**Note**: Students who plan to enroll in the Master's program of the **Division of Marine Biomedicine and Natural Products** should apply to the Department of Marine Biotechnology and Resources; students who plan to enroll in the Ph.D. program, must hold a Master's diploma in related fields, should apply to the International Doctoral Program of Marine Science and Technology in the application system.



Dr. Cheng, Yuan-Bin, Professor (Ph.D., National Sun Yat-sen University) E-mail: jmb@mail.nsysu.edu.tw Phone: 886-7-5252000 ext. 5212 Expertise: natural product chemistry, structure determination of organic compounds, biosynthetic pathway of natural products Research interests: Secondary metabolites from marine invertebrates, microorganisms, and medicinal plants

- 1. Shu-Rong Chen, Shih-Wei Wang, Jyh-Horng Sheu, Ting-Hsuan Chang, and **Yuan-Bin Cheng** (corresponding). Zoanthamine alkaloid derivatives from the zoantharian *Zoanthus vietnamensis* with anti-metastatic activity. *J. Org. Chem.* **2020**, *85*, 11553–11560.
- Fang-Rong Chang, Shih-Wei Wang, Ching-Ying Lee, Jyh-Horng Sheu, Shu-Rong Chen, and Yuan-Bin Cheng (corresponding). Aleuritin, a novel dinor-diterpenoid from the twigs of *Aleurites moluccanus* with an anti-lymphangiogenic effect. *Org. Biomol. Chem.* 2020, 18, 7892–7898.
- 3. Shu-Rong Chen, Shih-Wei Wang, Fang-Rong Chang, and **Yuan-Bin Cheng** (corresponding). Anti-lymphangiogenic alkaloids from the zoanthid *Zoanthus vietnamensis* collected in Taiwan. *J. Nat. Prod.* **2019**, *82*, 2790–2799.
- 4. Fang-Rong Chang, Pei-Shian Li, Rosa Huang Liu, Hao-Chun Hu, Tsong-Long Hwang, Jin-Ching Lee, Shu-Li Chen, Yang-Chang Wu, **Yuan-Bin Cheng** (corresponding). Bioactive phenolic components from the twigs of *Atalantia buxifolia*. *J. Nat. Prod.* **2018**, *81*, 1534– 1539.
- 5. **Yuan-Bin Cheng**, Tzu-Ching Liao, Yi-Wen Lo, Yu-Chen Chen, Yuh-Chi Kuo, Shun-Ying Chen, Ching-Te Chien, Ya-Ching Shen. Arisandilactone A, a new triterpenoid from the fruits of *Schisandra arisanensis. Org. Lett.* **2010**, *12*, 1016–1019.



# Dr. Sheu, Jyh-Horng, Professor (Ph.D., University of California, San Diego)

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- 1. Tzu-Yin Huang, Chiung-Yao Huang, Chih-Hua Chao, Chi-Chien Lin, Chang-Feng Dai, Jui-Hsin Su, Ping-Jyun Sung, Shih-Hsiung Wu and **Jyh-Horng Sheu** (corresponding). New biscembranoids sardigitolides A–D and known cembranoid-related compounds from *Sarcophyton digitatum*: isolation, structure elucidation, and bioactivities. *Mar. Drugs* **2020**, *18*, 452.
- 2. Kuan-Hua Lin, Yen-Ju Tseng, Bo-Wei Chen, Tsong-Long Hwang, Hsing-Yin Chen, Chang-Feng Dai, and **Jyh-Horng Sheu** (corresponding). Tortuosenes A and B, new diterpenoid metabolites from the Formosan soft coral *Sarcophyton tortuosum*. *Org. Lett.* **2014**, *16*, 1314–1317.
- 3. Yen-Ju Tseng, Atallah F. Ahmed, Chang-Feng Dai, Michael Y. Chiang and **Jyh-Horng Sheu** (corresponding). Sinulochmodins A–C, three novel terpenoids from the soft coral *Sinularia lochmodes*. *Org. Lett.* **2005**, *7*, 3813–3816.
- 4. **Jyh-Horng She** (corresponding), Chun-An Chen and Buo-Horng Chen. Reaction of (dimethylvinylidene)carbene with indole-3-carbaldehyde and its application in the synthesis of  $\beta$ -(dehydroprenyl)indole-based natural products. *Chem. Comm.* **1999**, 203–204.
- 5. **Jyh-Horng Sheu** (corresponding), Yua-Kuang Chen and Yen-Long Vincent Hong. Efficient syntheses of yuehchukene and  $\beta$ -(dehydroprenyl)indole. *J. Org. Chem.* **1993**, *58*, 5784–5787.



