



Chang, Cheng-Yi, Associate Professor

Research Interests:

Neurosurgery, Neuro-oncology

Courses Taught:

Special Topics in Small Animal Surgery

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Educational Background:

Ph.D., Department of Life Sciences, Chung Hsing University

Bachelor of Medicine, National Yang Ming Chiao Tung University

Professional Career:

**Attending Physician, Department of Neurosurgery, Taichung Veterans General Hospital,
Executive Yuan Retirement Association**

**Neurosurgeon, Fengyuan Hospital, Ministry of Health and Welfare, concurrently serving as
vice president**

Research Fellow, Dana-Farber Cancer Institute, Boston, USA

Visiting scholar at Swedish Hospital, Cherry Hill Campus in Seattle, USA

Selected Publications

1. Wu CC#, Chang CY#, Tzeng CY, Huang JH, Hung CJ, Chen WY, Liao SL, Kuan YH, Chen CJ*. 2022. Preventive intrathecal injection of bupivacaine alleviated microglia activation and neuropathic pain in a rat model of chronic constriction injury. *Int. J. Mol. Sci.* 23, 7197.
2. Chang CY, Pan PH, Liu TH, Wu CC, Hung CJ, Chen WY, Liao SL, Chen YF, Chen CJ*. 2022. Hyperglycemia augmented neuropathic pain involving the HMGB1/TLR4 inflammatory axis. *Tungs' Medical Journal.* 16, 14-22.
3. Chang CY, Wu CC, Wang JD, Liao SL, Chen WY, Kuan YH, Wang WY, Chen CJ*. 2022. Endoplasmic reticulum stress contributed to dipyridamole-induced impaired autophagic flux and glioma apoptosis. *Int. J. Mol. Sci.* 23, 579.
4. Wang YY, Lin SY, Chang CY, Wu CC, Chen WY, Liao SL, Chen YF, Wang WY, Chen CJ*. 2021. Jak2 inhibitor AG490 improved poststroke central and peripheral inflammation and metabolic abnormalities in a rat model of ischemic stroke. *Antioxidants.* 10, 1958.
5. Lin SY, Wang YY, Chang CY, Wu CC, Chen WY, Liao SL, Chen CJ*. 2021. TNF- α receptor inhibitor alleviates metabolic and inflammatory changes in a rat model of ischemic stroke. *Antioxidants.* 10, 851.
6. Chang CY, Pan PH, Wu CC, Liao SL, Chen WY, Kuan YH, Wang WY, Chen CJ*. 2021. Endoplasmic reticulum stress contributes to gefitinib-induced apoptosis in

- glioma.** *Int. J. Mol. Sci.* **22**, 3934.
- 7. Chang CY, Pan PH, Li JR, Ou YC, Liao SL, Chen WY, Kuan YH, Chen CJ*. 2021. Glycerol improves intracerebral hemorrhagic brain injury and associated kidney dysfunction in Rats. *Antioxidants.* **10**, 623.
 - 8. Chang CY, Wu CC, Wang JD, Li JR, Wang YY, Lin SY, Chen WY, Liao SL, Chen CJ*. 2021. DHA attenuated Japanese Encephalitis Virus infection-induced neuroinflammation and neuronal cell death in cultured rat Neuron/glia. *Brain Behav. Immun.* **93**, 194-205.
 - 9. Wang JD, Wang YY, Lin SY, Chang CY, Li JR, Huang SW, Chen WY, Liao SL, Chen CJ*. 2021. Exosomal HMGB1 promoted cancer malignancy. *Cancers.* Feb. **13**, 877.
 - 10. Lin SY, Wang YY, Chang CY, Wu CC, Chen WY, Kuan YH, Liao SL, Chen CJ*. 2020. Effects of β-adrenergic blockade on metabolic and inflammatory responses in a rat model of ischemic stroke. *Cells.* **9**, 1373.
 - 11. Wu CC, Chang CY, Shih KC, Hung CJ, Wang YY, Lin SY, Chen WY, Kuan YH, Liao SL, Wang WY, Chen CJ*. 2020. β-Funaltrexamine displayed anti-inflammatory and neuroprotective effects in cells and rodent model of stroke. *Int. J. Mol. Sci.* **21**, 3866.
 - 12. Chang CY, Pan PH, Li JR, Ou YC, Wang JD, Liao SL, Chen WY, Wang WY, Chen CJ*. 2020. Aspirin induced glioma apoptosis through Noxa upregulation. *Int. J. Mol. Sci.* **21**, 4219.
 - 13. Wang YY#, Chang CY#, Lin SY, Wang JD, Wu CC, Chen WY, Kuan YH, Liao SL, Wang WY, Chen CJ*. 2020. Quercetin protects against cerebral ischemia/reperfusion and oxygen glucose deprivation/reoxygenation neurotoxicity. *J. Nutr. Biochem.* Sep. **83**, 108436.
 - 14. Chang CY, Li JR, Wu CC, Wang JD, Liao SL, Chen WY, Wang WY, Chen CJ*. 2020. Endoplasmic reticulum stress contributed to indomethacin-induced glioma apoptosis. *Int. J. Mol. Sci.* Feb. **21** (2), 557.
 - 15. Chang CY, Pan PH, Lin SY, Wang YY, Chen WY, Liao SL, Chen CJ*. 2019. Comparison of post-ischemic brain injury in young and middle-aged stroke rats. *Tungs' Medical Journal* **13**, 75-82.
 - 16. Ou YC, Li JR, Wang JD, Chang CY, Wu CC, Chen WY, Kuan YH, Liao SL, Lu HC, Chen CJ*. 2019. Fibronectin promotes cell growth and migration in human renal cell carcinoma cells. *Int. J. Mol. Sci.* **20** (11), 2792.
 - 17. Chen WY, Chang CY, Li JR, Wang JD, Wu CC, Kuan YH, Liao SL, Wang WY, Chen CJ*. 2018. Anti-inflammatory and neuroprotective effects of fungal immunomodulatory protein involving microglial inhibition. *Int. J. Mol. Sci.* Nov. **21**, 19 (11), 3678.
 - 18. Chang CY, Li JR, Wu CC, Wang JD, Yang CP, Chen WY, Wang WW, Chen CJ*. 2018. Indomethacin induced glioma apoptosis involving ceramide signals. *Exp. Cell Res.* April **365** (1), 66-77.

19. Chang CY, Li JR, Ou YC, Lin SY, Wang YY, Chen WY, Hu YH, Lai CY, Chang CJ, Chen CJ*. 2017. Interplay of inflammatory gene expression in pericytes following Japanese encephalitis virus infection. *Brain Behav. Immun.* Nov. **66**, 230-243.
20. Wu CC, Hung CJ, Lin SY, Wang YY, Chang CY, Chen WY, Liao SL, Raung SL, Yang CP, Chen CJ*. 2017. Treadmill exercise alleviated prenatal buprenorphine exposure-induced depression in rats. *Neurochem. Int.* Nov. **110**, 91-100.
21. Li JR, Wu CC, Chang CY, Ou YC, Lin SY, Wang YY, Chen WY, Raung SL, Liao SL, Chen CJ*. 2017. Susceptibility of naïve and differentiated PC12 cells to Japanese encephalitis virus infection. *IUBMB Life.* Feb. **69** (2) 79-87.