


生化科技學系教師個人資料

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個人學經歷

學歷：

國立陽明大學 傳統醫藥研究所 博士
 國立中興大學 分子生物學研究所 碩士
 國立台灣大學 植物學系 學士

經歷：

國立嘉義大學 生化科技學系 教授、副教授、助理教授
 國立陽明大學 傳統醫藥研究所 兼任副教授
 台北榮民總醫院 教學研究部 特約副研究員
 馬偕紀念醫院 醫學研究部 副研究員
 大葉大學 生物產業科技學系 助理教授

研究領域及專長

基礎與轉譯醫學 (translational medicine) 之應用開發研究：

1. 開發具腫瘤抑制與免疫調節的中草藥，並獲得多項發明專利。
2. 機能性稻米新種之篩選與功能性評估，如：免疫調節之稻米蛋白質、以及低升糖指數之新米種。
3. 造血幹細胞分化之基礎與臨床研究及開發具抑制腫瘤幹細胞之藥物釋放系統。
4. 研發 Sonic hedgehog 訊息傳遞路徑對於腫瘤抗藥性之調控機轉，並開發 Sonic hedgehog 抑制藥物 (inhibitor) 於癌症治療之可行性。

研究成果

01. **Hui-Fen Liao**, You-Zhu Lin, Chih-Chia Yu, Tzong-Shyuan Tai, Shih-Kai Hung, Ching-Chieh Yang and Yu-Chieh Su. mTORC1/2 Inhibitor Served as a More Ideal Agent Against the Growth of Mouse Lymphocytic Leukemia Both In Vitro and In Vivo. *ANTICANCER RESEARCH* 2019, 39: 4829-4835. (SCI)
02. Kun-Ming Wu, **Hui-Fen Liao**, Chih-Wen Chi, Yu Ru Kou, Yu-Jen Chen. Wasabi compound 6-(methylsulfinyl) hexyl isothiocyanate induces cell death with co-existing mitotic arrest and autophagy in human chronic myelogenous leukemia K562 cells. *Biomolecules*. 2019, 9(12): pii: E774; doi:10.3390/biom9120774 www.mdpi. (SCI)
03. Chin-Jin Hou, Zheng-Chieh Chen, Shu-Huei Ferng and **Hui-Fen Liao***. Effects of organic cultivation with and without pest management of Adzuki bean (*Vigna angularis*) on yield characteristics, seed chemical composition, and antioxidant capacity. *Net Journal of Agricultural Science*. 2018, 6(2): 20-28. (SCI)
04. Yea-Chen Liu, Yu-Ying Hsiao, Kuo-Lung Ku, **Hui-Fen Liao***, Wei-Chun Chao*. *Mahonia oiwakensis* Extract and Its Bioactive Compounds Exert Anti-inflammatory Activities and VEGF Production Through M2-Macrophagic Polarization and STAT6 Activation. *JOURNAL OF MEDICINAL FOOD*. 2018, 21(7): 654-664. (SCI)
05. Chien-Kuo Liu, Chien-An Chen, Tzung-Yan Lee, Hen-Hong Chang, **Hui-Fen Liao***, Yu-Jen Chen*. Rice protein prolamin promotes anti-leukemia immunity and inhibits leukemia growth in vivo. *Food and Chemical Toxicology*. 2017, pii: S0278-6915(17)30562-8. (SCI)
06. Yu CC, Hung SK, Lin HY, Chiou WY, Lee MS, **Liao HF**, Huang HB, Ho HC, Su YC. Targeting the PI3K/AKT/mTOR signaling pathway as an effectively radiosensitizing strategy for treating human oral squamous cell carcinoma in vitro and in vivo. *Oncotarget*. 2017 Aug 2;8(40):68641-68653. (SCI)
07. Huang YT, **Liao HF**, Wang SL, Lin SY. Glycation and secondary conformational changes of human serum albumin: study of the FTIR spectroscopic curve-fitting technique. *AIMS Biophysics*, 2016. 3(2): 247 -260. (SCI)
