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## BIOGRAPHICAL SKETCH

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NAME in English <b>Chiung-Yuan Sareina Wu</b>	POSITION TITLE Assistant research Professor, Molecular Medicine Research Center
NAME in Chinese <b>吴瓊媛</b>	

EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
National Chang Kung University	B.S.	05/88	Biology
Vanderbilt University	Ph.D.	04/00	Cell Biology
University of California, Santa Cruz	Master	07/05	Bioinformatics
Medical College of Georgia	Research Assistant Scientist	09/09	Gene & Cell Therapy

### A. Positions and Honors

#### Positions and Employment

**Aug. 2008 – Present:** Assistant Research Professor, Center of Molecular Medicine, Chang Gung University

**Sept. 2007 – Aug. 2008:** Research Associate, Institute of Molecular Medicine and Genetics, Medical College of Georgia.

**August 2005 – July 2007:** Assistant research scientist (instructor), Medical College of Georgia

**January 2003-June 2004:** Graduate Student in Dr. Carol Rohl's laboratory, Department of Biomolecular Engineering, University of California, Santa Cruz.

**May 2000-December 2002:** Post-doctoral fellow in Dr. Lindsay Hinck's laboratory, Department of Molecular, Cellular and Developmental Biology, University of California, Santa Cruz.

**1997-2000:** Graduate student in Dr. Peter Kolodziej's laboratory, Department of Cell Biology, Vanderbilt University, Nashville.

#### Other Experience and Professional Memberships

2010-                                   Member, Taiwan Society for Stem Cell Research

#### Honors

2007-2009 Fellowship   Department of Health and Human Services Public Health Services (ID No:NS045543)

## **B. Selected Peer-reviewed Publications (2005-2010) (in chronological order)**

### **(1) BOOK CHAPTERS**

1. **Wu SC**, Maragathavally, CJ. Coates and JM. Kaminski (2008). Steps Towards Targeted Insertional Mutagenesis with Class II Transposable Elements. Chromosomal Mutagenesis. Series: Methods in Molecular Biology, Vol.435

### **(2) JOURNALS**

1. **Wu SC\***, Meir YJ\*, Coates CJ, Handler AM, Moisyadi S, Pelczar P, Kaminski JM (2006). *piggyBac* is a flexible and highly active transposon as compared to *Sleeping Beauty*, *Tol2*, and *Mos1* in mammalian cells. **Proc Natl Acad Sci USA** **103(41)**, 15008-13 (2006) (\* These authors contributed equally to this work.)

**This paper is ranked as the 7th of the top 100 gene therapy publications in 2006 and has been nominated for Cozzarelli Prize.** (<http://www.ionchannels.org/newsletters/genetherapeutics-2006-lit.html> ). **SCI 9.643 (2006)**

2. Williams ME\*, **Wu SC\***, McKenna WL\*, Hinck L. (2003). Surface expression of the netrin receptor UNC5H1 is regulated through a protein kinase C-interacting protein/protein kinase-dependent mechanism **J Neurosci.** 23(36): 11279-88. (\* These authors contributed equally to this work.) **SCI 7.453 (2006)**

3. Kuang B, **Wu SC**, Shin Y., Luo L, Kolodziej P. (2000) *Split ends* encodes large nuclear proteins that regulate neuronal cell fate and axon extension in the *Drosophila* embryo. **Development** 127, 1517-29. **SCI 7.764 (2006)**

4. Wu F, **Wu SC**, Lin C, Wu C. (1999) Suppression of tumorigenicity in cervical carcinoma HeLa cells by an episomal form of adeno-associated Virus. **Int J Oncol** Jul;15(1):101-6. **SCI 2.556 (2006)**

5. **Wu SC**, Winner GE, Hargett L, Hogan BLM. *Mouse Mesenchyme forkhead 2 (Mf2)*: expression, DNA binding and induction by sonic hedgehog during somitogenesis. (1998) **Mechanisms of Development** 70, 3-13. **SCI 3.836 (2006)**

6. Dai H, Lo Y, **Wu SC**, Tsou C, Hsu G, Chern C, Ruddat M, and Kwen-Sheng. (1991) Protein synthesis in isolated mitochondria of rice (*Oryzasativa L.*). **Plant Physiology**, 96, 319-23. **SCI 6.125 (2006)**

### **(3) PATENTS**

1. Cell and animal transgenesis with single plasmid transposase (Helper) and transposon (Donor) constructs. (US patent no. 60-840-780; 2006)

2. Methods and Compositions for Drug-Free Selection in Genetic Engineering. (US patent no. 61-127-479; May 2008)

3. A Transposon-Mediated Genetic Engineering System with a Self-Activating Reporter for a Rapid Indication of Transposition (US patent no. 61-131-298; June 2008)

4. Methods and Compositions for Drug-Free Selection in Genetic Engineering. (US patent no. 12/588,708; 10/26/2009) Confirmation No. 3763

## C. Research Support

### Ongoing Research Support

NMRPD190521 Meir (PI) 08/01/10—7/31/11  
Identifying biomarkers/genes involving in brain formation and function via a piggyBac-based in vivo genetic screen in living mice.  
Role: co-PI

VHYK-9904 Yang (PI) 01/01/10- 12/31/10  
Developing a novel transposon-mediated gene therapy strategy in brain--- using primary hippocampal neuron culture of MPS IIIA mouse as a therapeutic model  
Role: co-PI

### Completed Research Support (2006-2010)

vhyk-9704 Yang (PI) 01/01/08-12/31/08  
Developing the highly active mammalian DNA transposons as tools for gene therapy  
Role: co-PI

vhyk-9804 Yang (PI) 01/01/09-12/31/09  
Developing the highly active Adeno-piggyBac gene delivery system as tools for gene therapy  
Role: co-PI