

個人基本資料表

出生 1954/07/08; 台灣嘉義

學歷/畢業：美國馬里蘭大學醫學院 生理學博士 (1994)

國立中興大學動科系 營養生理學碩士 (1983)

國立中興大學畜牧獸醫系學士 (1977)

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現職/起迄：國立東華大學生物技術研究所教授 (2007/08)

到任年月份(東華)：2000 年 8 月

研究領域：中草藥/腫瘤生物/退慢性病/分子生理/生理學

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翁慶豐

Weng Ching Feng, PhD



Experiences

1978-1981 Veterinary doctor, Taiwan Sugar Company, Taiwan

1981-1985 Assistant Researcher, Taiwan Pig research Institute, Taiwan

1983-1985 Adjutant Editor, China Animal science Society, Taiwan

1985-1988 Research Associate, Institute of Zoology, Academia Sinica, Taiwan

1992-1994 Assistant Researcher, Department of Pathology, Walter Reed Army Hospital, USA

1994-1998 Post-doctor Fellow, Institute of Zoology, Academia Sinica, Taiwan

1998-1998 Associate Researcher and Production Chief, National Laboratory Animal Center, Taiwan

1998-2000 Post-doctor Fellow, Institute of Zoology, Academia Sinica, Taiwan

2000-2003 Assistant Professor, Department of Life Science and Graduate Inst Biotechnology, National Dong-Hwa University

2003-2007 Associate Professor, Department of Life Science and Graduate Inst Biotechnology, National Dong-Hwa University

2007-present Professor, Department of Life Science and Graduate Inst Biotechnology,
National Dong-Hwa University

2009- 2013 Chairman, Department of Life Science and Graduate Inst Biotechnology, National
Dong-Hwa University

一、研究項目

1. Cancer drug formulation discovery
2. Hypoglycemic drug formulation and natural hypoglycemic drug screening.
3. Cancer biology
4. Treatment for cardiovascular disease and others
5. Formulations for anti-bacteria
6. Tilapia and bufo physiology
7. Marine compounds

二、研究成果

期刊論文與著作：近五年期刊論文著作（2012. 8. 1~2018. 9. 30）

A. Cancer drug formulation discovery

1. Shian-Ren Lin, **Ching-Feng Weng**. PG-priming enhances doxorubicin influx to trigger necrotic and autophagic cell death in oral squamous cell carcinoma J Clin Med. 2018 (*in press*)
2. Chiu WJ, Lin SR, Chen YH, Tsai MJ, Leong MK, **Weng CF**. Prodigiosin-Emerged PI3K/Beclin-1-Independent Pathway Elicits Autophagic Cell Death in Doxorubicin-Sensitive and -Resistant Lung Cancer. J Clin Med. 2018;7(10). pii: E321.
3. Bharath Kumar Velmurugan, Po-Chih Wang, **Ching-Feng Weng** 16-Hydroxycyclohexa-3, 13-dien-15, 16-olide and N-methyl-actinodaphine potentiates tamoxifen-induced cell death in breast cancer. Molecules 23(8) 2018; 23(8). pii: E1966.
4. Chen C, Lee MH, **Weng CF**, Leong MK; Theoretical Prediction of the Complex P-Glycoprotein Substrate Efflux Based on the Novel Hierarchical Support Vector Regression Scheme. Molecules 23(7), 2018 pii: E1820. doi: 10.3390/molecules23071820
5. Hou TY, **Weng CF**, Leong MK; Insight Analysis of Promiscuous Estrogen Receptor Alpha-Ligand Binding by a Novel Machine Learning Scheme. Chem. Res. Toxicol. 2018 doi: 10.1021/acs.chemrestox.8b00130.
6. Thiyagarajan V, Lee KW, Leong MK, **Weng CF**; Potential natural mTOR inhibitors screened by in silico approach and suppress hepatic stellate cells activation. J. Biomol. Struct. Dyn. 2017, 1-15.