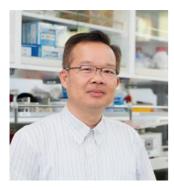
## Dr. Liaw, Chih-Chuang, Professor (Ph.D., Kaohsiung Medical University)

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Expertise: Natural products chemistry

**Research interests:** the chemical principles between marine organisms and microorganisms, such as host-pathogen interaction, and phytomedicine; modification and biosynthesis of the bioactive marine natural products; the practical medicinal and/or industrial applications of microbial natural products, as antibiotics, probiotics and antifouling agents.

- 1. **Chih-Chuang Liaw**, Jia-Lin Chang, Bo-Wei Wang, Pei-Lin Chen, Jing-Ru Weng, Kai-Wei Lin, and Chun-Nan Lin, "Discovering a racemate polycyclic prenylated acylphloroglucinol with unprecedented skeleton by an ESI-LCMS analytical approach", *Org. Lett.* **2019**, *21*, 857–861.
- 2. Chun-Kuang Lin, Yu-Ting Wang, Er-Mao Hung, Yu-Liang Yang, Jin-Ching Lee, Jyh-horng Sheu, **Chih-Chuang Liaw**,\* "Butyrolactones and diketopiperazines from marine microbes: Inhibition effects on Dengue virus type 2 replication", *Planta Med.* **2017**, *83*, 158–163.
- Chih-Chuang Liaw,\* Pei-Chin Chen, Chao-Jen Shih, Sung-Pin Tseng, Ying-Mi Lai, Chi-Hsin Hsu, Pieter C. Dorrestein, and Yu-Liang Yang,\* "Vitroprocines, new antibiotics against *Acinetobacter baumannii*, discovered from marine *Vibrio* sp. QWI06 using massspectrometry-based metabolomics approach", *Sci. Rep.* 2015, *5*, 12856; doi: 10.1038/srep12856.
- 4. **Chih-Chuang Liaw**,\* Yu-Liang Yang, Chun-Kuang Lin, Jin-Ching Lee, Wen-Ying Liao, Chia-Ning Shen, Jyh-Horng Sheu, and Shih-Hsiung Wu,\* "New Meroterpenoids from Aspergillus terreus with Inhibition of Cyclooxygenase-2 Expression", *Org. Lett.* **2015**, *17*, 2330–2333.
- Chih-Chuang Liaw, Jing-Ru Liou, Tong-Ying Wu, Fang-Rong Chang, Yang-Chang Wu.\* Acetogenins from Annonaceae. In *Prog. Chem. Org. Nat. Prod.* A. Douglas Kinghorn, Heinz Falk, Simon Gibbons, Jun'ichi Kobayashi, Series Title: Progress in the Chemistry of Organic Natural Products; Springer International Publishing: Switzerland; **2016**, *101*, 113–230. doi: 10.1007/978-3-319-22692-7.



