CURRICULUM VITAE



NAME Po-Shan Wang	POSITION TITLE/AFFILIATIONS Manager of the department of Neurology/ Taipei Municipal Gan-Dau Hospital		
EDUCATION/TRAINING	Ι		
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Taipei medical university	M.D	1998	Medicine
National Yang-Ming University, Taiwan	M.D	2009	Institute of Brain Science,

A. Current Research (Maximum 500 words)

My current research is to apply the mathematical methods such as fractal dimension (FD), gyrification index (GI), fractal dimension, shape index (SI), curvedness (CVD), and genomic data for the investigation and analysis of the brain MR images and EEG signals on neurodegenerative disorders. My recent findings are summarized as follows: CJD can be early diagnosed by using ICA analysis of their EEG; significantly lower 3D-FD and 3D-GI values were exhibited in patients with nultiple system atrophy of the cerebellar type (MSA-C) compared with healthy subjects; MAS-P and PD can be differentiated easily by using FD and ADC images; the use of magnetic resonance spectroscopy values can predict age of disease onset and to retrospectively evaluate the actual age of disease onset in spinocerebellar ataxia (SCA); MSA-C patients have disrupted small-world architecture and white matter degenerations in the cerebellum.

B. Positions and Honors.

Positions and Employment

2011/03-present Manager of the department of Neurology/ Taipei Municipal Gan-Dau Hospital 2005/08-2011-02 Attending doctor of the department of Neurology/ Taipei Municipal Gan-Dau Hospital 2000/05-2005/07 Resident of the neurology department /Taipei Veterans General Hospital

Honors, Prizes, Awards

- 1. 2008 Outstanding research award of Taipei Municipal Gan-Dau Hospital
- 2. 2009 Outstanding research award of Taipei Municipal Gan-Dau Hospital

- 3. 2010 Outstanding research award of Taipei Municipal Gan-Dau Hospital
- 4. 2011 Outstanding research award of Taipei Municipal Gan-Dau Hospital
- 5. 2012 Outstanding research award of Taipei Municipal Gan-Dau Hospital
- 6. 2013 Outstanding research award of Taipei Municipal Gan-Dau Hospital

C. Selected Publications in the past 5 years (in reverse chronological order; underscore your name; using PubMed format).

- 1. Liao YL, Wang PS, Lu CF, Hung CI, Li CT, Lin CP, Hsieh JC, Su TP, Wu YT. Cortical shape and curvedness analysis of structural deficits in remitting and non-remitting depression. PLoS One. 2013 Jul 16
- **2.** Lu CF, Soong BW, Wu HM, Teng S, Wang PS*, Wu YT*. Disrupted Cerebellar Connectivity Reduces Whole-Brain Network Efficiency in Multiple System Atrophy. Mov Disord. 2013 Jan 16.
- **3.** Lirng JF, Wang PS, Chen HC, Soong BW, Guo WY, Wu HM, Chang CY. Differences between Spinocerebellar Ataxias and Multiple System Atrophy-Cerebellar Type on Proton Magnetic Resonance Spectroscopy. PLoS One. 2012 Oct 31.
- **4.** Wang PS, Chen HC, Wu HM, Lirng JF, Wu YT, Soong BW. Association between Proton Magnetic Resonance Spectroscopy Measurements and CAG Repeat Number in Patients with Spinocerebellar Ataxias 2, 3, or 6. PLoS One. 2012 Oct 11.
- **5.** Wu YT, Shyu KK, Jao CW, Liao YL, Wang TY, Wu HM, Soong BW, Wang PS*. Quantifying cerebellar atrophy in multiple system atrophy of the cerebellar type (MSA-C) using three-dimensional gyrification index analysis. Neuroimage. 2012 Feb 28.
- **6.** Lee YC, Liao YC, Wang PS, Lee IH, Lin KP, Soong BW. Comparison of cerebellar ataxias: A three-year prospective longitudinal assessment. Mov Disord. 2011;26(11):2081-7.
- 7. Wang PS, Wu HM, Lin CP, Soong BW. Use of diffusion tensor imaging to identify similarities and differences between cerebellar and Parkinsonism forms of multiple system atrophy. Neuroradiology. 2010 Aug 25.
- **8.** Wu YT, Shyu KK, Jao CW, Wang ZY, Soong BW, Wu HM, Wang PS*. Fractal dimension analysis for quantifying cerebellar morphological change of multiple system atrophy of the cerebellar type (MSA-C). Neuroimage. 2009 Jul 25.
- **9.** Lee YC, Liu CS, Wu HM, Wang PS, Chang MH, Soong BW. The 'hot cross bun' sign in the patients with spinocerebellar ataxia. Eur J Neurol. 2009 Apr;16(4):513-6.
- **10.** Hu HH, Guo WY, Chen HY, Wang PS, Hung CI, Hsieh JC, Wu YT. Morphological regionalization using fetal magnetic resonance images of normal developing brains. Eur J Neurosci. 2009 Apr;29(8):1560-7.
- **11.** PS Wang, Wu YT, Hung CI, Kwan SY, Teng S, Soong BW. Early detection of periodic sharp wave complexes on EEG by independent component analysis in patients with Creutzfeldt-Jakob disease. J Clin Neurophysiol. 2008 Feb;25(1):25-31.