biochemistry and Cell Biology, Chang-Gung University, Tao-Yuan, Taiwan
 Third NHRI Conference on Developmental Biology, Taiwan

Dept of Life Science, National Taiwan University, Taiwan

2004

Dept. of Biochemistry and Cell Biology, Chang-Gung University, Tao-Yuan, Taiwan
 Fly Brain Neurogenomics, Mini-symposium, National Tsing-Hua University, Hsin-Chu
 Frontiers in Neuroscience, Kaoshung
 Stem Cell Center, Academia Sinica
 Institute of Biochemistry, National Yang-Ming University, Taipei
 The Nineteenth Joint Biomedical Science Conferences, Taipei
 The Forth Across the Taiwan Strait Symposium on Cell Biology, Kending
 Institute of Botany, Academia Sinica, Taipei
 Drosophila Cell and Developmental Biology (Crete meeting), Greece
 The Twentieth Biology Summer Camp (Keynote), Tai-Chung, Taiwan
 Taiwan (IMB)-France (IGBMC) Bilateral Meeting, Strassburg, France

2005

Symposium on Developmental Biology in Tunghai University
 Taiwan-Scotland High-Tech Forum, Edinburg
 Japan/Taiwan Bilateral Meeting on Developmental Biology, RIKEN, Center for Developmental
 Biology, Kobe, Japan
 2005 Neuroplasticity Symposium and the 2nd TMU Neuroscience Symposium, TMU, Taipei

2006

Taipei Medical University Lecture Series, Taipei
 ZOMES IV: The Fourth International Symposium on COP9 Signalosome, Proteasome, and eIF3,
 Yale U. USA
 Japan/Taiwan Bilateral meeting on Neuroscience, RIKEN, Brain Science Institute
 Molecular Biology in the 21st century: Interface, Integration and Perspectives; 20th Anniversary
 of IMB Symposium, Taipei

2007

IPMB Symposium, IPMB, Academia Sinica
 SUN (SUMO, Ubiquitin, Nedd8) Symposium, IBMS, Academia Sinica

2008

Graduate Institute of Molecular Systems Biomedicine, China Medical University (Jan 11)
 Gordon Research Conferences, Molecular and Cellular Neurobiology, Hong Kong (06/8-13).
 Cross Strait Biomedical and Bioengineering Symposium, IMB (6/30)
 Neuroscience Joint Meeting, Stanford University, USA (08/22)
 Department of Molecular and Cellular Biology, UC Berkeley (10/22)

2009

Investigator Award Mini-Symposium, Academia Sinica, Taiwan (Sept. 15)
 ION-NHIM-NPAS-HKUST, 10th Joint Retreat Symposium, Shanghai, China (Sept. 24-26)
 2007-2009 Taiwan-Israel Joint Final Report Workshop (Oct. 13)
 2009 Taiwanese in France Symposium on Natural and Life Sciences (Keynote, Nov. 25)
 Institute of Neuroscience, National Chengchi University (Dec. 22)
 Institute of Physics, National Chiao-Tung University (Dec. 31)

2010

School of Medicine, National Taiwan University (4/28)

PUBLICATIONS (complete list, * corresponding author)

