

教師姓名：王昭閔 Chao-Min Wang

現職：助理教授

學歷：

國立中興大學獸醫微生物學研究所，博士學位

國立中興大學獸醫微生物學研究所，碩士學位

國立中興大學獸醫學系，學士學位

E-mail：leowang@mail.ncyu.edu.tw

TEL：05-2732970

學術經歷

2008/12 ~ 2009/08 諾魯國家防疫計畫顧問
Secretariat of the Pacific Community, Fiji (SPC)於諾魯舉辦
之獸醫佐訓練計畫(Paravet training program)之計畫講師

2009/09 ~ 2016/07 博士後研究員
中國醫藥大學生命科學院生物多樣性中心/生態暨演化生
物學研究所周昌弘院士研究室

產業經歷

2001/09 ~ 2003/06 達邦蛋白股份有限公司 (台南)
開發嗜高溫之蛋白分解酵素並應用於分解大豆過敏蛋白
開發大豆過敏原蛋白ELISA檢測

2008/11~ 2009/09 台灣駐諾魯技術團之Anabar牧場獸醫師

2009/09~ 2011/06 綠寶農業科技有限公司 (嘉義)
農林作物殘體做為生物農藥之研究與開發

2016/07~ 2020/07 正瀚生技股份有限公司
中興大學產學合作負責人
天然資源開發室室長
GLP 認證實驗室負責人
發展品質管控主管

研究興趣/專長：

獸醫公共衛生學、微生物學、天然物化學、分子生物學、植物化學生態學

主要教授課程：

獸醫公共衛生學及實習、獸醫寄生蟲學及實習、獸醫細菌學及實習、獸醫
解剖學及實習



參與研究與計畫

1. 參與國際組織之計畫(2009)

- a. 太平洋組織 SPC(Secretariat of the Pacific Community)於諾魯之獸醫佐訓練計畫 (Paravet training program)講師

2. 科技部專題研究計畫 (2009-2015)

計畫主持人：周昌弘院士

- a. 苦瓜降血糖之代謝質體學研究：cucurbitane-type 三萜類化合物生合成路徑與調控(NSC98-2321-B-039-001-MY3)
- b. 植物相剋物質之衍生物與農林作物殘體做為生物農藥之研究與開發(NSC98-2324-B-039-002)
- c. 白茅植物抗鹽及抗旱機制及其功能性基因體學研究—白茅植物抗鹽及抗旱機制及其功能性基因之研究(NSC98-2621-B-039-002-MY3)
- d. 農林作物殘體做為生物農藥之研究與開發(NSC99-2622-B-039-003-CC3)
- e. 台灣八角金盤所含齊墩果烷型三萜類之抑菌活性討探(CMU 99 -COL -25-1 / CMU 99 -COL -25-2)
- f. 台灣杜鵑林下微生物族群與其相生相剋機制探討(NSC 101-2621-B-039 -001)
- g. 台灣八角金盤活性天然物分離純化、結構鑑定、衍生物之製備及其植物相生相剋作用機制(NSC 101-2811-B-039-013)
- h. 台灣杜鵑之相生相剋物質與其林下微生物族群相互作用機制與作為生物農藥之潛能研究(NSC 102-2313-B-039-001-MY3)
- i. 黑板樹之天然物在生物永續性的角色：植物相生相剋及生醫功能之探討(MOST 103-2621-B-039-002-MY2)

學術發表目錄

A. Journal publications

1. Lee YH, **CM Wang**, PY Liu, CC Cheng, ZY Wu, SY Tseng, KC Tung. (2018) Volatile oils of *Nepeta tenuifolia* (Jing Jie) as an alternative medicine against multidrug-resistant pathogenic microbes. **Can J Infect Dis Med Microbiol.** 2018: 8347403. (SCI: Impact factor: 1.373)
2. Yang JS, **CM Wang**, CH Su, HC Ho, CH Chang, CH Chou, YM Hsu. (2018) Eudesmin attenuates *Helicobacter pylori*-induced epithelial autophagy and apoptosis and leads to eradication of *H. pylori* infection. **Exp Ther Med.** 15: 2388-2396 (SCI: Impact factor: 1.448)
3. **Wang CM**, KL Yeh, SJ Tsai, YL Jhan, CH Chou. (2017) Anti-proliferative activity of triterpenoids and sterols isolated from *Alstonia scholaris* against Non-Small-Cell Lung Carcinoma Cells. **Molecules.** 22: 2119 (SCI: Impact factor: 3.06)
4. **Wang CM**, YL Jhan, SJ Tsai, CH Chou. (2016) The pleiotropic antibacterial mechanisms of ursolic acid against methicillin-resistant *Staphylococcus aureus* (MRSA). **Molecules.** 21: 884 (SCI: Impact factor: 3.06)
5. **Wang CM**, HT Chen, ZY Wu, YL Jhan, CL Shyu, CH Chou. (2016) Antibacterial and synergistic activity of pentacyclic triterpenoids isolated from *Alstonia scholaris*. **Molecules.** 21: 139. (SCI: Impact factor: 3.06)
6. Way TD, SJ Tsai, **CM Wang**, YL Jhan, CT Ho, CH Chou*. (2015) Cinnamtannin D1 from *Rhododendron formosanum* induces autophagy via the inhibition of Akt/mTOR and activation of

