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Position : Professor

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Research Interests:

1. Hepatology
2. Obesity and Fatty Liver
3. Fatty liver and immune tolerance
4. Antioxidant Medicine
5. Research on the mechanism of a Chinese medicinal ingredient formula for liver protection
6. Energy Metabolism and Aging

Publication Lists: (2011-present)

*****, corresponding author

1. Ko-Chen Lee, Hen-Hong Chang, Ying-Hui Chung, [Tzung-Yan Lee](#). Andrographolide acts as an anti-inflammatory agent in LPS-stimulated RAW264.7 macrophages by inhibiting STAT3-mediated suppression of the NF- κ B pathway. *Journal of Ethnopharmacology*. **2011**,135(3):678-84. **(I.F.: 5.195; R/C= 4/30 in INTEGRATIVE & COMPLEMENTARY MEDICINE)**
2. Jong-Jen Kuo, Hen-Hong Chang, Tung-Hu Tsai, [Tzung-Yan Lee](#). Curcumin ameliorates mitochondrial dysfunction associated with inhibition of gluconeogenesis in free fatty acid-mediated hepatic lipoapoptosis. *International Journal of Molecular Medicine*. **2012**, 30(3): 643-9. **(I.F.: 5.314; R/C= 53/139 in MEDICINE, RESEARCH & EXPERIMENTAL)**
3. Jong-Jen Kuo, Hen-Hong Chang, Tung-Hu Tsai, [Tzung-Yan Lee](#). Positive effect of curcumin on inflammation and mitochondrial dysfunction in obese mice with liver steatosis. *International Journal of Molecular Medicine*. **2012**, 30(3): 673-9. **(I.F.: 5.314; R/C= 53/139 in MEDICINE, RESEARCH & EXPERIMENTAL)**
4. Chorng-Kai Wen, [Tzung-Yan Lee](#). Electroacupuncture decreases the leukocyte infiltration to white adipose tissue and attenuates inflammatory response in high fat diet-induced obesity rats. *Evidence-Based Complementary and Alternative Medicine*. **2014**; 2014: 473978. **(I.F.: 2.650; R/C= 16/30 in INTEGRATIVE & COMPLEMENTARY MEDICINE)**
5. [Tzung-Yan Lee](#), Hen-Hong Chang, Chorng-Kai Wen, Tse-Hung Huang, Ya-Shu Chang. Modulation of thioacetamide-induced hepatic inflammations, angiogenesis and fibrosis by andrographolide in mice. *Journal of Ethnopharmacology*. **2014**, 158: 423-30. **(I.F.: 5.195; R/C= 4/30 in INTEGRATIVE & COMPLEMENTARY MEDICINE)**
6. Chin-Chang Chen, [Tzung-Yan Lee](#), Ching-Fai Kwok, Yung-Pei Hsu, Kuang-Chung Shih, Yan-Jie Lin, Low-Tone Ho. Major urinary protein 1 interacts with cannabinoid receptor type 1 in fatty acid-induced hepatic insulin resistance in a mouse hepatocyte model. *Biochemical and Biophysical Research Communications*. **2015**, 460(4): 1063-8. **(I.F.: 3.322; R/C= 39/72 in BIOPHYSICS)**
7. Chorng-Kai Wen, [Tzung-Yan Lee](#). Electroacupuncture prevents white adipose tissue

inflammation through modulation of hypoxia-inducible factors-1 α -dependent pathway in obese mice. *BMC Complementary Medicine and Therapies*. **2015**, 15: 452. **(I.F.: 2.838; R/C= 15/30 in INTEGRATIVE & COMPLEMENTARY MEDICINE)**

8. Chin-Chang Chen, **Tzung-Yan Lee**, Ching-Fai Kwok, Yung-Pei Hsu, Kuang-Chung Shih, Yan-Jie Lin, Low-Tone Ho. Cannabinoid receptor type 1 mediates high-fat diet-induced insulin resistance by increasing forkhead box O1 activity in a mouse model of obesity. *International Journal of Molecular Sciences*. **2016**, 37(3): 743-54. **(I.F.: 6.208; R/C= 69/296 in BIOCHEMISTRY & MOLECULAR BIOLOGY)**

