

## Prof. Hwang, Tzung-Jeng



- **Current appointment:** Assistant Professor
- **Research Field:** Abnormal and Clinical Psychology
- **E-Mail:** tjhwang@ntu.edu.tw
- **Office/Phone:** 02-33662181/2182#10

- **Research Interests:**

---

Psychopharmacology: especially on antipsychotic treatment for schizophrenia and dementia/  
Schizophrenia research: studies on magnetic resonance spectroscopy, positron emission tomography, clinical symptomatology and neurocognitive function in schizophrenia/  
Mild cognitive impairment and dementia: especially on neuropsychiatric manifestations or BPSD (behavioral and psychological symptoms in dementia)

- **Courses Offered:**

---

Medical Psychology/  
Psychiatry & Practice/  
Internship in Psychiatry/  
Introduction to Human Diseases: the unsolved problems/  
Therapeutics/  
APPE — General Ward

- **Professional Experience:**

---

2010-present : Assistant Professor, Department of Psychiatry, National Taiwan University  
2006-present : Director, Medical Student Clinical Program in Psychiatry, National Taiwan University  
2006-present : Director, Intern Clinical Program in Psychiatry, National Taiwan University

- **Honors & Awards:**

---

Outstanding Clinical Service, National Taiwan University Hospital (1998)  
Excellence in Teaching, Medical College, National Taiwan University (2004)  
Outstanding Conference Paper, Annual Meeting of the Gerontological Society of Taiwan (2004, 2008)

- **Education:**

---

M.D., College of Medicine, National Taiwan University (1986)

M.P.H., School of Public Health, Harvard University (1993)

• **Publications:**

- **Hwang TJ**, Hwu HG, Chang CJ. Polydipsia with hyponatremia: report of two cases. *Chin Psychiatry*. 1995;9:169-74.
- Hwu HG, Wu CC, Cheng JJ, Huang MG, Hu SP, **Hwang TJ**, et al. The burden on chief caregivers of patients with schizophrenia. *Taiwanese J Psychiatry*. 2000;14(3):205-17.
- Hong CJ, Cheng JJ, **Hwang TJ**, Chen YS, Guo SC, Lane HY, et al. Efficacy and Safety of Olanzapine versus Haloperidol in the Treatment of Taiwanese Schizophrenia Patients. *Taiwanese J Psychiatry*. 2001;15:184-93.
- **Hwang TJ**, Lin SK, Lin HN. Efficacy and safety of zotepine for the treatment of Taiwanese schizophrenic patients: a double-blind comparison with haloperidol. *J Formos Med Assoc*. 2001;100(12):811-6.
- **Hwang TJ**, Liu CM, Liu SK, Hsu HC, Cheng JJ, Lin SK, et al. Clinical validation and prevalence of the deficit subtype in patients with schizophrenia. *Taiwanese J Psychiatry*. 2001;15:299-309.
- Kim K, Hwu H, Zhang LD, Lu MK, Park KK, **Hwang TJ**, et al. Schizophrenic delusions in Seoul, Shanghai and Taipei: a transcultural study. *J Korean Med Sci*. 2001;16(1):88-94.
- Cheng CT, Hwu HG, **Hwang TJ**. A phenomenological study of auditory hallucinations in schizophrenia. *Taiwanese J Psychiatry*. 2002;16:311-21.
- Huang LC, Lin HN, **Hwang TJ**. Amnestic disorder due to an immature ovarian teratoma-paraneoplastic limbic encephalitis: a case report. *Taiwanese J Psychiatry*. 2002;16:73-9.
- Huang YL, **Hwang TJ**, Liu CM, Liu SK, Lee YJ, Fang CT, et al. Characteristics of patients using acetaminophen overdose for parasuicide. *Taiwanese J Psychiatry*. 2002;16(2):135-46.
- Hwu HG, Chen CH, **Hwang TJ**, Liu CM, Cheng JJ, Lin SK, et al. Symptom patterns and subgrouping of schizophrenic patients: significance of negative symptoms assessed on admission. *Schizophr Res*. 2002;56(1-2):105-19.
- Lane HY, Guo SC, **Hwang TJ**, Chen YS, Cheng JJ, Lee YC, et al. Effects of olanzapine plasma concentrations on depressive symptoms in schizophrenia: a pilot study. *J Clin Psychopharmacol*. 2002;22(5):530-2.
- Liu SK, Chiu CH, Chang CJ, **Hwang TJ**, Hwu HG, Chen WJ. Deficits in sustained attention in schizophrenia and affective disorders: stable versus state-dependent markers. *Am J Psychiatry*. 2002;159(6):975-82.
- **Hwang TJ**, Lee SM, Sun HJ, Lin HN, Tsai SJ, Lee YC, et al. Amisulpride versus risperidone in the treatment of schizophrenic patients: a double-blind pilot study in Taiwan. *J Formos Med Assoc*. 2003;102(1):30-6.
- **Hwang TJ**, O'Conner S, Cummings JL. The use of the Neuropsychiatric Inventory in severe dementia. *Research and Practice in Alzheimer's disease*. 2003;8:100-6.

