

Pingfu Feng, M.D., Ph.D.

Assistant Professor of Medicine and of Psychiatry, Case

Education:

M.D. – Henan Medical College, Zhengzhou, Henan, China

Ph.D. - Hunan Medical College, Changsha, Hunan, China.

Professional Training:

Postdoctoral Fellowship - University of Texas, South Western Medical Center at Dallas, University of Chicago

Area of Expertise:

Sleep in rodents

Neuronal and molecular regulation of depression and insomnia in rodent models

Memberships:

Society of Neuroscience

Sleep Research Society

Research focus:

Currently, his research is focusing on orexin (hypocretin) regulation in rodent model of depression and insomnia. Orexins (including orexin A and orexin B) are recently discovered neural peptides regulating food intake and energy metabolism and increase/maintenance wakefulness. Orexins activate multiple aminergic neurons including 5-HT neurons, dopaminergic neurons which are deeply involved in the mechanism of depression and other mood disorders. Our work indicated that orexins are involved in the pathology of depression, chronic insomnia and stress. Dr. Feng's hypothesis is that by activating aminergic neuronal systems, orexins may play a role in biofeedback regulation in mood and multiple physiological functions involving aminergic regulation. His research evaluates whether application of orexinergic receptor agonist would improve depression in measurable biomarkers including sleep, behavior and neural molecules.

Recent Publications:

1. **Feng P**, Vurbic D, Wu Z, Hu Y, Strohl K (2008) Changes in brain orexin levels in a rat model of depression induced by neonatal administration of

- clomipramine. *J Psychopharmacol*, 22:784-791.
2. **Feng P**, Hu Y, Li D, Vurbic D, Fan H, Wang S and Strohl KP. (2008) The Effect of clomipramine on wake/sleep and orexinergic expression in rats. *Journal of Psychopharmacology* (In press, online available, doi:10.1177/0269881108089606).
 3. **Feng P**, Vurbic D, Wu Z, Strohl KP (2007) Brain orexins and wake regulation in rats exposed to maternal deprivation. *Brain Res*, 1154C:163-172.
 4. **Feng P**, Liu X, Vurbic D, Fan H, and Wang S (2007) Neonatal REM sleep is regulated by corticotrophin releasing factor. *Behavioral Brain Res*, 182:95-102.
 5. Hammonds, M.D., Shim, S.S., **Feng, P.** and Calabrese, J.R., (2007) Effects of Subchronic Lithium Treatment on Levels of BDNF, Bcl-2 and Phospho-CREB in the Rat Hippocampus. *Basic Clin Pharmacol Toxicol*. 100, 356-9.
 6. **Feng P** and Ma Y (2003) Instrumental REM Sleep Deprivation in Neonates Leads to Adult Depression-like Behaviors in Rats. *Sleep*, 26:990-996.
 7. **Feng P**, Guan Z, Yang X, Fang J (2003). Impairments of ERK signal transduction in the brain in a rat model of depression induced by neonatal exposure of clomipramine. *Brain Res*, 991:195-205.

Contact information;

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