



Graduate Institute of Natural Products
College of Pharmacy
Kaohsiung Medical University



WU, CHIN-CHUNG, PhD, Professor

● **Teaching Courses**

Undergraduate school: Pharmacology

Graduate school: Special Topics in Pharmacological Evaluation of Natural Products

● **Education**

PhD, Pharmacological Institute, College of Medicine, National Taiwan University

Master, Pharmacological Institute, College of Medicine, National Taiwan University

Bachelor, Pharmacy School, Kaohsiung Medical University

● **Academic & Administrative Experience**

2018-2021, Associated Vice President of Research and Development, Kaohsiung Medical University (KMU)

2018-2019, Director, General Research Centers of R&D Office, KMU

2012-2018, Director, Graduate Institute of Natural Products, Kaohsiung Medical University

2015-2016, Director, Personnel Office, Kaohsiung Medical University

2009-2012, Director, Division of Academic Research, Office of Research and Development, Kaohsiung Medical University

2007-present, Professor, Graduate Institute of Natural Products, Kaohsiung Medical University

2004-2007, Associate Professor, Graduate Institute of Natural Products, Kaohsiung Medical University

2003, Visiting Scholar, University of North Carolina- Chapel Hill

2001-2004, Assistant Professor, Graduate Institute of Natural Products, Kaohsiung Medical University

1998-2001, Assistant Professor, School of Pharmacy, Tajen Institute of Technology

1997-1998, Postdoctoral Fellow, Pharmacological Institute, College of Medicine, National Taiwan University

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● **Research Interests**

Publications

Representative Papers:

1. Wu, C.C., Ko, F.N., Wu, T.S. and Teng, C.M. (1994) Antiplatelet effects of Clausine-D isolated from *Clausena excavata*. *Biochem. Biophys. Acta* 1201: 1-6.
2. Ko, F.N., Wu, C.C., Kuo, S.C., Lee, F.Y. and Teng, C.M. (1994) YC-1, a novel activator of platelet guanylate cyclase. *Blood* 84: 4226-4233.
3. Wu, C.C., Ko, F.N., Kuo, S.C., Lee, F.Y. and Teng, C.M. (1995) YC-1 inhibited human platelet aggregation through NO-independent activation of soluble guanylate cyclase. *Br. J. Pharmacol.* 116: 1973-1978.
4. Wu, C.C., Ko, F.N., Huang, T.F. and Teng, C.M. (1996) Mechanisms regulated platelet spreading after initial platelet contact with collagen. *Biochem. Biophys. Res. Commun.* 220: 388-393.
5. Wu, C.C., Ko, F.N. and Teng, C.M. (1997) Inhibition of platelet adhesion to collagen by cGMP-elevating agents. *Biochem. Biophys. Res. Commun.* 231: 412-416.
6. Teng, C.M., Wu, C.C., Ko, F.N., Lee, F.Y. and Kuo, S.C. (1997) YC-1, a NO-independent activator of soluble guanylate cyclase, inhibits platelet-rich thrombosis in mice. *Eur. J. Pharmacol.* 320: 161-166.
7. Wu, C.C., Kuo, S.C., Lee, F.Y., Teng, C.M. (1999) YC-1 potentiates the antiplatelet effect of hydrogen peroxide via sensitization of soluble guanylate cyclase. *Eur. J. Pharmacol.* 381: 185-191.
8. Wu, C.C., Huang, S.W., Hwang, T.L., Kuo, S.C., Lee, F.Y., Teng, C.M.* (2000) YD-3, a novel inhibitor of protease-induced platelet activation. *Br. J. Pharmacol.* 130: 1289-1296.
9. Wu, C.C., Hwang, T.L., Liao, C.H., Kuo, S.C., Lee, F.Y., Lee, C.Y., Teng, C.M.* (2002) Selective inhibition of protease-activated receptor 4-dependent platelet activation by YD-3. *Thromb. Haemost.* 87: 1026-1033.
10. Wu, C.C., Hwang, T.L., Liao, C.H., Kuo, S.C., Lee, F.Y., Teng, C.M.* (2003) The role of PAR4 in thrombin-induced thromboxane production in human platelets. *Thromb. Haemost.* 90: 299-308.
11. Wu, C.C.*, Wang, W.Y., Kuo, R.Y., Chang, F.R., Wu, Y.C. (2004) Antiplatelet effects of KW-7, a new inhibitor of cyclic nucleotide phosphodiesterases. *Eur. J. Pharmacol.* 483: 187-194.
12. Wu, C.C.*, Chan, M.L., Chen W.Y., Tsai, C.I, Chang, F.R., Wu, Y.C. (2005) Pristimerin induces caspase-dependent apoptosis in MDA-MB-231 cells via direct effects on mitochondria, *Mol. Cancer Ther.* 4: 1277-1285.
13. Chen, W.Y., Wu, C.C.*, Lan, Y.H., Chang, F.R., Teng, C.M., Wu, Y.C. (2005) Goniiothalamine induces cell cycle-specific apoptosis by modulating the redox status in MDA-MB-231 cells. *Eur. J. Pharmacol.* 522: 20-29.
14. Wu, C.C.*, Wang, T.W., Wang, W.Y., Hsieh, P.W., Wu, Y.C. (2005) 2-(2-Br-phenyl)-8-methoxy-benzoxazinone (HPW-RX2), a direct thrombin inhibitor with a suppressive effect on thromboxane formation in platelets. *Eur. J. Pharmacol.* 527: 37-43.