9. Chin-Chang Chen, **Tzung-Yan Lee**, Ching-Fai Kwok, Yung-Pei Hsu, Kuang-Chung Shih, Yan-Jie Lin, Low-Tone Ho. Using proteomics to discover novel biomarkers for fatty liver development and response to CB1R antagonist treatment in an obese mouse model. *Proteomics*. **2017**, 17(1-2). **(I.F.: 5.393; R/C= 15/79 in BIOCHEMICAL RESEARCH METHODS)**

10. Tse-Hung Huang, Chin-Chang Chen, Hsuan-Miao Liu, **Tzung-Yan Lee**, Sue-Heui Shieh. Resveratrol Pretreatment Attenuates Concanavalin A-induced Hepatitis through Reverse of Aberration in the Immune Response and Regenerative Capacity in Aged Mice. *Scientific Reports*. **2017**, 7(1): 2705. **(I.F.: 4.996; R/C= 19/73 in MULTIDISCIPLINARY SCIENCES)**

11. Hsuan-Miao Liu, Jyh-Fei Liao, **Tzung-Yan Lee**. Farnesoid X receptor agonist GW4064 ameliorates lipopolysaccharide-induced ileocolitis through TLR4/MyD88 pathway related mitochondrial dysfunction in mice. *Biochemical and Biophysical Research Communications*. **2017**, 490(3): 841-848. **(I.F.: 3.322; R/C= 39/72 in BIOPHYSICS)**

12. **Tzung-Yan Lee**, Yann-Lii Leu, Chorng-Kai Wen. Modulation of HIF-1 α and STAT3 signaling contributes to anti-angiogenic effect of YC-1 in mice with liver fibrosis. *Oncotarget*. **2017**, 8(49): 86206-86216. **(I.F.: 5.168; R/C= 44/217 in ONCOLOGY)**

13. Hsuan-Miao Liu, Jyh-Fei Liao, **Tzung-Yan Lee**. GW4064 attenuates lipopolysaccharide-induced hepatic inflammation and apoptosis through inhibition of the Toll-like receptor 4-mediated p38 mitogen-activated protein kinase signaling pathway in mice. *International Journal of Molecular Medicine*. **2018**, 41(3): 1455-1462. **(I.F.: 5.314; R/C= 53/139 in MEDICINE, RESEARCH & EXPERIMENTAL)**

14. Geng-Hao Liu, Meng-Yen Tsai, Gwo-Jyh Chang, Chao-Min Wu, Sheng-Kai Lin, Yu-

Sheng Chen, [Tzung-Yan Lee](#). Safety Assessment of the Auto Manipulation Device for Acupuncture in Sprague-Dawley Rats: Preclinical Evaluation of the Prototype. *Evidence-Based Complementary and Alternative Medicine*. **2018**, 2018: 5708393. **(I.F.: 2.650; R/C= 16/30 in INTEGRATIVE & COMPLEMENTARY MEDICINE)**

15. Yu-Sheng Chen, Hsuan-Miao Liu, [Tzung-Yan Lee](#). Ursodeoxycholic Acid Regulates Hepatic Energy Homeostasis and White Adipose Tissue Macrophages Polarization in Leptin-Deficiency Obese Mice. *Cells* (IF: 4.37; Q4). **2019**, 8(3): 253. **(I.F.: 7.666; R/C= 51/194 in CELL BIOLOGY)**

16. Zi-Yu Chang, Chin-Chang Chen, Hsuan-Miao Liu, Yuan-Chieh Yeh, Tung-Yi Lin, [Tzung-Yan Lee](#), Tse-Hung Huang. Positive Effects of Ger-Gen-Chyn-Lian-Tang on Cholestatic Liver Fibrosis in Bile Duct Ligation-Challenged Mice. *International Journal of Molecular Sciences*. **2019**, 20(17): 4181. **(I.F.: 6.208; R/C= 69/296 in BIOCHEMISTRY & MOLECULAR BIOLOGY)**