7. Cheng MF, Lin CS, Chen YH, Sung PJ, Lin SR, Tong YW, **Weng CF**; Inhibitory Growth of Oral Squamous Cell Carcinoma Cancer via Bacterial Prodigiosin; *Mar. Drugs* 15(7), 2017, 224.
8. Cheng MF, Lin SR, Tseng FJ, Huang YC, Tsai MJ, Fu YS, **Weng CF**; The autophagic inhibition oral squamous cell carcinoma cancer growth of 16-hydroxycyclocleroda-3,13-dien-15,16-olide; *Oncotarget* 8(45), 2017, 78379-7896.
9. Lin SR, Fu YS, Tsai MJ, Cheng H, **Weng CF**; Natural Compounds from Herbs that can Potentially Execute as Autophagy Inducers for Cancer Therapy; *Int. J. Mol. Sci.* 18(7), 2017, pii: E1412.
10. Kalai Selvi S., Vinoth A., Varadharajan T., **Weng CF**, Vijaya Padma V.; Neferine augments therapeutic efficacy of cisplatin through ROS- mediated non-canonical autophagy in human lung adenocarcinoma (A549 cells); *Food Chem Toxicol.* 103, 2017, 28-40.
11. Sivalingam KS, Paramasivan P, **Weng CF**, Vijaya Padma V; Neferine Potentiates the Antitumor Effect of Cisplatin in Human Lung Adenocarcinoma Cells via a Mitochondria-mediated Apoptosis Pathway. *J Cell Biochem.* 118(9), 2017, 2865-2876.
12. Velmurugan, BK, Yang, HH, Sung, PJ, **Weng CF**; Excavatoide B inhibits nonsmall cell lung cancer proliferation by altering peroxisome proliferator activated receptor gamma expression and PTEN/AKT/NF-K β expression; *Environ. Toxicol.* 32(1), 2017, 290-301.
13. Ma YD, Thiyagarajan V, Tsai MJ, Lue SI, Chia YC, Shyue SK, **Weng CF**; Pyrogallol abates VSMC migration via modulation of Caveolin-1, matrix metalloproteinase and intima hyperplasia in carotid ligation mouse; *Environ Toxicol Pharmacol.* 48, 2016, 63-75.
14. Thiyagarajan V, Sivalingam KS, Viswanadha VP, **Weng CF**; 16-hydroxycyclocleroda-3,13-dien-16,15-olide induced glioma cell autophagy via ROS generation and activation of p38 MAPK and ERK-1/2; *Environ. Toxicol. Pharmacol.* 45, 2016, 202-211.
15. Thiyagarajan, V., Lin, SH, Chang, YC, **Weng CF**; Identification of novel FAK and S6K1 dual inhibitors from natural compounds via ADMET screening and molecular docking; *Biomed. Pharmacol.* 80, 2016, 52-62.
16. Thiyagarajan, V., Lin, SX, Lee, CH, **Weng CF**; A focal adhesion kinase inhibitor 16-hydroxy-cyclocleroda-3,13-dien-16,15-olide incorporated into enteric-coated nanoparticles for controlled anti-glioma drug delivery; *Colloids Surf B Biointerfaces.* 141, 2016, 120-131.
17. Chen ZA, Kuthati Y, Kankala RK, Chang YC, Liu CL, **Weng CF**, Mou CY, Lee CH; Encapsulation of palladium porphyrin photosensitizer in layered metal oxide nanoparticles for photodynamic therapy against skin melanoma; *Sci. Technol. Adv. Mater.* 16(5), 2015, 054205.

18. Thiyagarajan, V., Tsai, M. J., **Weng CF**; Antroquinonol Targets FAK-Signaling Pathway Suppressed Cell Migration, Invasion, and Tumor Growth of C6 Glioma. *PLoS One*; 10(10), 2015, e0141285.
19. Poornima P, Kumar VB, **Weng CF**, Padma VV; Doxorubicin induced apoptosis was potentiated by neferine in human lung adenocarcinoma A549 cells; *Food Chem. Toxicol.* 68, 2014, 87-98.
20. Poornima P, **Weng CF**, Padma VV; Neferine, an alkaloid from lotus seed embryo, inhibits human lung cancer cell growth by MAPK activation and cell cycle arrest; *Biofactors.* 40(1), 2014, 121-31.
21. Poornima P, **Weng CF**, Padma VV; Neferine from *Nelumbo nucifera* induces autophagy through the inhibition of PI3K/Akt/mTOR pathway and ROS hyper generation in A549 cells; *Food Chem.* 141(4), 2013, 3598-605.
22. Kuthati Y, Sung PJ, **Weng CF**, Mou CY, Lee CH; Functionalization of mesoporous silica nanoparticles for targeting, biocompatibility, combined cancer therapies and theragnosis. *J. Nanosci. Nanotechnol.* 13(4), 2013, 2399-2430.
23. Thiyagarajan V, Lin SH, Chia YC, **Weng CF**; A novel inhibitor, 16-hydroxycyclohexa-3,13-dien-16,15-olide, blocks the autophosphorylation site of focal adhesion kinase (Y397) by molecular docking; *Biochim. Biophys. Acta.* 1830(8), 2013, 4091-4101.
24. Lin CH, Cheng SH, Liao WN, Wei PR, Sung PJ, **Weng CF**, Lee CH; Mesoporous silica nanoparticles for the improved anticancer efficacy of cis-platin; *Int. J. Pharm.* 429(1-2), 2012, 138-147.

B. Hypoglycemic drug formulation and natural hypoglycemic drug screening.

1. Huang PK, Lin SR, Chang CH, Tsai MJ, Lee DN, **Weng CF**; Natural phenolic compounds potentiate hypoglycemia via inhibition of Dipeptidyl peptidase IV; *Sci. Rep.*; 2018, (In press).
2. Hou TY, **Weng CF**, Leong MK. Insight Analysis of Promiscuous Estrogen Receptor α -Ligand Binding by a Novel Machine Learning Scheme. *Chem Res Toxicol.* **2018**; 31(8):799-813.
3. Chen C, Lee MH, **Weng CF**, Leong MK. Theoretical Prediction of the Complex P-Glycoprotein Substrate Efflux Based on the Novel Hierarchical Support Vector Regression Scheme. *Molecules.* **2018**; 23(7). pii: E1820.
4. Velmurugan BK, Rathinasamy B, Lohanathan BP, Thiyagarajan V, **Weng CF**. Neuroprotective Role of Phytochemicals. *Molecules.* **2018**; 23(10). pii: E2485. Review.
5. Riyaphan J, Jhong CH, Lin SR, Chang CH, Tsai MJ, Lee DN, Sung PJ, Leong MK, **Weng CF**. Hypoglycemic Efficacy of Docking Selected Natural Compounds against α -Glucosidase and α -Amylase. *Molecules.* **2018**; 23(9). pii: E2260.