15. Wu, C.C.* & Teng, C.M. (2006) Comparison of the effects of PAR1 antagonists, PAR4 antagonists, and their combinations on thrombin-induced human platelet activation. *Eur. J. Pharmacol.* 546: 142-147.
16. Wang, W.Y., Wu, Y.C. & Wu, C.C.* (2006) Prevention of platelet glycoprotein IIb/IIIa activation by a novel tyrosine kinase inhibitor 3,4-methylenedioxy-beta-nitrostyrene. *Mol. Pharmacol.* 70: 1380-1389.
17. Wu, C.C.*, Wu, C.I., Wang, W.Y., Wu, Y.C. (2007) Low concentrations of resveratrol potentiate the antiplatelet effect of prostaglandins. *Planta Med.* 73: 439-443.
18. Wang, W.Y., Hsieh, P.W., Wu, Y.C., Wu, C.C.* (2007) Synthesis and pharmacological evaluation of novel β -nitrostyrene derivatives as tyrosine kinase inhibitors with potent antiplatelet activity. *Biochem. Pharmacol.* 74: 601-611.
19. Chen, H.S., Kuo, S.C., Teng, C.M., Lee, F.Y., Wang, J.P., Lee, Y.C., Kuo, C.W., Huang, C.C., Wu, C.C.*, Huang, L.J.* (2008) Synthesis and antiplatelet activity of ethyl 4-(1-benzyl-1H-indazol-3-yl)benzoate (YD-3) derivatives. *Bioorg. Med. Chem.* 16: 1262-1278.
20. Chen, W.Y., Chang, F.R., Huang, Z.Y., Chen, J.H., Wu, Y.C., Wu, C.C.* (2008) Tubocapsenolide A, a novel withanolide, inhibits proliferation and induces apoptosis in MDA-MB-231 cells by thiol oxidation of heat shock proteins. *J. Biol. Chem.* 283: 17184-17193.
21. Hou, Y.Y., Wu, M.L., Hwang, Y.C., Chang, F.R., Wu, Y.C., Wu, C.C.* (2009) The natural diterpenoid ovatodioidide induces cell cycle arrest and apoptosis in human oral squamous cell carcinoma Ca9-22 cells. *Life Sci.* 85: 26-32.
22. Wu, C.C.*, Wu, S.Y., Liao, C.Y., Teng, C.M., Wu, Y.C., Kuo, S.C. (2010) The roles and mechanisms of PAR4 and P2Y₁₂/phosphatidylinositol 3-kinase pathway in maintaining thrombin-induced platelet aggregation. *Br. J. Pharmacol.* 161: 643-658.
23. Hsieh, P.W.*, Chang, Y.T., Chuang, W.Y., Chiang, S.Z., Wu, C.C.* (2010) The synthesis and biologic evaluation of anti-platelet and cytotoxic β -nitrostyrenes. *Bioorg. Med. Chem.* 18: 7621-7627.
24. Wu, C.C.*, Wang, W.Y., Wei, C.K., Teng, C.M. (2011) Combined blockade of thrombin anion binding exosite-1 and PAR4 produces synergistic antiplatelet effect in human platelets. *Thromb. Haemost.* 105: 88-95.
25. Chen, W.Y., Hsieh, Y.A., Tsai, C.I., Kang, Y.F., Chang, F.R., Wu, Y.C., Wu, C.C.* (2011) Protoapigenone, a natural derivative of apigenin, induces mitogen-activated protein kinase-dependent apoptosis in human breast cancer cells associated with induction of oxidative stress and inhibition of glutathione S-transferase pi. *Invest New Drugs* 29: 1347-1359.
26. Wang, H.C., Tsai, Y.L., Wu, Y.C., Chang, F.R., Liu, M.H., Chen, W.Y., Wu, C.C.* (2012) Withanolides-induced breast cancer cell death is correlated with their ability to inhibit heat protein 90. *PLoS One* 7: e37764.
27. Chuang, W.Y., Kung, P.H., Kuo, C.Y., Wu, C.C.* (2013) Sulforaphane prevents human platelet aggregation through inhibiting the phosphatidylinositol 3-kinase/Akt pathway. *Thromb. Haemost.* 109:1120-1130.
28. Kuo, C.Y., Wang, H.C., Kung, P.H., Lu, C.Y., Liao, C.Y., Wu, M.T., Wu, C.C.* (2013) Identification of CalDAG-GEFI as an intracellular target for the vicinal dithiol binding agent phenylarsine oxide in human platelets. *Thromb. Haemost.* 111: 892-901.

