

BIOGRAPHICAL SKETCH

NAME Dong Chuan Wu		POSITION TITLE Assistant Professor, China Medical University, Taiwan	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Shangdong University	Master	1996-1999	Physiology
Peking University	PHD	1999-2003	Physiology
University of British Columbia	PhD	2004-2010	Neuroscience

Appointments

2012-present- Assistant Professor, China Medical University

2011-present – Investigator, China Medical University Hospital

2010-2011 – Postdoctoral Fellow, University of British Columbia

Selected Publications

Shen ML, Wang CH, Lin CH, Zhou N, Kao ST, **Wu DC**. Luteolin attenuates airway mucus overproduction via inhibition of the GABAergic system. **Sci Rep**. 2016 Sep 6; (6)32756.

Shen ML, Wang CH, Chen RY, Zhou N, Kao ST, **Wu DC**. Luteolin inhibits GABA_A receptors in HEK cells and brain slices. **Sci Rep**. 2016 Jun 13; (6)27695

Lin CH, Shen ML, Zhou N, Lee CC, Kao ST, **Wu DC**. The effect of sesamin on airway fibrosis in vitro and in vivo. **Int Immunopharmacol**. 2014 Sep;22(1):141-50. doi: 10.1016/j.intimp.2014.06.031. Epub 2014 Jun 27.

Lin CH, Shen ML, Zhou N, Lee CC, Kao ST, **Wu DC**. Protective Effects of the Polyphenol Sesamin on Allergen-Induced TH2 Responses and Airway Inflammation in Mice. **PLoS One**. 2014 April 22;9(4): e96091 DOI: 10.1371/journal.pone.0096091

Liu SP, Fu RH, **Wu DC**, Hsu CY, Chang CH, Lee W, Lee YD, Liu CH, Chien YJ, Lin SZ, Shyu WC. Mouse induced pluripotent stem cells generated under hypoxic conditions in the absence of viral infection and oncogenic factors and used for ischemic stroke therapy. **Stem Cells Dev**. 2014 Feb.23(4):421-433.

Zhou N, Wang CH, Zhang S, **Wu DC**. The GLRA1 Missense Mutation W170S Associates Lack of Zn²⁺ Potentiation with Human Hyperekplexia. **J Neurosci**. 2013, 33(45):17675-81.

Zhou N, Rungta RL, Malik A, Han H, **Wu DC**, MacVicar BA. Regenerative glutamate release by presynaptic NMDA receptors contributes to spreading depression. **J Cereb Blood Flow Metab**. 2013 Oct;33(10):1582-94. doi: 10.1038/jcbfm.2013.113. Epub 2013 Jul 3

Dalton GL, **Wu DC**, Wang YT, Floresco SB, Phillips AG. NMDA GluN2A and GluN2B receptors play separate roles in the induction of LTP and LTD in the amygdala and in the acquisition and extinction of conditioned fear. **Neuropharmacology**. 2012 Feb.62(2):797-806.SCI

Principal Investigator/Program Director (Last, First, Middle): **Wu, Dong Chuan**

Liu J*, **Wu DC***, Wang YT. Allosteric potentiation of glycine receptor chloride currents by glutamate. **Nat Neurosci**. 2010 Oct;13(10):1225-32. doi: 10.1038/nn.2633. Epub 2010 Sep 12.

Yu SY*, **Wu DC***, Liu L, Ge Y, Wang YT. Role of AMPA receptor trafficking in NMDA receptor-dependent synaptic plasticity in the rat lateral amygdala. **J Neurochem**. 2008 Jul.106(2):889-899.

Liu Y, Wong TP, Aarts M, Rooyackers A, Liu L, Lai TW, **Wu DC**, Lu J, Tymianski M, Craig AM, Wang YT. NMDA Receptor Subunits Have Differential Roles in Mediating Excitotoxic Neuronal Death Both In Vitro and In Vivo. **J Neurosci**. 2007 Mar.27(11):2846-2857.

Peineau S, Taghibiglou C, Bradley C, Wong TP, Liu L, Lu J, Lo E, **Wu DC**, Saule E, Bouschet T, Matthews P, Isaac JT, Bortolotto ZA, Wang YT, Collingridge GL. LTP inhibits LTD in the hippocampus via regulation of GSK3beta. **Neuron**.2007 Mar.53(5):703-717.

Ryu J, Liu L, Wong TP, **Wu DC**, Burette A, Weinberg R, Wang YT, Sheng M. A critical role for myosin IIb in dendritic spine morphology and synaptic function. **Neuron**.2006 Jan.49(2):175-182.

RECENT RESEARCH SUPPORT

The conserved tryptophan and flanking regions in glycine and GABAA receptors: the role in receptor modulation and synaptic inhibition in CNS (MOST 104-2320-B-039-045-MY3) (2015-2017)

Mechanism of the Glycine receptor allosteric modulation by glutamate and its role in tonic inhibition in hippocampus and cortex (NSC 102-2320-B-039-038-MY3) (2013-2015)

Mechanism of the GABAA receptor modulation by ascorbate and its role in physiological and pathological synaptic transmission. (NSC 101-2320-B-039-057) (2012)