6. Huang PK, Lin SX, Tsai MJ, Leong MK, Lin SR, Kankala RK, Lee CH, **Weng CF**; Encapsulation of 16-Hydroxycyclohexa-3,13-dien-16,15-Olide in Mesoporous Silica Nanoparticles as a Natural Dipeptidyl Peptidase-4 Inhibitor Potentiated Hypoglycemia in Diabetic Mice; *Nanomaterials*,7(5), 2017, 112.
7. Jhong, CH, Riyaphan, J, Lin, SH, Chia, YC, **Weng CF**; Screening alpha-glucosidase and alpha-amylase inhibitors from natural compounds by molecular docking *in silico*; *Biofactors*. 41(4), 2015, 242-251.
8. Sulake, RS, Lin, HH, Hsu, CY, **Weng CF**, Chen, C.; Synthesis of (+)-Antroquinonol: An Antihyperglycemic Agent; *J. Org. Chem.* 80(12), 2015, 6044-6051.
9. Hsu CY, Shih HY, Chang YC, Huang ZL, Tsai MJ, Chia YC, Chen C, Lai YK, **Weng CF**; The beneficial effects of tetracosanol on insulin-resistance by insulin receptor kinase sensibilization; *J. Funct. Foods*; 14, 2015, 174-182.
10. Hsu CY, Sulake RS, Huang PK, Shih HY, Sie HW, Lai YK, Chen C, **Weng CF**; Synthetic of (+)-antroquinonol possesses dual efficacy for insulin-resistance via triggering AMPK and anti- DPP IV activity; *Br. J. Pharmacol.* 172(1), 2015, 38-49.
11. Hsu CY, Shih HY, Chia YC, Lee CH, Ashida H, Lai YK, **Weng CF**; Rutin potentiates insulin receptor kinase to enhance insulin-dependent glucose transporter 4 translocation; *Mol. Nutr. Food Res.* 58(6), 2014, 1168-76.
12. Lin YC, Chen LH, Varadharajan T, Tsai MJ, Chia YC, Yuan TC, Sung PJ, **Weng CF**; Resveratrol inhibits glucose-induced migration of vascular smooth muscle cells mediated by focal adhesion kinase; *Mol. Nutr. Food Res.* 58(7), 2014, 1389-1401.

C. Cancer biology

1. Chen LH, Hsu WL, Tseng YJ, Liu DW, **Weng CF**; Involvement of DNMT 3B promotes epithelial-mesenchymal transition and gene expression profile of invasive head and neck squamous cell carcinomas cell lines; *BMC Cancer*; 16, 2016, 431.
2. Wang KH, Lin CJ, Liu CJ, Liu DW, Huang RL, Ding DC, **Weng CF**, Chu TY; Global methylation silencing of clustered proto-cadherin genes in cervical cancer: serving as diagnostic markers comparable to HPV; *Cancer Med.* 4(1), 2015, 43-55.
3. Chen LH, Liu DW, Chang JL, Chen PR, Hsu LP, Lin HY, Chou YF, Lee CF, Yang MC, Wen YH, Hsu WL, **Weng CF**; Methylation status of insulin-like growth factor-binding protein 7 concurs with the malignance of oral tongue cancer. *J. Exp. Clin. Cancer Res.* 34, 2015, 20.
4. Wang KH, Lin CJ, Liu CJ, Liu DW, Huang RL, Ding DC, **Weng CF**, Chu TY; Global methylation silencing of clustered proto-cadherin genes in cervical cancer: serving as diagnostic markers comparable to HPV; *Cancer Med.* 4(1), 2015, 43-55.
5. Wu TF, Luo FJ, Chang YL, Huang CM, Chiu WJ, **Weng CF**, Hsu YK, Yuan TC; The oncogenic role of androgen receptors in promoting the growth of oral squamous cell carcinoma cells. *Oral Dis.*; 21(3), 2015, 320-327.