29. Liao, C.Y., Lee, C.L., Wang, H.C., Liang, S.S., Kung, P.H., Wu, Y.C., Chang F.R., Wu, C.C.* (2015) CLL2-1, a chemical derivative of orchid 1, 4-phenanthrenequinones, inhibits human platelet aggregation through thiol modification of CALDAG-GEFI. *Free Radic. Biol. Med.* 78: 101-110.
30. Chen, I.H., Chang, F.R., Wu, Y.C., Kung, P.H., Wu, C.C.* (2015) 3,4-Methylenedioxy- β -nitrostyrene inhibits adhesion and migration of human triple-negative breast cancer cells by suppressing β 1 integrin function and surface protein disulfide isomerase. *Biochimie* 110: 81-92.
31. Wang, H.C.*, Chang, F.R., Huang T.J., Kuo, C.Y., Tsai, Y.C., Wu, C.C.* (2015) (-)-Liriopein B suppresses breast cancer progression via inhibition of multiple kinases. *Chem. Res. Toxicol.* 18: 28: 897-906.
32. Zupkó, I., Jaeger, W., Topcu, Z., Wu, C.C. (2015) Anticancer properties of natural products. *Biomed. Res. Int.* 2015: 242070.
33. Wei, C.K., Chang, F.R., Hsieh, P.W., Wu, C.C.* (2015) Inhibition of the interactions between metastatic human breast cancer cells and platelets by β -nitrostyrene derivatives. *Life Sci.* 143, 147-155.
34. Chen, I.H., Shih, H.C., Hsieh, P.W., Chang, F.R., Wu, Y.C., Wu, C.C.* (2015) HPW-RX40 restores anoikis sensitivity of human breast cancer cells by inhibiting integrin/FAK signaling. *Toxicol. Appl. Pharmacol.* 289, 330-340.
35. Tsai, J.Y., Rédei, D., Forgo, P., Li, Y., Vasas, A., Hohmann, J., Wu, C.C.* (2016) Isolation of phorbol esters from *Euphorbia grandicornis* and evaluation of protein kinase C- and human platelet-activating effects of Euphorbiaceae Diterpenes. *J. Nat. Prod.* 79: 2658-2666.
36. Kung, P.H., Hsieh, P.W., Lin, Y.T., Lee, J.H., Chen, I.H., Wu, C.C.* (2017) HPW-RX40 prevents human platelet activation by attenuating cell surface protein disulfide isomerases. *Redox Biol.* 13: 266-277.
37. Tsai, J.Y., Shin-Han Tsai, S.H., Wu, C.C.* (2019) The chemopreventive isothiocyanate sulforaphane reduces anoikis resistance and anchorage-independent growth in non-small cell human lung cancer cells. *Toxicol. Appl. Pharmacol.* 362: 116-124.
38. Wang, H.C., Hu, H.H., Chang, F.R., Tsai, J.Y., Kuo, C.Y., Wu, Y.C., Wu, C.C.* (2019) Different effects of plant withanolides 4 β -hydroxywithanolide E and withaferin A on the Akt signaling pathway in human breast cancer cells. *Phytomedicine* 53: 213-222.
39. Hsieh, K.Y., Wei, C.K., Wu, C.C.* (2019) YC-1 prevents tumor-associated tissue factor expression and procoagulant activity in hypoxic conditions by inhibiting p38/NF- κ B signaling pathway. *Int. J. Mol. Sci.* 2019, 20, 244.
40. Lin, Y.C., Ko, Y.C., Hung, S.C., Lin, Y.T., Lee, J.H., Tsai, J.Y., Kung, P.H., Tsai, M.C., Chen, Y.F., Wu, C.C.* (2019) Selective inhibition of PAR4 (protease-activated receptor 4)-mediated platelet activation by a synthetic nonanticoagulant heparin analog. *Arterioscler Thromb Vasc Biol.* 39: 694-703.
41. Tsai, J.Y., Rédei, D., Hohmann, J., Wu, C.C.* (2020) 12-Deoxyphorbol esters induce growth arrest and apoptosis in human lung cancer A549 cells via activation of PKC- δ /PKD/ERK signaling pathway. *Int. J. Mol. Sci.* 21: 7579.
42. Kao, C.C., Kung, P.H., Tai, C.J., Tsai, M.C., Cheng, Y.B., Wu, C.C.* (2021) Juglone prevents human platelet aggregation through inhibiting Akt and protein disulfide isomerase.