1. Chien, C.-T., Tauler, A., Lange, A. J., Chan, K., Printz, R. L., El Maghrabi, M. R., Granner, D. K., and Pilakis, S. J.* (1989) Expression of rat hepatic glucokinase in *Escherichia Coli*. ***Biochemical and Biophysical Research Communications*** 165:817-825.
2. Chien, C.-T., Bartel, P. L., Sternglanz, R., and Fields, S.* (1991) The two-hybrid system: A method to identify and clone genes for proteins that interact with a protein of interest. ***Proc. Natl. Acad. Sci. USA*** 88:9578-9582.
3. Bartel, P.L., Chien, C.-T., Sternglanz, R., and Fields, S.* (1993) Using the two-hybrid system to detect protein-protein interactions. ***Cellular Interactions in Development: A practical approach***. D. Hartley ed. (Oxford: IRL Press)
4. Bartel, P. L., Chien, C.-T., Sternglanz, R., and Fields, S.* (1993) Elimination of false positives that arise in using the two-hybrid system. ***BioTechniques*** 14:920-924.
5. Chien, C.-T., Buck, S., Sternglanz, R., and Shore, D.* (1993) Targeting of SIR1 protein establishes transcriptional silencing at HM loci and telomeres in yeast. ***Cell*** 75:531-541.
6. Chien, C.-T., Hsiao, C.-D., Jan, L. Y., and Jan, Y. N.* (1996) The neuronal type information encoded in the basic-helix-loop-helix domain of proneural genes. ***Proc. Natl. Acad. Sci. USA*** 93, 13239-44.
7. Pi, H, Chien, C.-T., and Fields, S.* (1997) Transcriptional activation upon pheromone stimulation mediated by a small domain of *Saccharomyces cerevisiae* Ste12p. ***Mol. Cell. Biol.*** 17, 6410-6418.
8. Chien, C.-T., Wang, S., Rothenberg, M., Jan, L. Y., and Jan, Y. N.* (1998) Numb associated kinase interacts with the PTB domain of Numb and antagonizes the function of Numb in vivo. ***Mol. Cell. Biol.*** 18, 598-607.
9. Tien, A.-C., Hsei, H.-Y., and Chien, C.-T.* (1999) Dynamic expression and cellular localization of the *Drosophila* 14-3-3□ during embryonic development. ***Mech. Dev.*** 81, 209-212.
10. Chen, C.-K. and Chien, C.-T.* (1999) Negative regulation of *atonal* in proneural cluster formation of *Drosophila* R8 photoreceptors. ***Proc. Natl. Acad. Sci. USA***, 96, 5055-5060.
11. Huang, M.-L., Hsu, C.-H., and Chien, C.-T.* (2000) The proneural gene *amos* promotes multiple dendritic neuron formation in the *Drosophila* peripheral nervous system. ***Neuron***, 25, 57-67.
12. Pi, H., Wu, H.-R., and Chien, C.-T. *, (2001) A dual function of *phyllopod* in *Drosophila* external sensory organ development: cell fate specification of sensory organ precursor and its progeny. ***Development***, 128, 2699-2710.
13. Su T. T.* , Parry, D. H., Donahoe, B., Chien, C.-T., O'Farrell, P. H., Purdy, A. (2001) Cell cycle roles for two 14-3-3 proteins during *Drosophila* development. ***J. Cell Sci.***, 114, 3445-3454.
14. Ou, C.-Y., Lin, Y.-F., Chen, Y.-J. and Chien, C.-T.* (2002) Distinct Protein Degradation Mechanisms Mediated by Cull1 and Cul3 Controlling Ci Stability in *Drosophila* Eye Development. ***Genes & Dev.***, 16, 2403-2414.
15. Chou, Y.-H. and Chien, C.-T.* (2002) Scabrous Controls Ommatidial Rotation in the *Drosophila* Compound Eye. ***Dev. Cell***, 3, 839-850.
16. Ou, C.-Y., Pi, H. and Chien, C.-T.* (2003) Control of protein degradation by E3 ubiquitin ligases in *Drosophila* eye development. ***Trends Genetics***, 19, 382-389 (review).
17. Chang, C.-W.; Pi, H.; Chien, C.-T.; Hsu, C.-P.* (2003) Network Modeling of *Drosophila* External Sensory Organ Precursor Formation: The Role of Recently Studied Genes. ***J. Genet. Mol. Biol.***, 14, 243.