17. Geng-Hao Liu, Hsuan-Miao Liu, Yu-Sheng Chen, [Tzung-Yan Lee](#). Effect of Electroacupuncture in Mice with Dextran Sulfate Sodium-Induced Colitis and the Influence of Gut Microbiota. *Evidence-Based Complementary and Alternative Medicine*. **2020**, 2020: 2087903. **(I.F.: 2.650; R/C= 16/30 in INTEGRATIVE & COMPLEMENTARY MEDICINE)**

18. Cheng-Hui Wang, Hsuan-Miao Liu, Zi-Yu Chang, Tse-Hung Huang, [Tzung-Yan Lee](#). Losartan Prevents Hepatic Steatosis and Macrophage Polarization by Inhibiting HIF-1 α in a Murine Model of NAFLD. *International Journal of Molecular Sciences*. **2021**, 22(15): 7841. **(I.F.: 6.208; R/C= 69/296 in BIOCHEMISTRY & MOLECULAR BIOLOGY)**

19. Hsuan-Miao Liu, Cheng-Hui Wang, Zi-Yu Chang, Tse-Hung Huang, Tzung-Yan Lee. Losartan attenuates insulin resistance and regulates browning phenomenon of white adipose tissue in *ob/ob* Mice. *Current Issues in Molecular Biology*. **2021**, 3(3): 1828-1843. **(I.F.: 2.976; R/C= 216/296 in BIOCHEMISTRY & MOLECULAR BIOLOGY)**

20. Zi-Yu Chang, Hsuan-Miao Liu, Yann-Lii Leu, Chung-Hua Hsu, [Tzung-Yan Lee](#). Modulation of gut microbiota combined with upregulation of intestinal tight junction explains anti-inflammatory effect of Corylin on colitis-associated cancer in mice. *International Journal of Molecular Sciences*. **2022**, 23(5): 2667. **(I.F.: 6.208; R/C= 69/296 in BIOCHEMISTRY & MOLECULAR BIOLOGY)**

21. Ching-Chuan Yeh, Hsuan-Miao Liu, Ming-Chung Lee, Yann-Lii Leu, Wei-Han, Chiang,

Hen-Hong Chang, [Tzung-Yan Lee](#). Phytochemical-rich herbal formula ATG-125 protects against sucrose-induced gastrocnemius muscle atrophy by rescuing Akt signaling and improving mitochondrial dysfunction in young adult mice. *Molecular Medicine Reports*. **2022**, 25(2): 57. (I.F.: 3.423; R/C= 97/195 in **MEDICINE, RESEARCH & EXPERIMENTAL**)

22. Geng-Hao Liu, Xin-Cheng Zhuo, Yueh-Hsiang Huang, Hsuan-Miao Liu, Ren-Chin Wu, Chia-Jung Kuo, Ning-Hung Chen, Li-Pang Chuang, Shih-Wei Lin, Yen-Lung Chen, Huang-Yu Yang, [Tzung-Yan Lee](#). Alterations in Gut Microbiota and Upregulations of VPAC2 and Intestinal Tight Junctions Correlate with Anti-Inflammatory Effects of Electroacupuncture in Colitis Mice with Sleep Fragmentation. *Biology-Basel*. **2022**, 11(7), 962. (I.F.: 5.168; R/C= 21/94 in **BIOLOGY**)

22. Cheng-Hui Wang, Hsuan-Miao Liu, Zi-Yu Chang, Chung-Hua Hsu, [Tzung-Yan Lee](#). Antioxidants rich herbal formula Ger-Gen-Chyn-Lian-Tang protects lipotoxicity and ameliorates inflammation signaling through regulation of mitochondrial biogenesis and mitophagy in nonalcoholic fatty liver disease mice. *Frontiers in Bioscience-Landmark (Landmark Ed)*. **2022**, 27(8):242. (SCI) (I.F.:3.115; R/C= 207/297 in **BIOCHEMISTRY & MOLECULAR BIOLOGY**)