Phytomedicine 82: 153449.

43. Hsieh, K.Y., Tsai, J.Y., Lin, Y.H., Chang, F.R., Wang, H.C., Wu, C.C.* (2021) Golden berry 4 β -hydroxywithanolide E prevents tumor necrosis factor α -induced procoagulant activity with enhanced cytotoxicity against human lung cancer cells. *Sci. Rep.* 11: 4610.
44. Chiang, Y.C., Wu, Y.S., Kang, Y.F., Wang, H.C., Tsai, M.C., Wu, C.C.* (2022) 3,5,2',4'-Tetramethoxystilbene, a fully methylated resveratrol analog, prevents platelet aggregation and thrombus formation by targeting the protease-activated receptor 4 pathway. *Chem. Biol. Interact.* 357: 109889.
45. Lin, Y.T., Li, Y., Hsu, H.C., Tsai, J.Y., Lee, J.H., Tai, C.J., Wu, M.J., Wu, C.C.* (2022) Discovery of 7, 4'-dimethoxy-3-hydroxyflavone as a protease-activated receptor 4 antagonist with antithrombotic activity and less bleeding tendency in mice. *Biochem. Pharmacol.* 202:115152.

Other Published Papers :

46. Huang, T.L., Wu, C.C. and Teng, C.M. (1998) Comparative effects of methylene blue and ODQ on sodium nitroprusside-induced relaxation in guinea pig airways. *Br. J. Pharmacol.* 125: 1158-1163.
47. Hwang, T.L., Wu, C.C., Teng, C.M. (1999) YC-1 potentiates nitric oxide-induced relaxation in guinea-pig trachea. *Br. J. Pharmacol.* 128: 577-584.
48. Lee F.Y., Lien J.C., Huang L.J., Huang T.M., Tsai S.C., Teng C.M., Wu C.C., Cheng F.C., Kuo S.C., (2001) Synthesis of 1-benzyl-3-(5'-hydroxymethyl- 2'-furyl)indazole analogues as novel antiplatelet agents. *J. Med. Chem.* 44: 3746-3749.
49. Yang, Y.L., Chang, F.R., Wu, C.C., Wang, W.Y., Wu, Y.C., (2002) New *ent*-kaurane diterpenoids with anti-platelet aggregation activity from *Annona squamosa*. *J. Nat. Prod.* 65: 1462-1467.
50. Hwang T.L., Wu, C.C., Guh, J.H., Teng, C.M. (2003) Potentiation of TNF α expression by YC-1 in alveolar macrophages through a cyclic GMP-independent pathway. *Biochem. Pharmacol.* 66: 149-156.
51. Chang, F.R., Wu, C.C., Patnam, R., Kuo, R.Y., Wang, W.Y., Lan, Y.H., Wu, Y.C. (2003) Effect of active synthetic 2-substituted quinazolinones on anti-platelet aggregation and the inhibition of superoxide anion generation by neutrophils. *Arch. Pharm. Res.* 26: 511-515.
52. Lo, W.L., Wu, C.C., Chang, F.R., Wang, W.Y., Khalil, A.T., Lee, K.H, Wu, Y.C., (2003) Antiplatelet and anti-HIV constituents from *Euchresta formosana*. *Nat. Prod. Lett.* 17: 91-97.
53. Kuo, R.Y., Wu, C.C., Chang, F.R., Yeh, J.L., Chen, I.J., Wu, Y.C. (2003) Antiplatelet activity of synthetic pyrrolo-benzylisoquinolines, *Bioorg. Med. Chem. Lett.* 13: 821-823.
54. Chen, K.S., Wu, C.C., Chang, F.R., Chia, Y.C., Chiang, M.Y., Wang, W.Y., Wu, Y.C. (2003) Bioactive coumarins from the leaves of *Murraya omphalocarpa*. *Planta Med.* 69: 654-657.
55. Kuo R.Y, Chang, F.R., Wu, C.C., Patnam, R., Wang, W.Y., Du, Y.C., Wu, Y.C. (2003) Antiplatelet activity of benzylisoquinoline derivatives oxidized by cerium (IV) ammonium nitrate. *Bioorg. Med. Chem. Lett.* 13: 2789-2793.
56. Hwang, T.L., Hung, H.W., Kao, S.H., Teng, C.M., Wu, C.C., Cheng, S.J.S. (2003) Soluble guanylyl cyclase activator YC-1 inhibits human neutrophil functions through cGMP-independent but cAMP-dependent pathway. *Mol. Pharmacol.* 64: 1419-1427.