18. Pi, H., Huang, S.-K., Tang, C.-Y., Sun, Y.-H. and Chien, C.-T.* (2004) phyllopod is a target gene of proneural proteins in Drosophila external sensory organ development. *Proc. Natl. Acad. Sci. USA* 101, 8378-8383
19. Wu, J.-T., Lin S.-C., Hu, Y.-C. and Chien, C.-T.* (2005) Neddylation and deneddylation regulate Cul1 and Cul3 protein accumulation. *Nat Cell Biol.*, 7, 1014-20
20. Ho, M. S., Tsai P.-I., and Chien, C.-T.* (2006) F-box proteins: the key to protein degradation. *J. Biomedical Sci.*, 13: 181–191 (review).
21. Wu, J.-T., Chan Y.-R. and Chien, C.-T.* (2006) Protection of cullin-RING E3 ligases by CSN-UBP12. *Trends Cell Biol.*, 16(7):362-369 (review).
22. Tan BC, Chien CT, Hirose S, Lee SC.* (2006) Functional cooperation between FACT and MCM helicase facilitates initiation of chromatin DNA replication. *EMBO J.*, 25(17):3975-85.
23. Zhang Q, Zhang L, Wang B, Ou CY, Chien CT, Jiang J.* (2006) A hedgehog-induced BTB protein modulates hedgehog signaling by degrading Ci/Gli transcription factor. *Dev Cell*, 10(6):719-29.
24. Pi, H.-W., Chien, C.-T.* (2007) Getting the edge: neural precursor selection. *J. Biomedical Sci.*, 14(4):467-73 (review).
25. Ou CY, Wang CH, Jiang J, Chien C.-T.*. (2007) Suppression of Hedgehog signaling by Cul3 ligases in proliferation control of retinal precursors. *Dev Biol.*, 308(1):106-19.
26. Ho, M. S., Ou, C., Chan, Y., Chien, C. T.* and Pi, H.*. (2008) The utility F-box for protein destruction. *Cellular and Molecular Life Sciences*, 65: 1977-2000 (invited review).
27. Rencus-Lazar, S., Amir, Y., Wu, J., Chien, C.-T., Chamovitz, D.-A., Segal, D.* (2008) The proto-oncogene Int6 is essential for neddylation of Cul1 and Cul3 in Drosophila. *PLoS One*, 3, e2239.
28. Chan, Y., Yoon, J., Wu, J.-T., Kim, H.-J., Pan, K.-T., Yim, J., Chien, C.-T.* (2008) DEN1 deneddylates non-cullin proteins in vivo. *J Cell Sci.*, 121:3218-23. (The first two contribute equally).
29. Tsai, P.-I., Kao, H.-H., Grabbe, C., Lee, Y.-T., Ghose, A., Lai, T.-T., Peng, K.-P., Van Vactor, D, Palmer R. H., Chen, R.-H., Yeh, S.-R., Chien, C.-T.* (2008) Fak56 functions downstream of integrin alphaPS3betanu and suppresses MAPK activation in neuromuscular junction growth. *Neural Dev.*, 3:26.
- 30 Knowles, A., Koh, K., Wu, J.-T., Chien, C.-T., Chamovitz, D.-A., Blau, J.* (2009) The COP9 signalosome is required for light-dependent timeless degradation and Drosophila clock resetting. *J Neurosci.*, 29, 1152-1162.
- 31 Peng, Y.-H., Yang, W.-K., Lin, W.-H., Lai, T.-T., Chien, C.-T.* (2009) Nak regulates Dlg basal localization in Drosophila salivary gland cells. *Biochem Biophys Res Commun.*, 382:108-13.
32. Ho, M. S., Chen, H., Chen, M., Jacques, C., Giangrande, A.*, Chien, C.-T.* (2009) Gcm protein degradation suppresses proliferation of glial progenitors. *Proc Natl Acad Sci USA*. 106:6778-83.
33. Lin, H.-C., Wu, J.-T., Tan, B.-C., Chien, C.-T.* (2009) Cul4 and DDB1 regulate Orc2 localization, BrdU incorporation and Dup stability during gene amplification in Drosophila follicle cells. *J Cell Sci.*, 122:2393-2401.
34. Lin, C.-H., Tsai, P.-I, Wu, R.-M., Chien, C.-T.* (2010) *LRRK2* G2019S Mutation Induces Dendrite Degeneration through Mislocalization and Phosphorylation of Tau by Recruiting Autoactivated GSK3b., *J Neurosci.*, 30(39):13138-13149
35. Wu, C.-T., Lin, W.-H., Chen, W.-Y., Huang, Y.-C., Tang, C.-Y., Ho, M. S., Pi, Haiwei, and Chien, C.-T.* (2011) CSN-mediated deneddylation differentially modulates Ci¹⁵⁵ proteolysis to promote Hedgehog signaling responses., *Nature communication* 2: 182