- Hwu HG, Gorenc KD, Peredo S, **Hwang TJ**, Abreu LF, Chen CC. Brief alcoholism screening questionnaire: establishment and validity in Taiwanese. *J Formos Med Assoc.* 2003;102(4):250-6.
- Chen WJ, Chang CH, Liu SK, **Hwang TJ**, Hwu HG. Sustained attention deficits in nonpsychotic relatives of schizophrenic patients: a recurrence risk ratio analysis. *Biol Psychiatry.* 2004;55(10):995-1000.
- **Hwang TJ**, Cummings JL. Neuropsychiatric symptoms of mild cognitive impairment. In: Gauthier S, Scheltens P, Cummings JL, editors. *Alzheimer's disease and related disorders annual 2004.* London: Martin Dunitz; 2004. p. 71-9.
- **Hwang TJ**, Liu HM, Hwu HG. Hippocampal Neurochemical Pathology and Thought Disorganization in Schizophrenia: a pilot study. *Taiwanese J Psychiatry.* 2004;18(3):181-9.
- **Hwang TJ**, Masterman DL, Ortiz F, Fairbanks LA, Cummings JL. Mild cognitive impairment is associated with characteristic neuropsychiatric symptoms. *Alzheimer Dis Assoc Disord.* 2004;18(1):17-21.
- Hwu HG, Gorenc KD, **Hwang TJ**, Peredo S, Abreu LF, Chen CC. Alcoholism Screening Questionnaire. *Taiwanese J Psychiatry.* 2004;18(1):10-8.
- Tsai JL, Horng PH, **Hwang TJ**, Hsu JW, Horng CJ. Determination of urinary trace elements (arsenic, copper, cadmium, manganese, lead, zinc, selenium) in patients with Blackfoot disease. *Arch Environ Health.* 2004;59(12):686-92.
- Hwu HG, Faraone SV, Liu CM, Chen WJ, Liu SK, Shieh MH, **Hwang TJ**, et al. Taiwan schizophrenia linkage study: the field study. *Am J Med Genet B Neuropsychiatr Genet.* 2005;134(1):30-6.
- Chuang YF, Chiu YL, **Hwang TJ**, Chu TS. Delirium and multiple electrolyte abnormalities associated with high dose paroxetine exposure. *Psychiatry Clin Neurosci.* 2006;60(5):642-3.
- Faraone SV, Hwu HG, Liu CM, Chen WJ, Tsuang MM, Liu SK, Shieh MH, **Hwang TJ**, et al. Genome scan of Han Chinese schizophrenia families from Taiwan: confirmation of linkage to 10q22.3. *Am J Psychiatry.* 2006;163(10):1760-6.
- Liu SK, Hsieh MH, **Hwang TJ**, Hwu HG, Liao SC, Lin SH, et al. Re-examining sustained attention deficits as vulnerability indicators for schizophrenia: stability in the long term course. *J Psychiatr Res.* 2006;40(7):613-21.
- Liu SK, Hsieh MH, **Hwang TJ**, Liu CM, Liu CC, Hua MS, et al. Patterns and clinical correlates of neuropsychologic deficits in patients with schizophrenia. *J Formos Med Assoc.* 2006;105(12):978-91.
- Liu YL, Fann CS, Liu CM, Chang CC, Wu JY, Hung SI, Liu SK, Shieh MH, **Hwang TJ**, et al. No association of G72 and d-amino acid oxidase genes with schizophrenia. *Schizophr Res.* 2006;87(1-3):15-20.
- Liu YL, Fann CS, Liu CM, Chen WJ, Wu JY, Hung SI, Chen CH, Jou YS, Liu SK, **Hwang TJ**, et al. A single nucleotide polymorphism fine mapping study of chromosome 1q42.1

reveals the vulnerability genes for schizophrenia, GNPAT and DISC1: Association with impairment of sustained attention. *Biol Psychiatry*. 2006;60(6):554-62.