57. Hsieh, P.W., Chang, F.R., Wu, C.C., Wang, W.Y., Gu, L.C., Wu, Y.C. (2004) Selective inhibition of collagen-induced platelet aggregation by a cyclic-peptide from *Drymaria diandra*. *Helv. Chim. Acta* 87: 57-66.
58. Chen, Y.C., Chen, J.J., Chang, Y.L. Teng, C.M., Lin, W.Y., Wu, C.C., Chen, I.S. (2004) A new aristolactam alkaloid and anti-platelet aggregation constituents from *Piper taiwanense*. *Planta Med.* 70: 174-177.
59. Sheu, J.H., Chao, C.H., Wang, G.H., Hung, K.C., Duh, C.Y., Chiang, M.Y., Wu, Y.C., Wu, C.C. (2004) The first A-nor-hippuristanol and two novel 4,5-secosuberosanoids from the Gorgonian *Isis hippuris*. *Tetrahedron Lett.* 45: 6413-6416.
60. Cheng, M.J., Wu, C.C., Tsai, I.L., Chen, I.S. (2004) Chemical and antiplatelet constituents from the stem of *Zanthoxylum beecheyanum*. *J. Chin. Chem. Soc.* 51: 1065-1072.
61. Hsieh, P.W., Chang, F.R., Wu, C.C., Wu, K.Y., Li, C.M., Chen, S.L., Wu, Y.C. (2004) New cytotoxic cyclic peptides and dianthramide from *Dianthus superbus*. *J. Nat. Prod.* 67: 1522-1527.
62. Liaw, C.C., Chang, F.R., Wu, C.C., Chen, S.L., Bastow, K.F., Hayashi, K.I., Nozaki, H., Lee, K.H., Wu, Y.C. (2004) Nine new cytotoxic monotetrahydrofuranic annonaceous acetogenins from *Annona montana*. *Planta Med.* 70: 948-959.
63. Hsieh, P.W., Chang, F.R., Wu, C.C., Li, C.M., Wu, K.Y., Chen, S.L., Yen, H.F., Wu, Y.C. (2005) Longicalycinin A, a new cytotoxic cyclic peptide from *Dianthus superbus* var. *longicalycinus* (Maxim.) Will. *Chem. Pharm. Bull.* 53: 336-338.
64. Hsieh, P.W., Hwang, T.L., Wu, C.C., Chang, F.R., Wang, T.W., Wu, Y.C. (2005) The Evaluation of 2,8-disubstituted benzoxazinone derivatives as anti-inflammatory and anti-platelet aggregation agents. *Bioorg. Med. Chem. Lett.* 15: 2786-2789.
65. Lin, A.S., Chang, F.R., Wu, C.C., Liaw, C.C., Wu, Y.C. (2005) New cytotoxic flavonoids from *Thelypteris torresiana*. *Planta Med.* 71: 867-870.
66. Tsai, I.L., Lee, F.P., Wu, C.C., Duh, C.Y., Ishikawa, T., Chen, J.J., Chen, Y.C., Seki, H., Chen, I.S. (2005) New cytotoxic cyclobutanoid amides, a new furanoid lignan and anti-platelet aggregation constituents from *Piper arborescens*. *Planta Med.* 71: 535-542.
67. Nakagawa-Goto, K., Chen, C.X., Hamel, E., Wu, C.C., Bastow, K.F., Brossi, A., Lee, K.H. (2005) Antitumor agents. Part 236: Synthesis of water-soluble colchicine derivatives. *Bioorg. Med. Chem. Lett.* 15: 235-238.
68. Nakagawa-Goto, K., Jung, M.K., Hamel, E., Wu, C.C., Bastow, K.F., Brossi, A. Ohta, S., Lee, K.H. (2005) Antitumor Agents 238, Anti-tubulin and in vitro Cytotoxic Effects of N-Substituted Allocolchicinoids. *Heterocycles* 65: 541-550.
69. Pan, W.B., Wei, L.M., Wei, L.L., Wu, C.C., Wu, Y.C. (2005) Esterification-nitration of ortho-hydroxyphenyl carboxylic acids and benzoic acids with cerium (IV) ammonium nitrate (CAN). *J. Chin. Chem. Soc.* 52: 173-180.
70. Lan, Y.H., Chang, F.R., Liaw, C.C., Wu, C.C., Chiang, M.Y., Wu, Y.C. (2005) Digoniodiol, deoxygonioppyrone A, and goniofupyrone A: Three new styryllactones from *Goniothalamus amuyon*. *Planta Med.* 71:153-159.
71. Nakagawa-Goto, K., Wu, J.H., Bastow, F., Wu, C.C., Lee, K.H. (2005) Antitumor agents 243. Syntheses and cytotoxicity of desmosdumotin C derivatives. *Bioorg. Med. Chem.* 13: 2325-2330.
72. Hsu, H.F., Houg, J.Y., Chang, C.L., Wu, C.C., Chang, F.R., Wu, Y.C. (2005) Antioxidant

