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### 職稱：

- 1、長庚大學 專任教授
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### 研究專長：

發炎免疫藥理學、天然物藥學、分子訊號傳遞、藥物研發

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研究室成員：博士班研究生 5 人  
碩士班研究生 7 人  
專任研究助理 4 人  
博士後研究員 2 人



### 實驗室榮譽和獲獎(2013~)

- 2017 第十五屆台塑關係企業應用技術研討會 研發論文優勝獎
- 2017 中華天然藥物學會優秀天然藥物學術論文獎
- 2016 行政院科技部 指導大專生研究計畫 榮獲研究創作獎
- 2016 長庚科技大學 學術作品發表績優獎
- 2016 長庚科技大學 產學合作技術研發績優獎
- 2015 高雄醫學大學 藥學院 傑出校友
- 2014 財團法人沈水德翁文教基金會 學術論文獎 (中華民國免疫學會傑出論文獎)
- 2014 長庚大學 優良教師教學獎
- 2014 行政院科技部 指導大專生研究計畫 榮獲研究創作獎
- 2014 Excellent Poster Award, Symposium on Natural Products, Taiwan
- 2013 Excellent Poster Award, Biennial Meeting of Society for Free Radical Research Asia, Taiwan

## 最近實驗室研究主題：

### 一、研究計畫

1. 新穎性嗜中性白血球 NADPH oxidase 抑制劑的研究
2. 菲類化合物 CLL V-1 作為抑制嗜中性白血球發炎作用的新穎性試劑
3. 整合型中草藥多酚成分之最適分離技術開發：以扣樹為例之子計畫四：分離製程最佳化-藥理圖譜之建立
4. 煙麴黴成分抑制嗜中性白血球發炎反應的研究
5. 探討全身性紅斑狼瘡發炎體活化的機制與其對應的抗發炎藥物的研發

### 二、產學合作案

1. 樣品於免疫細胞 Neutrophil 之功效測試
2. Nalbuphine 於免疫細胞 Neutrophil 和 Macrophage 之功效測試研究計畫
3. 頭髮生長原料開發
4. JF2016 抗發炎功效評估
5. 嗜中性白血球運用於抗發炎藥物平台之研究計畫
6. 毛髮生長暨烏髮原料篩選

## 論文著作 (2013-迄今)：

### 5 年內代表論文：

1. Tsai YF, Chu TC, Chang WY, Wu YC, Chang FR, Yang SC, Wu TY, Hsu YM, Chen CY, Chang SH, Hwang TL\*. 6-Hydroxy-5,7-dimethoxy-flavone suppresses the neutrophil respiratory burst via selective PDE4 inhibition to ameliorate acute lung injury. Free Radic Biol Med. 2017 Mar 3;106:379-92.
2. Yang SC, Chang SH, Hsieh PW, Huang YT, Ho CM, Tsai YF, Hwang TL\*. Dipeptide HCH6-1 inhibits neutrophil activation and inflammasome-mediated injury by blocking FPR1. Free Radic Biol Med. 2017 Feb 21;106:254-69.
3. Liu FC, Yu HP, Syu YT, Fang JY, Lin CF, Chang SH, Lee YT, Hwang TL\*. Honokiol suppresses formyl peptide-induced human neutrophil activation by blocking formyl peptide receptor 1. Sci Rep. 2017 Jul 27;7(1):6718.
4. Whuang TY, Tsai HC, Su YD, Hwang TL\*, Sung PJ\*. Sterols from the Octocoral Nephthea columnaris. Mar Drugs. 2017 Jul 4;15(7). pii: E212.
5. Korinek M, Tsai YH, El-Shazly M, Lai KH, Backlund A, Wu SF, Lai WC, Wu TY, Chen SL, Wu YC, Cheng YB, Hwang TL\*, Chen BH\*, Chang FR\*. Anti-allergic Hydroxy Fatty Acids from Typhonium blumei Explored through ChemGPS-NP. Front Pharmacol. 2017 Jun 19;8:356.
6. Tseng CH, Tung CW, Wu CH, Tzeng CC, Chen YH\*, Hwang TL\*, Chen YL\*. Discovery of Indeno[1,2-c]quinoline Derivatives as Potent Dual Antituberculosis and Anti-Inflammatory Agents. Molecules. 2017 Jun 16;22(6). pii: E1001.
7. Chen CY, Yang CH, Tsai YF, Liaw CC, Chang WY, Hwang TL\*. Ugonin U stimulates NLRP3 inflammasome activation and enhances inflammasome-mediated pathogen clearance. Redox Biol. 2016 Dec 18;11:263-74.
8. Chen CY, Tsai YF, Chang WY, Yang SC, Hwang TL\*. Marine Natural Product Inhibitors of