D. Treatment for cardiovascular disease and others

1. Kankala RK, Kuthati Y, Sie HW, Shih HY, Lue SI, Kankala S, Jeng CC, Deng JP, **Weng CF**, Liu, CL, Lee CH; Multi-laminated metal hydroxide nanocontainers for oral-specific delivery for bioavailability improvement and treatment of inflammatory paw edema in mice; *J. Colloid Interface Sci.* 458, 2015, 217-228.
2. Lin SH, Huang KJ, **Weng CF**, Shiuan D; Exploration of natural product ingredients as inhibitors of human HMG-CoA reductase through structure-based virtual screening. *Drug Des. Devel. Ther.* 9, 2015, 3313-3324.
3. Tseng FJ, Chia WT, Wang CH, Shyu JF, Gou GH, Shui HA, Sytwu HK, Pan RY, **Weng CF**; Carbon Monoxide Inhibits Receptor Activator of NF-kappaB (RANKL)-Induced Osteoclastogenesis; *Cell Physiol. Biochem.* 36(3), 2015, 1250-1258.
4. Lee KW, Thiyagarajan V, Sie HW, Cheng MF, Tsai MJ, Chia YC, **Weng CF**; Synergistic effect of natural compounds on the fatty acid-induced autophagy of activated hepatic stellate cells; *J. Nutr. Biochem.* 2014, pii: S0955-2863(14)00082-5.
5. Chen YR, Chang KT, Tsai MJ, Lee CH, Huang KJ, Cheng H, Ho YP, Chen JC, Yang HH, **Weng CF**; *Antrodia cinnamomea* profoundly exalted the reversion of activated hepatic stellate cells by the alteration of cellular proteins; *Food Chem. Toxicol.* 69, 2014, 150-62.
6. Hsu YJ, **Weng CF**, Lin KW, Lin KC; Suppression of allergic reactions in ovalbumin-sensitized mice by yam storage proteins dioscorins; *J. Agric. Food Chem.* 61(47), 2013, 11460-11467.

E. Formulations for anti-bacteria

1. Kuthati Y, Kankala RK, Lin SX, **Weng CF**, Lee CH; pH-Triggered Controllable Release of Silver-Indole-3 Acetic Acid Complexes from Mesoporous Silica Nanoparticles (IBN-4) for Effectively Killing Malignant Bacteria; *Mol. Pharm.* 12(7), 2015, 2289-2304.
2. Chen YH, Kuo J, Sung PJ, Chang YC, Lu MC, Wong TY, Liu JK, **Weng CF**, Twan WH, Kuo FW; Isolation of marine bacteria with antimicrobial activities from cultured and field-collected soft corals; *World J. Microbiol. Biotechnol.* 28(12), 2012, 3269-3279.

F. Tilapia and bufo physiology

1. Yu TL, Lin HD, **Weng CF**; A new phylogeographic pattern of endemic *Bufo bankorensis* in Taiwan Island is attributed to the genetic variation of populations; *PLoS One*; 9(5), 2014, e98029.
2. Tang ZJ, Lue SI, Tsai MJ, Yu TL, Thiyagarajan V, Lee CH, Huang WT, **Weng CF**; The hormonal regulation of color changes in the sexually dichromatic frog *Buergeria robusta*; *Physiol. Biochem. Zool.* 87(3), 2014, 397-410.
3. Chen CC, Li KW, Yu TL, Chen LH, Sheu PY, Tong YW, Huang KJ, **Weng CF**; Genetic structure of *Bufo bankorensis* distinguished by amplified restriction

fragment length polymorphism of cytochrome b; *Zoological Studies*; 52, 2013, 48-57.

G. Marine compounds

1. Velmurugan BK, Yang HH, Sung PJ, **Weng CF**; Excavatolide B inhibits nonsmall cell lung cancer proliferation by altering peroxisome proliferator activated receptor gamma expression and PTEN/AKT/NF- κ B expression. *Environ. Toxicol.*, 32(1), 2017, 290-301.
2. Chen YH, Chen WF, Yang JC, Lu MC, Kuo J, Su JH, **Weng CF**, Wu YC, Sung PJ; Pseudoalteromone C: a novel ubichromenol derivative from bacterium *Pseudoalteromonas* sp. CGH2XX isolated from the cultured-type octocoral *Lobophytum crissum*; *Nat. Prod. Commun.* 12(0), 2017, 1-2.
3. Chen YH, Yang JC, Lu MC, **Weng CF**, Su YD, Kuo J, Wu YC, Sung PJ; Bafilomycins N and O, novel cytotoxic bafilomycin analogues produced by *Streptomyces* sp. GIC10-1 isolated from marine sponge *Theonella* sp. *Tetrahedron*; 73(34), 2017, 5170-5175.
4. Chen YH, Lu MC, Chung HM, **Weng CF**, Su JH, Yang YT, Su YD, Chang YC, **Kuo J**, Wu YC, Sung PJ; Bafilomycin M, a new cytotoxic bafilomycin produced by a *Streptomyces* sp. isolated from a marine sponge *Theonella* sp. *Tetrahedron Lett.*; 57(43), 2016, 4863-4865.
5. Sheu JH, Chen YH, Chen YH, Su YD, Chang YC, Su JH, **Weng CF**, Lee CH, Fang LS, Wang WH, Wen ZH, Wu YC, Sung PJ; Briarane diterpenoids isolated from gorgonian corals between 2011 and 2013; *Mar. Drugs*; 12(4), 2014, 2164-81.
6. Lin CY, Lu MC, Su JH, Chu CL, Shiuan D, **Weng CF**, Sung PJ, Huang KJ; Immunomodulatory effect of marine cembrane-type diterpenoids on dendritic cells. *Mar. Drugs*; 11(4), 2013, 1336-50.
7. Yen WH, Hu LC, Su JH, Lu MC, Twan WH, Yang SY, Kuo YC, **Weng CF**, Lee CH, Kuo YH, Sung PJ. Norcembranoidal diterpenes from a Formosan soft coral *Sinularia* sp.; *Molecules*; 17(12), 2012, 14058-14066.
8. Chen YH, Lu MC, Chang YC, Hwang TL, Wang WH, **Weng CF**, Kuo J, Sung PJ; Pseudoalteromone A: A novel bioactive ubiquinone from a marine bacterium *Pseudoalteromonas* sp. CGH2XX (Pseudoalteromonadaceae); *Tetrahedron Lett.*; 53(13), 2012, 1675-1677.
9. Chen YH, Kuo J, Su JH, Hwang TL, Chen YH, Lee CH, **Weng CF**, Sung PJ; Pseudoalteromone B: a novel 15C compound from a marine bacterium *Pseudoalteromonas* sp. CGH2XX; *Mar. Drugs*; 10(7), 2012, 1566-71.
10. Hong PH, Su YD, Su JH, Chen YH, Hwang TL, **Weng CF**, Lee CH, Wen ZH, Sheu JH, Lin NC, Kuo YH, Sung PJ; Briarenolides F and G, new briarane diterpenoids from a *Briareum* sp. octocoral; *Mar. Drugs*; 10(5), 2012, 1156-1168.
11. Chen YH, Kuo J, Sung PJ, Chang YC, Lu MC, Wong TY, Liu JK, **Weng CF**, Twan WH, Kuo FW; Isolation of marine bacteria with antimicrobial activities from

