Curriculum Vitae

Prepared: Sep 2011

Hwan-Ching Tai, Ph.D.

Date of Birth: June, 1978

Research Fellow Harvard Medical School and Department of Neurology, Massachusetts General Hospital Room 2400, 114 16th St. Charlestown, MA 02114 1 617 6430870 htai@partners.org

EDUCATION

Ph.D. Chemistry (2009). California Institute of Technology.

B.S. Chemistry (2000). National Taiwan University, Taipei, Taiwan.

DISSERTATION

Ph.D. thesis: Characterization of the brain proteasome and its interacting proteins and their regulation by neuronal activity.

RESEARCH EXPERIENCE

Assistant professor (2012.8-). Department of Chemistry, National Taiwan University.

Postdoctoral fellow (2010.7- 2012.5). Adviser: Dr. Bradley T. Hyman, MassGeneral Institute for Neurodegenerative Disease and Harvard Medical School.

Postdoctoral fellow (2009.10-2010.6). Adviser: Dr. Erin M. Schuman, Division of Biology, California Institute of Technology.

Dissertation research (2004.10-2009.9). Adviser: Dr. Erin M. Schuman, Division of Biology and Howard Hughes Medical Institute, California Institute of Technology.

Doctoral Student (2002.10-2004.9). Adviser: Dr. Linda C. Hsieh-Wilson, Division of Chemistry and Chemical Engineering and Howard Hughes Medical Institute, California Institute of Technology.

Research assistant (2002.5-2002.8). Adviser: Dr. Soo-Chen Chen, Institute of Molecular Biology, Academia Sinica, Taiwan.

Undergraduate research (1998.7-2000.5). Adviser: Dr. Tien-Yau Luh, Department of Chemistry, National Taiwan University.

OTHER EXPERIENCE

Second Lieutenant (2000.7-2002.4). Army Reserve Command, Taiwan.

AWARDS AND FELLOWSHIPS

Alzheimer's Disease Research Fellowship, American Health Assistance Foundation (2010.7-2012.5).

California Tobacco-Related Disease Research Program Fellowship (2004.4-2007.3).

Dean's Award, College of Science, National Taiwan University (2000).

Undergraduate Research Fellowship, National Science Council, Taiwan (1998.7-1999.6).

Yuan T. Lee Chemistry Fellowship (1996.7-2000.6).

Silver Medal, 28th International Chemistry Olympiad, Moscow, Russia (1996).

PUBLICATIONS

- Koffie, R. M., Hashimoto, T., **Tai, H. C.**, Serrano-Pozzo, A., Joyner, D., Hou, S., Kopeikina, K. J., Frosch, M. P., Lee, V. M., Holtzman, D. M., Hyman, B. T., Spires-Jones, T. L. (2011). Apolipoprotein E4 Effects in Alzheimer's Disease are Mediated by Synaptotoxic Oligomeric Amyloid-beta. Submitted.
- **Tai, H. C.**, Besche, H., Goldberg, A. L., Schuman, E. M. (2010). Characterization of the Brain 26S Proteasome and Its Interacting Proteins. *Front. Mol. Neurosci.* **3**, 12.
- Tai, H. C., Schuman, E. M. (2010). Angelman Syndrome: Finding the Lost Arc. Cell, 140, 608-610.
- **Tai, H. C.** (2009). Stradivari's Varnish: A Review of Scientific Findings, Part 2. *J. Violin Soc. Am.: VSA Papers*, **22** (1) 60-90.
- **Tai, H. C.**, Schuman, E. M. (2008). Ubiquitin, the Proteasome and Protein Degradation in Neuronal Function and Dysfunction. *Nat. Rev. Neurosci.*, **9**, 826-838.
- **Tai, H. C.** (2007). Stradivari's Varnish: A Review of Scientific Findings, Part 1. *J. Violin Soc. Am.: VSA Papers*, **21** (1), 119-144.
- **Tai, H. C.**, Schuman E. M. (2006). MicroRNA: MicroRNAs Reach Out into Dendrites. *Curr. Biol.*, **16**, R121-123.
- Lin, W. Y., Murugesh, M. G., Sudhakar, S., Yang, H. C., **Tai, H. C.**, Chang, C. S., Liu, Y. H., Wang, Y., Chen, I. W., Chen, C. H., Luh, T. Y. (2005). On the Rigidity of Polynorbornenes with Dipolar Pendant Groups. *Chem-Eur J.*, **12**, 324-330.
- **Tai, H. C.**, Khidekel, N., Ficarro, S. B., Peters, E. C., Hsieh-Wilson, L. C. (2004). Parallel Identification of O-GlcNAc Modified Proteins from Cell Lysates. *J. Am. Chem. Soc.*, **126**, 10500-10501.

PATENTS

- US Patent #7,842,517. Hsieh-Wilson, L., Khidekel, N., **Tai, H. C.**, Arndt, S. "Method and compositions for the detection of protein glycosylation." Issued Nov 30, 2010.
- US Patent #7,332,355. Hsieh-Wilson, L., Khidekel, N., **Tai, H. C.**, Arndt, S. "Method and compositions for the detection of protein glycosylation." Issued Feb 19, 2008.