- Neutrophil-Associated Inflammation. *Mar Drugs*. 2016 Jul 26;14(8). pii: E141. Review.
9. Tsai YF, Yang SC, Hwang TL\*. Formyl peptide receptor modulators: a patent review and potential applications for inflammatory diseases (2012-2015). *Expert Opin Ther Pat*. 2016 Aug 3:1-18.
  10. Chen PJ, Wang YL, Kuo LM, Lin CF, Chen CY, Tsai YF, Shen JJ, Hwang TL\*. Honokiol suppresses TNF- $\alpha$ -induced neutrophil adhesion on cerebral endothelial cells by disrupting polyubiquitination and degradation of I $\kappa$ B $\alpha$ . *Sci Rep*. 2016 May 23;6:26554. doi: 10.1038/srep26554.
  11. Chen CY, Leu YL, Fang Y, Lin CF, Kuo LM, Sung WC, Tsai YF, Chung PJ, Lee MC, Kuo YT, Yang HW, Hwang TL\*. Anti-inflammatory effects of *Perilla frutescens* in activated human neutrophils through two independent pathways: Src family kinases and Calcium. *Sci Rep*. 2015 Dec 14;5:18204.
  12. Tsai YF, Yu HP, Chung PJ, Leu YL, Kuo LM, Chen CY, Hwang TL\*. Osthol attenuates neutrophilic oxidative stress and hemorrhagic shock-induced lung injury via inhibition of phosphodiesterase 4. *Free Radic Biol Med*. 2015 Dec;89:387-400.
  13. Tsai YF, Hwang TL\*. Neutrophil elastase inhibitors: a patent review and potential applications for inflammatory lung diseases (2010 - 2014). *Expert Opin Ther Pat*. 2015 Oct;25(10):1145-58.
  14. Chen YR, Tseng CH, Chen YL, Hwang TL\*, Tzeng CC\*. Discovery of benzo[f]indole-4,9-dione derivatives as new types of anti-inflammatory agents. *Int J Mol Sci*. 2015 Mar 23;16(3):6532-44.
  15. Hwang TL, Hsu CY, Aljuffali IA, Chen CH, Chang YT, Fang JY. Cationic liposomes evoke proinflammatory mediator release and neutrophil extracellular traps (NETs) toward human neutrophils. *Colloids Surf B Biointerfaces*. 2015 Apr 1;128:119-26.
  16. Tsai YF, Yu HP, Chang WY, Liu FC, Huang ZC, Hwang TL\*. Sirtinol inhibits neutrophil elastase activity and attenuates lipopolysaccharide-mediated acute lung injury in mice. *Sci Rep*. 2015 Feb 10;5:8347.
  17. Yang SC, Sung PJ, Lin CF, Kuo J, Chen CY, Hwang TL\*. Anti-Inflammatory Effects of Secondary Metabolites of Marine *Pseudomonas* sp. in Human Neutrophils Are through Inhibiting P38 MAPK, JNK, and Calcium Pathways. *PLoS One*. 2014 Dec 4;9(12):e114761.
  18. Chen CY, Liaw CC, Chen YH, Chang WY, Chung PJ, Hwang TL\*. A novel immunomodulatory effect of ugonin U in human neutrophils via stimulation of phospholipase C. *Free Radic Biol Med*. 2014 Jul;72:222-31.
  19. Kuo LM, Kuo CY, Lin CY, Hung MF, Shen JJ, Hwang TL\*. Intracellular glutathione depletion by oridonin leads to apoptosis in hepatic stellate cells. *Molecules*. 2014 Mar 18;19(3):3327-44.
  20. Hwang TL, Hung CH, Hsu CY, Huang YT, Tsai YC, Hsieh PW. Design and synthesis of tryptophan containing dipeptide derivatives as formyl peptide receptor 1 antagonist. *Org Biomol Chem*. 2013 May 14;11(22):3742-55.
  21. Wu YC, Sureshbabu M, Fang YC, Wu YH, Lan YH, Chang FR, Chang YW, Hwang TL\*. Potent inhibition of human neutrophil activations by bractelactone, a novel chalcone from *Fissistigma bracteolatum*. *Toxicol Appl Pharmacol*. 2013 Feb 1;266(3):399-407.
  22. Yang SC, Lin CF, Chang WY, Kuo J, Huang YT, Chung PJ, Hwang TL\*. Bioactive Secondary Metabolites of a Marine *Bacillus* sp. Inhibit Superoxide Generation and Elastase Release in Human Neutrophils by Blocking Formyl Peptide Receptor 1. *Molecules*. 2013 Jun 3;18(6):6455-68.
  23. Yu HP\*, Liu FC, Tsai YF, Hwang TL\*. Osthole attenuates hepatic injury in a rodent Model of trauma-hemorrhage. *PLoS One*. 2013 Jun 6;8(6):e65916.
  24. Lin YK, Chen HW, Leu YL, Yang YL, Fang Y, Su Pang JH\*, Hwang TL\*. Indigo naturalis up-regulates claudin-1 expression in human keratinocytes and psoriatic lesions. *J Ethnopharmacol*. 2013 Jan 30;145(2):614-20.
  25. Yang SC, Chung PJ, Ho CM, Kuo CY, Hung MF, Huang YT, Chang WY, Chang YW, Chan