- ERK1/2 in non-small cell lung carcinoma cells. **J Agr Food Chem.** 63: 10407–10417 (SCI: Impact factor: 3.571)
7. **Wang CM**, YM Hsu, YL Jhan, SJ Tsai, SX Lin, CH Su, CH Chou*. (2015) Structure elucidation of procyanidins isolated from *Rhododendron formosanum* and their anti-oxidative and anti-bacterial activities. **Molecules.** 20: 12787-12803 (SCI: Impact factor: 3.06)
 8. Liu YL, CC Huang, JH Liu, CY Chou, SY Lin, IK Wang, JY Hsieh, GP Jong, CY Huang*, **CM Wang***. (2015) Hyperphosphate-induced myocardial hypertrophy through GATA4/NFAT3 signal pathway is attenuated by ERK inhibitor treatment. **Cardiorenal Med.** 5: 79-88 (SCI: Impact factor: 2.214)
 9. Lin YC, JC Chang, SY Cheng, **CM Wang**, YL Jhan, IW Lo, YM Hsu, CC Liao, CC Hwang, CH Chou*. (2015) New bioactive chromanes from *Litchi chinensis*. **J Agr Food Chem.** 63: 2472-2478 (SCI: Impact factor: 3.571)
 10. **Wang CM***, ZY Wu, WY Shia, YJ Jhou, KC Tung, CL Shyu*. (2015) Complete genome sequence of *Campylobacter fetus* subsp. *testudinum* strain pet-3, isolated from a lizard (*Hydrosaurus pustulatus*). **Genome Announcements** 3: e01420-14. (SCI: Impact factor: 0.99)
 11. **Wang CM**, HT Chen, TC Li, JH Weng, YL Jhan, SX Lin, CH Chou*. (2014) The role of pentacyclic triterpenoids in the allelopathic effect of *Alstonia scholaris*. **J Chem Ecol.** 40: 90-98 (SCI: Impact factor: 3.1)
 12. Way TD, SJ Tsai, **CM Wang**, CT Ho, CH Chou*. (2014) Chemical constituents of *Rhododendron formosanum* show pronounced growth inhibitory effect on non-small-cell lung carcinoma cells. **J Agr Food Chem.** 62: 875-884. (SCI: Impact factor: 3.571)
 13. **Wang CM**, TC Li, YL Jhan, JH Weng, CH Chou*. (2013) The impact of microbial biotransformation of catechin in enhancing the allelopathic effects of *Rhododendron formosanum*. **PLoS One** 8(12): e85162. (SCI: Impact factor: 2.776)
 14. **Wang CM**, YL Jhan, LS Yen, YH Su, CC Chang, YY Wu, CI Chang, SY Tsai, CH Chou*. (2013) The allelochemicals of litchi leaf and its potential as natural herbicide in weed control. **Allelopathy J.** 32: 157-174 (SCI: Impact factor: 0.729)
 15. **Wang CM**, WY Shia, YJ Jhou, CL Shyu*. (2013) Occurrence and molecular characterization of reptilian *Campylobacter fetus* strains isolated in Taiwan. **Vet Microbiol.** 164: 64-76 (SCI: Impact factor: 2.791)
 16. Cheng SY, **CM Wang**, HJ Chen, HL Cheng, YM Hsu, YC Lin, CH Chou*. (2013) Biological activities of oleanane triterpene derivatives obtained by chemical derivatization. **Molecules.** 18: 13003-13019 (SCI: Impact factor: 3.06)
 17. Cheng SY, **CM Wang**, YM Hsu, TJ Huang, SC Chou, EH Lin, CH Chou*. (2011) Oleanane-type triterpenoids from the leaves and twigs of *Fatsia polycarpa* Hayata. **J Nat Prod.** 74: 1744-1750. (SCI: Impact factor: 4.257)
 18. **Wang CM**, CL Shyu, SP Ho, SH Chiou*. (2008) Characterization of a novel thermophilic, cellulose degrading bacterium *Paenibacillus* sp. strain B39. **Lett Appl Microbiol.** 47:46-53. (SCI: Impact factor: 1.805)
 19. Wan TC, FY Cheng, YT Liu, **CM Wang**, CL Shyu, CM Chen, LC Lin*, R. Sakata*. (2008) Identification of a novel *Bacillus* species isolated from *Calculus Bovis*. **Anim Sci J.** 79: 693-698. (SCI: Impact factor: 1.301)
 20. **Wang CM**, CL Shyu, SP Ho, SH Chiou*. (2007) Species diversity and substrate utilization patterns of thermophilic bacterial communities in hot aerobic poultry and cattle manure composts. **Microb Ecol.** 54:1-9. (SCI: Impact factor: 3.611)
 21. **Wang CM**, SH Chiou, SP Ho, JS Ueng, JA Lin, and CL Shyu*. (2002) Investigation of bacterial flora in aerobic composting. **Taiwan Vet J.** 28: 228-234.