- Liu YL, Fann CS, Liu CM, Wu JY, Hung SI, Chan HY, Chen JJ, Pan CC, Liu SK, Shieh MH, **Hwang TJ**, et al. Absence of significant associations between four AKT1 SNP markers and schizophrenia in the Taiwanese population. *Psychiatr Genet*. 2006;16(1):39-41.
- Liu YL, Shen-Jang Fann C, Liu CM, Wu JY, Hung SI, Chan HY, Chen JJ, Lin CY, Liu SK, Shieh MH, **Hwang TJ**, et al. Evaluation of RGS4 as a candidate gene for schizophrenia. *Am J Med Genet B Neuropsychiatr Genet*. 2006;141(4):418-20.
- Tsuang HC, Lin SH, Liu SK, Hsieh MH, **Hwang TJ**, Liu CM, et al. More severe sustained attention deficits in nonpsychotic siblings of multiplex schizophrenia families than in those of simplex ones. *Schizophr Res*. 2006;87(1-3):172-80.
- Chan HY, Lin WW, Lin SK, **Hwang TJ**, Su TP, Chiang SC, et al. Efficacy and safety of aripiprazole in the acute treatment of schizophrenia in Chinese patients with risperidone as an active control: a randomized trial. *J Clin Psychiatry*. 2007;68(1):29-36.
- Lin SH, Liu CM, Chang SS, Hwu HG, Liu SK, **Hwang TJ**, et al. Familial Aggregation in Skin Flush Response to Niacin Patch Among Schizophrenic Patients and Their Nonpsychotic Relatives. *Schizophr Bull*. 2007;33(1):174-82.
- Liu CM, Chang SS, Liao SC, **Hwang TJ**, Shieh MH, Liu SK, et al. Absent response to niacin skin patch is specific to schizophrenia and independent of smoking. *Psychiatry Res*. 2007;152(2-3):181-7.
- Liu CM, Liu YL, Fann CS, Chen WJ, Yang WC, Ouyang WC, Chen CY, Jou YS, Shieh MH, **Hwang TJ**, et al. Association evidence of schizophrenia with distal genomic region of NOTCH4 in Taiwanese families. *Genes Brain Behav*. 2007;6(6):497-502.
- Liu CM, Liu YL, Fann CS, Yang WC, Wu JY, Hung SI, Chen WJ, Chueh CM, Liu WM, Liu CC, Shieh MH, **Hwang TJ**, et al. No association evidence between schizophrenia and dystrobrevin-binding protein 1 (DTNBP1) in Taiwanese families. *Schizophr Res*. 2007;93(1-3):391-8.
- Liu YL, Fann CS, Liu CM, Chang CC, Yang WC, Hung SI, Yu SL, **Hwang TJ**, et al. More evidence supports the association of PPP3CC with schizophrenia. *Mol Psychiatry*. 2007;12(10):966-74.
- Liu YL, Fann CS, Liu CM, Chang CC, Yang WC, Wu JY, Hung SI, Chan HY, Chen JJ, Shieh MH, **Hwang TJ**, et al. HTF9C gene of 22q11.21 region associates with schizophrenia having deficit-sustained attention. *Psychiatr Genet*. 2007;17(6):333-8.
- Su YP, Chang CJ, **Hwang TJ**. Lithium intoxication after valsartan treatment. *Psychiatry Clin Neurosci*. 2007;61(2):204.
- Chang SS, Liu CM, Lin SH, Hwu HG, **Hwang TJ**, Liu SK, et al. Impaired flush response to niacin skin patch among schizophrenia patients and their nonpsychotic relatives: the effect of genetic loading. *Schizophr Bull*. 2009;35(1):213-21.