KH, Hwang TL\*. Propofol Inhibits Superoxide Production, Elastase Release, and Chemotaxis in Formyl Peptide-Activated Human Neutrophils by Blocking Formyl Peptide Receptor 1. J Immunol. 2013 Jun 15;190(12):6511-9.

### 專利:

1. 黃聰龍、蔡永豐、陳俊宇、郭亮銓、鄭源斌、王至欣、張芳榮、吳永昌。第 I 型甲醯胜肽受體拮抗劑及其用途。中華民國發明第 I606828 號；專利權期間：20171231-20361228.
2. Tsong-Long Hwang, Pei-Wen Hsieh, Yin-Ting Huang, Chih-Hao Hung. FPR1 antagonist derivatives and use thereof. US 9593144 B2. ; 專利權期間：20170314-20350706.
3. 陳日榮、謝博銓、陳晉彥、黃聰龍。白蠟樹萃取之新裂環烯醚萜及生物活性成分及其製備方法。中華民國發明第 I568443 號；專利權期間：20170201 -20320711.
4. 陳金銓、呂彥禮、黃聰龍、方嘉佑、潘台龍。哺乳類 SIRT1 的活化劑。中華民國發明第 I556818 號；專利權期間：20161111 -20350806.
5. 黃聰龍、謝珮文、黃吟婷、洪志豪。FPR1 拮抗劑的衍生物及其用途。中華民國發明第 I537251 號；專利權期間：20160611 -20331008.
6. 謝珮文、黃聰龍、王雯慧、王婷儀。2-胺基苯甲醛肟衍生物及其製備方法與用途。日本特許證 特許第 5890512 號；專利權期間：20160226 -20341211.
7. 陳日榮、謝博銓、郭文隆、黃聰龍、王泰吉、郭代璜、鍾靜宜。厚朴萃取之新聯苯化合物及生物活性成分及製備方法。中華民國發明第 I515004 號；專利權期間：20160101-20310824.
8. 謝珮文、黃聰龍、王雯慧、王婷儀。2-胺基苯甲醛肟衍生物及其製備方法與用途。中華民國發明第 I 508938 號；專利權期間：20151121-20340123.
9. Pei-Wen Hsieh, Tsong-Long Hwang, Wen-Hui Wang, Ting-Yi Wang. Oxime-based compound, pharmaceutical composition containing the same and method for preparing the same cross-reference to related application. US9073833 B1；專利權期間：20150707-20341030.
10. 黃聰龍、謝珮文、余黃平。苯并雜氧嗪酮衍生物，其製備方法以及包含有此等衍生物的藥學組成物。中華民國發明第 I419884 號；專利權期間：20131221-20300623.
11. 宋秉鈞、白鎮豪、蘇尹帝、黃聰龍、郭富雯、樊同雲、李展榮。紅鞭珊瑚醇及其分離方法。中華民國發明第 I344960 號；專利權期間：20110711-20280611.
12. 宋秉鈞、白鎮豪、蘇尹帝、黃聰龍、李展榮、林美如、許志宏、方力行。白鞭珊瑚酯及其分離方法。中華民國發明第 I353355 號；專利權期間：20111201-20280611.

### 指導研究生畢業論文:

姓名	學位	論文題目
洪秀文	碩士	Pharmacological Effects of YC-1, a Soluble Guanylate Cyclase Activator, in Human Neutrophils