cultured and field-collected soft corals. *World J. Microbiol. Biotechnol.*; 28, 2012, 3269–3279.

H. Others

1. Chen SF, Chao YL, Shen YC, Chen CH, **Weng CF**; Resequencing and association study of the NFKB activating protein-like gene (NKAPL) in schizophrenia; *Schizophr. Res.*; 2014, pii: S0920-9964(14)00294-1.
2. Tsai MJ, **Weng CF**, Yu NC, Liou DY, Kuo FS, Huang MC, Huang WC, Tam K, Shyue SK, Cheng H; Enhanced prostacyclin synthesis by adenoviral gene transfer reduced glial activation and ameliorated dopaminergic dysfunction in hemiparkinsonian rats. *Oxid. Med. Cell Longev.*; 2013, 2013, 649809.
3. Wei PR, Cheng SH, Liao WN, Kao KC, **Weng CF**, Lee CH; Synthesis of chitosan-coated near-infrared layered double hydroxide nanoparticles for in vivo optical imaging; *J. Mater. Chem.*; 22, 2012, 5503-5513.

三、學術亮點

近 200 篇國際期刊文章 IF 0.8—5.5 超過引用 1900 次(citations)及九件研究成果獲得美國與台灣專利

1. 張春生, 李松泰, **翁慶豐**; 使用經由粉擬青黴菌 G30801 的培育而得到的產物來治療第一型或第二型糖尿病; TW Patent I376229; Nov, 2011.
2. 吳茂昆, **翁慶豐**, 史閔元, 謝蕙雯; 含綬草萃取物的組合物及其醫藥應用; TW Patent I578991; Apr, 2017.
3. **翁慶豐**, 賈宜琛, 邱韋鈞; 治療肺癌的方法及醫藥組合物; TW Patent I547279; Sep, 2016.
4. **翁慶豐**, 賈宜琛, 吳嘉仁, 蔡湘儀; 用以預防及/或治療肝纖維化的方法及醫藥組合物; TW Patent I515002; Jan, 2016.
5. **翁慶豐**, 李佳洪, 賈宜琛; 用於癌症治療之 16-羥基克羅烷-3,13-二烯-15,16-內酯製劑; TW Patent 201630594; Sep, 2016.
6. **Weng; Ching-Feng**, Chia; Yi-Chen, Lee; Chia-Hung, Varadharajan; T.; HCD formulation for cancer treatment. US. Patent 9.682.003 A; Aug 25, 2016.
7. **Weng; Ching-Feng**, Chen; Chin-piao, Shivaji; Sulake Rohidas, Hsu; Chia-Yu; Compounds from Antrodia camphorate and their use in treatment of diabetes mellitus. US Patent 9.604.894; Jul 23, 2015.

8. **Weng; Ching-Feng**, Chen; Chin-piao, Chia; Yi-Chen, Hsu; Chia-Yu; Method and composition for treating diabetes mellitus. US Patent 9.226.950; May 14, 2015.
9. WU; Maw-Kuen; **Weng, Ching-Feng**; Shih, Hung-Yuan; Sie, Huei-Wun; Composition containing a spiranthes sinensis extract and pharmaceutical applications thereof. US Patent US20150250843A1; Sep, 10, 2015.