08. Chang MC, Wu JY, **Liao HF**, Chen YJ, Kuo CD. Comparative assessment of therapeutic safety of norcantharidin, N-farnesyloxy-norcantharimide, and N-farnesyl-norcantharimide against Jurkat T cells relative to human normal lymphoblast: A quantitative pilot study. *Medicine (Baltimore)*. 2016 Aug;95(31):e4467. (SCI)
09. Yu CC, Huang HB, Hung SK, **Liao HF**, Lee CC, Lin HY, Li SC, Ho HC, Hung CL, Su YC. AZD2014 Radiosensitizes Oral Squamous Cell Carcinoma by Inhibiting AKT/mTOR Axis and Inducing G1/G2/M Cell Cycle Arrest. *PLoS One*. 2016 Mar 31;11(3):e0151942. (SCI)
10. **Liao HF***, TJ Wu, JL Tai, MC Chi, LL Lin*. Immunomodulatory Potential of the Polysaccharide-rich Extract from Edible Cyanobacterium *Nostoc commune*. *Medical Sciences*. 2015, 3(4), 112-123.
11. Chang MC, Wu JY, **Liao HF**, Chen YJ, Kuo CD. N-Farnesyloxy-norcantharimide inhibits progression of human leukemic Jurkat T cells through regulation of mitogen-activated protein kinase and interleukin-2 production. *Anticancer Drugs*. 2015 Nov;26(10):1034-42. (SCI)
12. Chang MC, Tsai ET, Wu JY, **Liao HF**, Chen YJ, Kuo CD. N-Farnesyloxy-norcantharimide and N-farnesyl-norcantharimide inhibit the progression of leukemia and increase survival days in a syngeneic mouse leukemia model. *Anticancer Drugs*. 2015 Jun;26(5):508-17. (SCI)
13. Yu-Jen Chen, Yu-Chuen Huang, Tung-Hu Tsai and **Hui-Fen Liao***. Effect of Wasabi Component 6-(methylsulfinyl) hexyl isothiocyanate and Derivatives on Human Pancreatic Cancer Cells. *Evidence-Based Complementary and Alternative Medicine*. 2014. 2014: 494739. (SCI)
14. Wu JY, Kuo CD, Chu CY, Chen MS, Lin JH, Chen YJ, **Liao HF**. Synthesis of novel lipophilic N-substituted norcantharimide derivatives and evaluation of their anticancer activities. *Molecules*. 2014 May 26;19(6):6911-28. (SCI)
15. Yu CC, Hung SK, **Liao HF**, Lee CC, Lin HY, Lai HC, Li SC, Ho HC, Huang HB, Su YC. RAD001 enhances the radiosensitivity of SCC4 oral cancer cells by inducing cell cycle arrest at the G2/M checkpoint. *Anticancer Res*. 2014 Jun;34(6):2927-35. (SCI)
16. Lee TH, Chen CC, Chen JJ, **Liao HF**, Chang HS, Sung PJ, Tseng MH, Wang SY, Ko HH, Kuo YH. New and Cytotoxic Components from *Antrodia camphorata*. *Molecules*. 2014 Dec 19;19(12):21378-85. (SCI)

專利：

- [1] APPLICATION OF RICE PROLAMIN TO TREATMENT OF LEUKEMIA (2011-157341), 日本發明專利。發明人: CHIN HIROHITO; **LIAO HUI-FEN**; CHEN YU-YAWN; CHEN YU-JEN. 日期: 2011/8/18.
- [2] 去甲基斑蝥酸二鈉於調控人類樹突細胞之用途 (102114311), 台灣發明專利。發明人: **廖慧芬**; 吳進益; 郭正典; 陳裕仁。專利權: 嘉義大學; 台北榮民總醫院; 馬偕紀念醫院。專利期限: 2015.2.11-2033.4.22.