- activity, cytotoxicity, and DNA information of *Glossogyne tenuifolia*. *J. Agric. Food Chem.* 53: 6117-6125.
73. Liaw, C.C., Chang, F.R., Chen, S.L., Wu, C.C., Lee, K.H., Wu, Y.C. (2005) Novel cytotoxic monotetrahydrofuranic Annonaceous acetogenins from *Annona montana*. *Bioorg. Med. Chem.* 13: 4767-4776.
74. Lan, Y.H., Chia, Y.C., Chang, F.R., Liaw, C.C., Wu, C.C., Wu, Y.C. (2005) HCA-017. Potential antiinflammatory activities of the new bractelactone and other compounds isolated from *Fissistigma bracteolatum*. *Helv. Chim. Acta* 88, 905-909.
75. Su, J.H., Huang, H.C., Chao, C.H., Yan, L.Y., Wu, Y.C., Wu, C.C., Sheu, J.H. (2005) Vigulariol, a new metabolite from the sea pen *Vigularia juncea*. *Bull. Chem. Soc. Jpn.* 78: 877-879.
76. Bruno, M., Rosselli, S., Maggio, A., Raccuglia, R.A., Bastow, K.F., Wu, C.C., Lee, K.H. (2005) Cytotoxic activity of some natural and synthetic sesquiterpene lactones. *Planta Med.* 71: 1176-1178.
77. Chen, Y.H., Chang, F.R., Wu, C.C., Yen, M.H., Liaw, C.C., Huang, H.C., Kuo, Y.H., Wu, Y.C. (2006) New cytotoxic 6-oxygenated 8,9-dihydrofurocoumarins, hedyotiscone A - C, from *Hedyotis biflora*. *Planta Med.* 72:75-78.
78. Lin, L., Shi, Q., Nyarko, A.K., Bastow, K.F., Wu, C.C., Su, C.Y., Shih, C.C., Lee, K.H. (2006) Antitumor agents. 250. Design and synthesis of new curcumin analogues as potential anti-prostate cancer agents. *J. Med. Chem.* 49: 3963-3972.
79. Chia, Y.C., Chang, F.R., Wu, C.C., Teng, C.M., Chen, K.S., Wu, Y.C. (2006) Effect of isoquinoline alkaloids of different structural types on antiplatelet aggregation in vitro. *Planta Med.* 72:1238-1241.
80. Chen, I.H., Chang, F.R., Wu, C.C., Chen, S.L., Hsieh, P.W., Yen, H.F., Du, Y.C., Wu, Y.C. (2006) Cytotoxic triterpenoids from the leaves of *Microtropis fokiensis*. *J. Nat. Prod.* 69: 1543-1546.
81. Chang, F.R., Hwang, T.L., Yang, Y.L., Li, C.E., Wu, C.C., Issa, H.H., Hsieh, W.B., Wu, Y.C. (2006) Anti-inflammatory and cytotoxic diterpenes from formosan *Polyalthia longifolia* var. *pendula*. *Planta Med.* 72: 1344-1347.