國際期刊 *Molecules* (IF 3.089) 專刊編審(Guest editor)

Guest editor of special issue from *Molecules* “The Potential Use of Herbal Medicinal Products in Chronic Disorders”

[Guest editor of special issue from *Molecules* “The Potential Use of Herbal Medicinal Products in Chronic Disorders”](#)

超過 36 種國際期刊審稿者(peer reviewer)及 4 種國際期刊編審委員(Editorial member)

1. African Journal Of Biotechnology 2. African Journal Of Agricultural Research 3. Agricultural Science Research Journal 4. Asian Herpetological Research 5. Biofactors 6. Biological Journal of The Linnean Society 7. Biomedical And Environmental Sciences 8. Biosensors & Bioelectronics 9. Biotechnology And Applied Biochemistry 10. Chinese J Physiology 11. Fisheries Science 12. Food And Function 13. Gene 14. Histology And Histopathology 15. International Journal of Medical and Pharmaceutical Case Reports 16. International Journal of Molecular Sciences 17. International Journal of Nanomedicine 18. International Scholarly Research Network (ISRN) Zoology 19. Journal of Agricultural Food Chemistry 20. Kaohsiung J. Medical Science 21. Letters In Drug Design & Discovery 22. *Molecules* 23. Neuropsychiatric Disease and Treatment 24. Natural Product Communications 25. Oncotarget 26. OncoTargets and Therapy 27. PLOS ONE 28. Phytomedicine 29. Scientific report 30. Targeted Oncogene 31. Theranostics 32. Therapeutics and Clinical Risk Management 33. World Journal of Cardiology 34. World Journal of Methodology (Editorial Board) 35. Yonsei Medical Journal 36. Zoological Studies

四、論文亮點

Cancer biology and anticancer drug screening		
No.	Citation	Impact
1	Cheng MF, Lin SR, Tseng FJ, Huang YC, Tsai MJ, Fu YS, Weng CF* (2017) The autophagic inhibition oral squamous cell carcinoma cancer growth of 16-hydroxycyclohexa-3,13-dien-15,16-olide; <i>Oncotarget</i> ; 8(45):78379-78396.	This study provides a favorable assessment for further elucidating the role of HCD that targets autophagic cell death pathways as a potential agent for cancer therapy.
2	Cheng MF, Lin CS, Chen YH, Sung PJ, Lin SR, Tong YW, Weng CF* (2017) Inhibitory Growth of Oral Squamous Cell Carcinoma Cancer via Bacterial Prodigiosin; <i>Mar. Drugs</i> ; 15(7), 2017, 224.	These findings explore the role of PG, which may target the autophagic cell death pathways as a potential agent in cancer therapeutics.
3	Chen LH, Liu DW, Chang JL, Chen PR, Hsu LP, Lin HY, Chou YF, Lee CF, Yang MC, Wen YH, Hsu WL, Weng CF.* (2015) Methylation status of insulin-like growth factor-binding protein 7 concurs with the malignance of oral tongue cancer. <i>J Experimental & Clinical Cancer Research</i> 34 :20 doi:10.1186/s13046-015-0138-5.	DNMT 3B might control EMT by DNA methylation manner in invasive HNC cell lines. Moreover, miR-29b mimic downregulated DNMT 3B and inhibited EMT and cell invasion indicated the role of therapeutic agent for invasive HNC. Genes identified from array data and new molecules are involved in metastasis of HNC need further validation.
4	Thiyagarajan, V., Lin, S.X., Lee, C.H., Weng CF.* (2016) A focal adhesion kinase inhibitor 16-hydroxy-cyclohexa-3,13-dien-16,15-olide incorporated into enteric-coated nanoparticles for controlled anti-glioma drug delivery. <i>Colloids Surf B Biointerfaces</i> . 141:120-131. doi: 10.1016/j.colsurfb.2016.01.038.	This study provides conclusive evidence of the successful development of the anti-cancer agent HCD conjugated with enteric-coated MSN as a delivery control mechanism with enhanced dissolution characteristics.
5	Thiyagarajan, V., Tsai, M. J., Weng CF.* (2015). Antroquinonol Targets FAK-Signaling Pathway Suppressed Cell Migration, Invasion, and Tumor Growth of C6 Glioma. <i>PLoS One</i> , 10(10), e0141288 doi:10.1371/journal.pone.0141285.	Antroquinonol regulates the expression of epithelial to mesenchymal transition (EMT) proteins. Furthermore, antroquinonol also suppresses the C6 glioma growth in xenograft studies. Together, these results