高淑惠	碩士	Inhibition of Human Neutrophil Functions by VCC394 from <i>Viscum Coloratum</i>
湯銘吉	碩士	Regulation of Nitric Oxide and TNF $\alpha$ Production by Cyclic AMP in Alveolar Macrophages
葉尚鑫	碩士	Effects of H <sub>2</sub> O <sub>7</sub> D and Ass-13-2a on superoxide anion generation and elastase release in human neutrophils
卓士凱	碩士	Effects of cyclic nucleotides on homotypic human neutrophil aggregation
潘彥霖	碩士	Pharmacological effects of sGC activators on $\beta$ -hexosaminidase release in RBL-2H3 mast cells
李果濃	碩士	Inhibition of superoxide generation in human neutrophils by AFB-1 from <i>Fissistigma bracteolatum</i>
王前喬	碩士	Inhibition of human neutrophil functions by <i>Sapindus mukorossi</i> and <i>Styrax benzoin</i>
張翰林	碩士	Effect of clerodane diterpenoid derivatives on superoxide anion and elastase release in human neutrophils
吳怡秀	碩士	Inhibition of superoxide anion and elastase release in human neutrophils by bractelactone from <i>Fissistigma bracteolatum</i>
張育華	碩士	Effects of BAY41-2272, a sGC activator, on MAPKs activation in human neutrophils
張一如	碩士	Effect of 2-benzoylamino-benzoic acid analogues on superoxide anion and elastase release in human neutrophils
蘇怡嘉	碩士	Effect of C18 fatty acids on superoxide anion and elastase release in human neutrophils
徐佳如	碩士	BAY41-2272 increases elastase release via p38 MAPK and JNK pathways in human neutrophils
詹于瑩	碩士	Role of palmitic acid and palmitoleic acid on superoxide anion and elastase release in human neutrophils
鍾沛蓁	碩士	Effect of coumarin derivative from <i>Angelica hirsutiflora</i> on superoxide generation and elastase release in human neutrophils
陳宜萱	碩士	P007, a flavonoid from <i>Helminthostachys zeylanica</i> (L) Hook, causes respiratory burst in human neutrophils
林怡玟	碩士	Imperatorin, a furocoumarin from <i>Angelica hirsutiflora</i> , inhibits human neutrophils superoxide anion generation via a cAMP-dependent pathway
林震宇	碩士	Oridonin inhibits survival of rat hepatic stellate cells
張玟伊	碩士	Suppressive effect of GMC on human neutrophil functions
賴俊學	碩士	Mechanism of thrombin on the expression of connective tissue growth

		factor in human hepatic stellate cells
張雅雯	碩士	Anti-inflammatory effects of MVBR-28 in human neutrophils
沈欣誼	碩士	Effect of ursolic acid on superoxide generation and elastase release in human neutrophils
楊慧霖	碩士	Mechanism of TGF- $\beta$ 1 on the expression of CTGF and type I collagen in hepatic stellate cells
柯宜伶	碩士	Suppressive effects of CLL V-1, a phenanthrene compound, on human neutrophil activation
褚孜琪	碩士	UFM24, a natural flavone, inhibits neutrophil activation via a cAMP-dependent pathway
楊舜欽	碩士	Effect of 2,6-diisopropylphenol on formyl peptide receptor in human neutrophils
黃吟婷	碩士	Anti-inflammatory effects of HCH6-1, a new dipeptide, by selectively blocking FPR1
賴心慧	碩士	Suppressive effect of DSM-RX100 on human neutrophil activation
方 瑤	碩士	The anti-inflammatory effects of <i>Perilla frutescens</i> extract in human neutrophils
張媛婷	碩士	The effect of cationic nanosystems in human neutrophils
何俊廷	碩士	<i>Pinnigorgia</i> sp. extract induces apoptosis in hepatic stellate cells
陳宇琦	碩士	Effect of sorafenib on human neutrophil activations
郭昱廷	碩士	The anti-inflammatory effect of FM-8, a small molecular compound isolated from <i>Aspergillus fumigatus</i> , in human neutrophils
李映萱	碩士	Suppressive effects of C <sub>18</sub> unsaturated fatty acids-encapsulated nanocarriers in neutrophil inflammation
楊軒武	碩士	CYR5099 inhibits neutrophil respiratory burst and ameliorates inflammatory paw edema
徐郁婷	碩士	Pharmacological studies of honokiol and dimethylhonokiol in human neutrophils
楊荃卉	碩士	Research and Development of Novel Inflammasome Inhibitors
蔡永豐	博士	Anti-inflammatory effects of small-molecular-mass compounds on activated neutrophil-mediated acute lung injury
楊舜欽	博士	Protective effects of bioactive natural products in neutrophilic inflammation
郭亮鋒	博士	Pharmacological effects of cGMP in hepatic stellate cells
謝佩珊	碩士	Randialic acid B and tomentosolic acid inhibit neutrophilic inflammation by blocking formyl peptide receptor 1
林承諭	碩士	Development of cilomilast-loaded nanoformulations for inhibiting neutrophil activation: lipid nanoparticles and niosomes

姜智釗	碩士	Pharmacological Studies of Kan-Lu-Hsiao-Tu-Tan in Human Neutrophils
鄭為仁	碩士	The anti-inflammatory effects of Astragalus membranaceus water extract in human neutrophils
陳俊宇	博士	Ugonin U stimulates human immune cells and enhances inflammasome-mediated pathogen clearance
黃建豪	博士	The Role of Regulatory T Cells and Neutrophils in Immune Dysfunction in Patients with Liver Cirrhosis