Dr. Wen, Zhi-Hong, Professor (Ph.D., National Defense Medical Center) E-mail: <u>wzh@mail.nsysu.edu.tw</u> Phone: 886-7-5252000 ext. 5038 Expertise: neuroscience, animal disease models Research interests: drug, cosmeceutical, nutraceutical and biomaterial discovery and development

- Huang SY, Feng CW, Hung HC, Chakraborty C, Chen CH, Chen WF, Jean YH, Wang HM, Sung CS, Sun YM, Wu CY, Liu W, Hsiao CD, <u>Wen ZH\*</u>. A novel zebrafish model to provide mechanistic insights into the inflammatory events in carrageenan-induced abdominal edema. *PLoS One* 2014;9:e104414.
- 2. Chen WF, Huang SY, Liao CY, Sung CS, Chen JY\*, <u>Wen ZH</u>\*. The use of the antimicrobial peptide piscidin (PCD)-1 as a novel anti-nociceptive agent. *Biomaterials* 2015;53:1-11.
- 3. Chen ZC, Wu SY, Su WY, Lin YC, Lee YH, Wu WH, Chen CH, <u>Wen ZH</u>\*. Anti-inflammatory and burn injury wound healing properties of the shell of *Haliotis diversicolor*. *BMC Complementary and Alternative Medicine* 2016; 16:487
- Cheng SY, Chen NF, Lin PY, Su JH, Chen BH, Kuo HM, Sung CS, Sung PJ, <u>Wen ZH</u>\*, Chen WF\*. Anti-invasion and antiangiogenic effects of stellettin B through inhibition of the Akt/Girdin signaling pathway and VEGF in glioblastoma cells. *Cancers (Basel)*. 2019 Feb 14;11(2). pii: E220. doi: 10.3390/cancers11020220. (IF=6.126; Oncology 31/229)
- 5. Lin YY, Jean YH, Lin SC, Feng CW, Kuo HM, Lai YC, Kuo TJ, Chen NF, Lee HP, <u>Wen ZH\*</u>. Etoricoxib prevents progression of osteolysis in repeated intra-articular monosodium urate-induced gouty arthritis in rats. *Journal of Advanced Research* 2020;24:109-120.



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- 1. Cheng-Wen Lin, Li-Yuan Bai, Jui-Hsin Su, Chang-Fang Chiu, Wei-Yu Lin, Wei-Ting Huang, Ming-Cheng Shih, Yu-Ting Huang, Jing-Lan Hu, and **Jing-Ru Weng**\*, Ilimaquinone induces apoptosis and autophagy in human oral squamous cell carcinoma cells, *Biomedicines*, **2020**, 8, 296.
- Cheng-Wen Lin, Hsien-Kuo Chin, Shou-Lun Lee, Chang-Fang Chiu, Jing-Gung Chung, Zi-Yin Lin, Chia-Yung Wu, Ying-Chen Liu, Yung-Ting Hsiao, Chia-Hsien Feng, Li-Yuan Bai\*, and Jing-Ru Weng\*, Ursolic acid induces apoptosis and autophagy in oral cancer cells, *Environmental Toxicology*, 2019, 34, 983–991.
- 3. **Jing-Ru Weng**<sup>\*</sup>, Li-Yuan Bai, Shih-Jiuan Chiu, Chang-Fang Chiu, Wei-Yu Lin, Jing-Lan Hu, and Tzong-Ming Shieh, Divaricoside exerts antitumor effects, in part, by modulating Mcl-1 in human oral squamous cell carcinoma cells, *Computational and Structural Biotechnology Journal*, **2019**, 17, 151–159.
- 4. **Jing-Ru Weng**, Chang-Fang Chiu, Jing-Lan Hu, Chia-Hsien Feng, Chiung-Yao Huang, Li-Yuan Bai<sup>\*</sup>, and Jyh-Horng Sheu<sup>\*</sup>, A sterol from soft coral induces apoptosis and autophagy in MCF-7 breast cancer cells, *Marine Drugs*, **2018**, 16, E238.
- 5. **Jing-Ru Weng**<sup>\*</sup>, Li-Yuan Bai, Horng-Huey Ko, and Yi-Tung Tsai, Cyclocommunol induces apoptosis in human oral squamous cell carcinoma partially through a Mcl-1-dependent mechanism, *Phytomedicine*, **2018**, 39, 25–32.