		suggest that antroquinonol is a potential anti-tumorigenesis and anti-metastasis inhibitor of FAK.
Hypoglycemic agent formulation		
No.	Citation	Impact
1	Huang PK, Lin SX, Tsai MJ, Leong MK, Lin SR, Kankala RK, Lee CH, Weng CF.* (2017) Encapsulation of 16-Hydroxycyclohexa-3,13-Dien-16,15-Olide in Mesoporous Silica Nanoparticles as a Natural Dipeptidyl Peptidase-4 Inhibitor Potentiated Hypoglycemia in Diabetic Mice. <i>Nanomaterials</i> (Basel) 7(5). pii: E112. doi: 10.3390/nano7050112.	This formulation effectively controlled blood glucose and significantly decreased the body weight of mice, suggesting that MSN-HCD exerts natural DPP4 inhibitor as a potential clinical drug for the treatment of diabetes.
2	Jhong, C. H., Riyaphan, J., Lin, S. H., Chia, Y. C., Weng CF* (2015). Screening alpha-glucosidase and alpha-amylase inhibitors from natural compounds by molecular docking in silico. <i>Biofactors</i> , 41(4), 242-251. doi:10.1002/biof.1219	The implication is that molecular docking is a fast and effective way to screen alpha-glucosidase and alpha-amylase inhibitors as lead compounds of natural sources isolated from medicinal plants.
3	Hsu CY, Shih HY, Chang YC, Huang ZL, Tsai MJ, Chia YC, Chen C, Lai YK, Weng CF.* (2015) The beneficial effects of tetracosanol on insulin-resistance by insulin receptor kinase sensibilization. <i>J. Funct. Foods</i> 14:174-182. 10.1016/j.jff.2015.01.033.	This study provides new evidence to show that tetracosanol can improve glycaemic control via insulin receptor kinase activity induced and leads to the enhancement of glucose transporter translocation to improve glucose uptake.
4	Hsu CY, Sulake RS, Huang PK, Shih HY, Sie HW, Lai YK, Chen C, Weng CF.* (2015) Synthetic (+)-antroquinonol possesses dual efficacy for insulin-resistance via triggering AMPK and anti-DPP IV activity. <i>Br J Pharmacol.</i> 172(1):38-49. doi: 10.1111/bph.12828 (equal correspondent author)	Chemically synthesized (+)-antroquinonol exhibits dual effects to ameliorate insulin resistance, by increasing AMPK activity and GLUT4 translocation, along with inhibiting DPP IV activity.
5	Hsu CY, Shih HY, Chia YC, Lee CH, Ashida H, Lai YK, Weng CF.* (2014) Rutin potentiates insulin receptor kinase to enhance insulin-dependent glucose transporter 4 translocation. <i>Mol Nutr Food Res.</i> 58(6):1168-76. doi: 10.1002/mnfr.201300691 (equal correspondent author).	This study shows evidence that rutin may serve as a potential agent for glycemic control through enhancement of IRK activity, thereby inducing the insulin signaling pathway causing increased GLUT4 translocation and increased glucose uptake.



■ 專書論文與專利：

專書論文

1. Weng, C.F., S.S. Liu, T. Shui & Y.L. Shui. The existence of interleukin-2-like in the oka organ of shrimp. 吳金洙(編) (1999) 生物技術在水產養殖上應用會論文集(三)。農委會漁業特刊第六十五號。
2. Weng, C.F., C.L. Hew, J.L. Wu & P.P. Hwang. Antagonizing effects of Antifreeze Protein on Ca⁺⁺ uptake in fish cells. 吳金洙(編) (1999) 生物技術在水產養殖上應用會論文集(三)。農委會漁業特刊第六十五號。
3. May-Jywan Tsai, Song-Kun Shyue, Dann-Ying Liou, Tzu-Hsuan Yang, Ching-Feng Weng, Ming-Chao Huang, Yi-Lo Lin, Huai-Sheng Kuo, Meng-Jen Lee, Shih-Ling Huang, Wen-Cheng Huang, Barry J. Hoffer, Henrich Cheng (2011) Protective Effect of BMP-7 Overexpression via Adenovirus-Mediated Transfer on Spinal Cord Injury in Culture and in vivo. in “Handbook on Oxidative Stress: New Research” edited by: Adolfo M. Reyes and Cristóbal D. Contreras.

研發成果智慧財產權及其應用績效：

類別	專利名稱	國別	專利號碼	發明人	專利權人	專利核准日期	科技部計畫編號
A	使用經由粉擬青黴菌 G 3 0 8 0 1 的培育而得到的產物來治療第一行或第二行糖尿病	台灣	I376229	張春生； 李松泰； 翁慶豐	南台科技大學	201211~20202811	
A	用於預防及/或治療肝纖維化的方法及醫藥組合物	台灣	I515002	翁慶豐； 賈宜琛； 蔡湘儀； 吳嘉仁	國立東華大學	2014/03	99-2311-B-259-001-MY3
A	用於癌症治療之 16-羥基克羅烷-3,13-二烯-15,16-內酯製劑	台灣	專利核准，領證中	翁慶豐； 李佳洪； 賈宜琛	國立東華大學		

A	含綬草萃取物的組合物及其醫藥應用	台灣	I578991	吳茂昆; 翁慶豐; 史閔元; 謝蕙雯	國立東華大學	20 16/ 01	
申請中	供治癒傷口及美白皮膚之含穿心蓮組合物及使用該組合物的方法	台灣	申請中	翁慶豐; 賈宜琛; 曾至堅	國立東華大學	20 14/ 05	
申請中	Method And Pharmaceutical Composition For Treating Colorectal Cancer	美國	申請中	翁慶豐; 賈宜琛; 鄭嘉惠	國立東華大學	20 14/ 07	
A	Method And Pharmaceutical Composition For Treating Lung Cancer	美國	14/280,383	翁慶豐; 賈宜琛; 邱韋鈞;	國立東華大學	20 14/ 06	
A	Method And Pharmaceutical Composition For Liver Fibrosis Prevention	美國	14/088,291	翁慶豐; 賈宜琛; 蔡湘儀; 吳嘉仁	國立東華大學	20 14/ 01	99-2311-B-259-001-MY3
A	Composition Having A. Paniculata For Wound Healing And Skin Whitening, And	美國	15/073,351	翁慶豐; 賈宜琛; 曾至堅	國立東華大學	20 14/ 04	