- Cheng WC, Liu CM, Hsieh MH, **Hwang TJ**. Bupropion-related parkinsonism and dystonia. *J Clin Psychopharmacol*. 2009;29(6):616-8.
- Liao SY, Lin SH, Liu CM, Hsieh MH, **Hwang TJ**, Liu SK, et al. Genetic variants in COMT and neurocognitive impairment in families of patients with schizophrenia. *Genes Brain Behav*. 2009;8(2):228-37.
- Lin SH, Liu CM, Liu YL, Shen-Jang Fann C, Hsiao PC, Wu JY, Hung SI, Chen CH, Wu HM, Jou YS, Liu SK, **Hwang TJ**, et al. Clustering by neurocognition for fine mapping of the schizophrenia susceptibility loci on chromosome 6p. *Genes Brain Behav*. 2009;8(8):785-94.
- Lin YT, **Hwang TJ**, Chiang HL, Sheu YH, Shan GC. Quetiapine for patients with agitation or psychosis related to Alzheimer's disease and vascular dementia. *Taiwan Geriatrics and Gerontology*. 2009;4(1):51-62.
- Tseng KC, **Hwang TJ**. Rhabdomyolysis following dose increase of clozapine and combination therapy with lithium. *J Clin Psychopharmacol*. 2009;29(4):398-9.
- Chiang HL, Liu CC, **Hwang TJ**. Rapid dose-dependent effect of clozapine on a schizophrenic patient's lipid profile. *J Psychopharmacol* 2009;23(4):465-467.
- Finnema SJ, Varrone A, **Hwang TJ**, Gulyas B, Pierson ME, Halldin C, et al. Fenfluramine-induced serotonin release decreases [<sup>11</sup>C]AZ10419369 binding to 5-HT<sub>1B</sub>-receptors in the primate brain. *Synapse*. 2010;64(7):573-7.
- Ho MJ, Yao G, Lee KL, **Hwang TJ**, Beach MC. Long-term effectiveness of patient-centered training in cultural competence: what is retained? What is lost? *Acad Med*. 2010;85(4):660-4.
- **Hwang TJ**, Ni HC, Chen HC, Lin YT, Liao SC. Risk predictors for hypnotic-related complex sleep behaviors: a retrospective, cross-sectional pilot study. *J Clin Psychiatry*. 2010;71(10):1331-5.
- Lien YJ, Tsuang HC, Chiang A, Liu CM, Hsieh MH, **Hwang TJ**, et al. The multidimensionality of schizotypy in nonpsychotic relatives of patients with schizophrenia and its applications in ordered subsets linkage analysis of schizophrenia. *Am J Med Genet B Neuropsychiatr Genet*. 2010;153B(1):1-9.
- Lin CC, Bai YM, Chen JY, **Hwang TJ**, Chen TT, Chiu HW, et al. Easy and low-cost identification of metabolic syndrome in patients treated with second-generation antipsychotics: artificial neural network and logistic regression models. *J Clin Psychiatry*. 2010;71(3):225-34.
- Liu YL, Liu CM, Fann CS, Yang WC, Chen YH, Tseng LJ, Liu SK, Shieh MH, **Hwang TJ**, et al. Genetic variants of IL-6 and its receptor are not associated with schizophrenia in Taiwan. *Neurosci Lett*. 2010;468(3):330-3.
- Finnema SJ, Varrone A, **Hwang TJ**, Halldin C, Farde L. Confirmation of fenfluramine effect on 5-HT<sub>1B</sub> receptor binding of [(11)C]AZ10419369 using an equilibrium approach. *J Cereb Blood Flow Metab*. 2011.
- Huang LC, **Hwang TJ**, Huang GH, Hwu HG. Outcome of severe obsessive-compulsive disorder with schizotypal features: a pilot study. *J Formos Med Assoc*. 2011;110(2):85-92.

- **Hwang TJ**, Liu CM, Liu CC, Hsieh MH, Chien YL, Hwu HG. Clinical Aspect and Psychopathology of Schizophrenia Formosan J Med. 2011;15(4).
- Lin SH, Liu CM, **Hwang TJ**, Hsieh MH, Hsiao PC, Faraone SV, et al. Performance on the Wisconsin Card Sorting Test in Families of Schizophrenia Patients With Different Familial Loadings. Schizophr Bull. 2011.
- Liu CC, Lai MC, Liu CM, Chiu YN, Hsieh MH, **Hwang TJ**, et al. Follow-up of subjects with suspected pre-psychotic state in Taiwan. Schizophr Res. 2011;126(1-3):65-70.
- Liu CM, Fann CS, Chen CY, Liu YL, Oyang YJ, Yang WC, Chang CC, Wen CC, Chen WJ, **Hwang TJ**, et al. ANXA7, PPP3CB, DNAJC9, and ZMYND17 Genes at Chromosome 10q22 Associated with the Subgroup of Schizophrenia with Deficits in Attention and Executive Function. Biol Psychiatry. 2011;70(1):51-8.
- Tsuang HC, Liu CM, **Hwang TJ**, Hsieh MH, Faraone SV, Tsuang MT, et al. Handedness and schizotypy in non-psychotic relatives of patients with schizophrenia. Laterality. 2011:1-17.