82. Hsieh, P.W., Hwang, T.L., Wu, C.C., Chiang, S.Z., Wu, C.I., Wu, Y.C. (2007) The evaluation and structure-activity relationships of 2-benzoylaminobenzoic esters and their analogues as anti-inflammatory and anti-platelet aggregation agents. *Bioorg. Med. Chem. Lett.* 17: 1812-1817.
83. Hsieh, P.W., Huang, Z.Y., Chen, J.H., Chang, F.R., Wu, C.C., Yang, Y.L., Chiang, M.Y., Yen, M.H., Chen, S.L., Yen, H.F., Lubken, T., Hung, W.C., Wu, Y.C. (2007) Cytotoxic withanolides from *Tubocapsicum anomalum*. *J. Nat. Prod.* 70:747-753.
84. Lin, A.S., Nakagawa-Goto, K., Chang, F.R., Yu, D., Morris-Natschke, S.L., Wu, C.C., Chen, S.L., Wu, Y.C., Lee, K.H. (2007) First total synthesis of protoapigenone and its analogues as potent cytotoxic agents. *J. Med. Chem.* 50:3921-3927.
85. Lan, Y.H., Wang, H.Y., Wu, C.C., Chen, S.L., Chang, C.L., Chang, F.R., Wu, Y.C. (2007) New constituents from stems of *Artabotrys uncinatus*. *Chem. Pharm. Bull.* 55:1597-1599.
86. Yang, Y.L., Chang, S.M., Wu, C.C., Hsieh, P.W., Chen, S.L., Chang, F.R., Hung, W.C., Issa, H.H., Wu, Y.C. (2007) Cytotoxic sesquiterpene lactones from *Pseudoelephantopus spicatus*. *J. Nat. Prod.* 70: 1761-1765.
87. Lee, C.L., Chang, F.R., Hsieh, P.W., Chiang, M.Y., Wu, C.C., Huang, Z.Y., Lan, Y.H., Chen, M.,

- Lee, K.H., Yen, H.F., Hung, W.C., Wu, Y.C. (2008) Cytotoxic ent-abietane diterpenes from *Gelonium aequoreum*. *Phytochemistry* 69: 276-287.
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Honors:

- First Grade Award, National Science Council, Taiwan
- Special Outstanding Talent Award, Ministry of Science and Technology, Taiwan
- Outstanding Research Award, Kaohsiung Medical University, Taiwan
- External Expert, French National Research Agency, French

Membership and Association:

- Secretary-General, The Society of Chinese Natural Medicine
- Supervisor, The Society of Chinese Natural Medicine
- Member, The Society of Chinese Natural Medicine
- Member, The Pharmacological Society in Taiwan
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