B. 專利 (Patent)

1. 邱雲棕、幹小英、王昭閔、張萍、汪志陽、徐慶霖、程景章。2010。地衣芽胞桿菌及其應用。中華人民共和國。發明專利。專利號：CN 101215537 B。
2. 邱雲棕、幹小英、王昭閔、張萍、汪志陽、徐慶霖、程景章。2010。一株地衣芽胞桿菌及其應用。中華人民共和國。發明專利。專利號：CN 101215538 B。
3. 邱雲棕、幹小英、王昭閔、張萍、汪志陽、徐慶霖、程景章。2011。利用含植物纖維的原料生產飼料的方法。中華人民共和國。發明專利。專利號：CN 101214004 B。

C. Conference abstracts

Oral presentation

1. Wang CM, YL Jhan, SJ Tsai, and CH Chou. 2016. The Impact of Allelochemicals on Microorganisms. 23rd Pacific Science Congress, Academia Sinica, Taipei, Taiwan.
2. Chou, CH, HT Chen, and CM Wang. 2015. The Allelopathic Mechanism of *Alstonia scholaris*. 7th Congress on Allelopathy, Kunming, Yunnan, China. pp.64-65.
3. Chou, CH, and CM Wang. 2015. Multiple disciplines for an allelopathic scientist are necessary: A case study on *Rhododendron formosanum*. 3th International Conference on Asian Allelopathy Society, Fuzhou, China. pp. 7.
4. Chou, CH, and CM Wang. 2014. Microbial biotransformation of catechin plays a key role in allelopathic effect of *Rhododendron formosanum*. 2014 MOST Agricultural Environment Science Program Conference, Taichung, Taiwan.
5. Chou, CH, and CM Wang. 2014. Microbial biotransformation of catechin enhances the allelopathic effects of *Rhododendron formosanum*. 7th World Congress on Allelopathy, Vigo, Spain.
6. Chou, CH, HT Chen, and CM Wang. 2014. The Allelopathic Mechanism of *Alstonia scholaris*. 7th World Congress on Allelopathy, Vigo, Spain.
7. Chou CH, and CM Wang. 2013. Recent Advances of Allelopathic Compounds from *Litchi chinensis* and its Application in Organic Agriculture. 6th Congress on Allelopathy, Chengdu, Sichuan, China.
8. Chou CH, SY Cheng, HL Cheng, CM Wang, and YM Hsu. 2013. Natural products from *Fatsia polycarpa* and their biomedical activities on human diseases. BIT's 3rd Annual World Congress of MolMed-2013, Hainan International Convention and Exhibition Center, Haikou, China.
9. Wang CM, SY Cheng, YL Jhan, and CH Chou. (2012) The allelopathic effects of *Rhododendron formosanum* is mediated by *Pseudomonas* through (-)-catechin biotransformation. Symposium on Ecosystem Service and Human Well-being. pp. 27-28.
10. Wang CM. The paravet training program. (2009) The Pacific islands introductory course. Regional Animal Health Service of the Secretariat of the Pacific Community. Republic of Nauru..
11. 陳建禎、王昭閔、何素鵬、楊志寰、徐慶霖。2005。台灣地區隱球菌之流行病學調查。中華民國獸醫學會論文發表會。中華民國。
12. 石蕙菱、王昭閔、李名世、王俊秀、徐慶霖。2005。應用基因分型探討 *Campylobacter jejuni* 及 *Campylobacter coli* 流行病學之關係。中華民國獸醫學會論文發表會。中華民國。
13. 王昭閔、李永文、徐慶霖、邱繡河。好氣式堆肥化處理之硝化菌分離與類緣分析。2003。第六屆畜牧資源回收再利用研討會論文集。中華民國。pp. 27-38
14. 王昭閔、徐慶霖、邱繡河。堆肥嗜高溫菌之分解酵素篩選。2002。第五屆畜牧資源回收再