A	Composition Containing <i>Spiranthes Sinensis</i> Extract And Pharmaceutical	A 美國	14/198,932	吳茂昆; 翁慶豐; 史閱元; 謝蕙雯	國立東華大學	20 14/ 04	
A	Method And Composition For Treating Diabetes Mellitus	美國	14/077,310	翁慶豐; 賈宜琛; 陳清標; 徐嘉瑜	國立東華大學	20 13/ 11	
A	Compounds From Antrodia Camphorate And Their Use In Treatment Of Diabetes	美國	14/161,213	翁慶豐; 賈宜琛; 陳清標; Shivaji; Sulake Rohidas	國立東華大學	20 14/ 01	
A	HCD FORMULATION FOR CANCER TREATMENT	美國	14/631,767	翁慶豐; 李佳洪; 賈宜琛	國立東華大學	20 15/ 02	



■ 計畫執行、開授課程、論文指導、研究獎勵等

近五年執行計畫

(一)、科技部

計畫名稱	計畫內擔任的工作	起訖年月	補助或委託機構	執行情形	經費總額
科技部：多重標靶藥物附載於酸鹼響應型有機-無機奈米複合材料作為糖尿病藥物傳遞系統 (104-2320-B-259 -001)	主持人	2016/08/01 至 2018/07/31	科技部	執行中	4,050,000

-MY3)					
科技部科學工業園區：紅球藻蝦紅素培育與萃取純化	主持人	2015/05/01 至 2016/04/30	科技部	執行中	7,536,000
天然物改善肝纖維化之機制探討 (102-2320-B-259-001-)	主持人	2013/08/01 至 2014/07/31	科技部	已結案	750,000
淨煤、捕碳與儲碳主軸專案計畫—二氧化碳固定再利用 (II)(101-3113-P-110-002-)	共同主持人	2012/01/01 至 2013/03/31	科技部	已結案	22,210,000
抑制老鼠肝星狀細胞活化之機制探討 (99-2311-B-259-001-MY3)	主持人	2010/08/01 至 2013/07/31	科技部	已結案	4,500,000
甲基蓮心鹼(Neferine)作為化療增敏劑在非小肺細胞癌對 Doxorubicin 抗阻之研究 (99-2923-B-259-002-MY3)	主持人	2010/01/01 至 2012/12/31	科技部	已結案	1,980,000

(二)、其它機構補助申請

計畫名稱	計畫內擔任的工作	起訖年月	補助或委託機構	經費總額
綫草萃取物應用於傷口癒合之研究及產品開發	計畫主持人	2015/12/01 至 2017/01/31	麗臺科技股份有限公司	1,500,000
創傷敷料凝膠功效評估	計畫主持人	2014/10/01 至 2017/09/30	明基材料股份有限公司	4,500,000
經濟部：104 年度中小企業即時技術輔導計畫—薑黃芽抗發炎之功效評估	計畫主持人	2015/04/24 至 2015/09/23	經濟部工業局	17,500

102 年度中小企業即時技術輔導計畫-薑黃益生茵複合物之血糖調控	計畫主持人	2013/06/08 至 2013/10/31	經濟部工業局	231,250
102 年度中小企業即時技術輔導計畫-小球藻複合物降血糖功效試驗	計畫主持人	2013/06/08 至 2013/10/31	經濟部工業局	156,250
轉譯醫學及農學人才培育先導型計畫：新藥及中草藥領域	計畫主持人	2010/01/01 至 2013/12/31	教育部科技顧問司	2,000,000

技術轉移

授權內容	技轉廠商	技轉金額	合約期間
技術移轉授權：敷清爽綫草深層滋養乳液	麗臺科技股份有限公司	150 萬	201601~201901

近年研討會演講發表

1. 天然物改善血糖之機制，2014 發現新藥研討會
2. Natural compounds potentiated insulin receptor kinase to enhance insulin-dependent glucose transporter 4 translocation，2014 台灣藥學會藥物化學研討會
3. Screening anti-diabetic natural compounds by molecular docking，2011 中草藥轉譯醫學國際研討會

指導學生 [參與科技部大專生專題研究計畫]

1. 陳思霈 (學士班) 107 年度「大專生專題研究計畫」(指導教授:翁慶豐老師)
2. 王姿雯 (學士班) 104 年度「大專生專題研究計畫」(指導教授:翁慶豐老師)
3. 郭開晟 (學士班) 103 年度「大專生專題研究計畫」(指導教授:翁慶豐老師)
4. 楊明鎧 (學士班) 102 年度「大專生專題研究計畫」(指導教授:翁慶豐老師)
5. 馬弘文 (學士班) 102 年度「大專生專題研究計畫」(指導教授:翁慶豐老師)
6. 史閔元 (學士班) 100 年度「大專生專題研究計畫」(指導教授:翁慶豐老師)
7. 黃瑋巧 (學士班) 97 年度「大專生專題研究計畫」(指導教授:翁慶豐老師)