利用研討會論文集。中華民國。pp. 48-58

15. 王昭閔、徐慶霖、何素鵬、林子恩、邱繡河。2001。堆肥之嗜高溫菌種與其分解酵素之研究。第四屆畜牧資源回收再利用研討會論文集。中華民國。pp. 56-65
16. 王昭閔、徐慶霖、何素鵬、林子恩、邱繡河。2000。好氣式堆肥處理嗜高溫菌之調查與類源分析。第三屆畜牧資源回收再利用研討會論文集。中華民國。pp. 65-72

Poster presentation

1. Wang CM, YL Jhan, SJ Tsai, YM Hsu, and CH Chou. (2016) Biological Activities of Procyanidins. 23rd Pacific Science Congress, Academia Sinica, Taipei, Taiwan.
2. Wang CM, WY Shia, YJ Jhou, Zyen Wu, CH Chou, KC Tung, CL Shyu. (2013) Molecular characterization of reptilian *Campylobacter fetus* isolated in Taiwan. The Taiwan Journal of Veterinary Medicine and Animal Husbandry.
3. Chen HT, SY Cheng, CM Wang, YL Jhan, CH Chou. (2012) Chemical constituents of *Alstonia scholaris* and their biological activities. Symposium on Ecosystem Service and Human Well-being. Pp. 71.
4. Chang CC, SY Cheng, CM Wang, YL Jhan, CH Chou. (2012) Chemical constituents of *Litchi chinensis* and their biological activities. Symposium on Ecosystem Service and Human Well-being. Pp. 72.
5. Cheng SY, CM Wang, YM Hsu, TJ Huang, SC Chou, EH Lin, CH Chou. (2011) Oleanane-type Triterpenoids from the Leaves and Twigs of *Fatsia polycarpa* Hayata. International Symposium on Traditional Chinese Medicine 2011 & the 26th Symposium on Natural Products.
6. Wang CM, CL Shyu, SP Ho, SH Chiou, CH Chou. (2009) Species diversity and substrate utilization patterns of thermophilic bacterial communities in hot aerobic composts. Darwin 200 : International Symposium on Global Biodiversity, Human Health and Well-Being.
7. 關親山、徐慶霖、王昭閔、李嘉毓、吳宗晏、劉春田、董光中。2008。烏園鳥類致腫瘤隱球菌之研究。中華民國獸醫學會論文發表會。
8. 王馨蓮、徐慶霖、王昭閔、高如柏、馮啟文、程景章、董光中。2006。台灣中部地區寵物陸龜黴漿菌性上呼吸道感染之分離與鑑定。台灣省畜牧獸醫學會會報。
9. Chen CC, CM Wang, MS Lee, SP Ho, CL Shyu. (2006) Investigation of *Cryptococcus neoformans* in Central Taiwan. The Taiwan Journal of Veterinary Medicine and Animal Husbandry.
10. Shih HL, CM Wang, MS Lee, JS Wang, CL Shyu. (2006) Sequencing Typing and Epidemiology of *Campylobacter jejuni* and *Campylobacter coli* in Central Taiwan. The Taiwan Journal of Veterinary Medicine and Animal Husbandry.
11. Wang CM, SH Chiou, SP Ho, JS Ueng, JA Lin, and CL Shyu. (2001) Investigation of Bacterial Flora in Aerobic Composting and Classification of Thermophilic Bacteria. The Taiwan Journal of Veterinary Medicine and Animal Husbandry.