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職稱/Position: 助理教授/Assistant Professor

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教學科目: 分析化學, 分析化學實驗, 藥物化學, 藥物化學實驗, 生物藥劑學與藥物動力學等

Teaching Activity: Analytical Chemistry; Analytical Chemistry Experiment; Pharmaceutical Chemistry; Pharmaceutical Chemistry Experiment; Biopharmaceutics and Pharmacokinetics

研究方向: 基於質譜的代謝組學和代謝流分析方法的建立及其在藥物分析、中藥分析、腫瘤病理機制和藥物治療機制等方面的應用。

Research Interest: The establishment of the analytical methods about metabolomics and metabolic flux based on mass spectrometry and its application on pharmaceutical analysis, traditional Chinese medicine analysis, pathological mechanism of tumors and drug therapy mechanism.

學歷/Education:

2015.09-2019.02 澳門科技大學 哲學博士學位/PhD, Macau University of Science and Technology, Macau, China

2012.09-2015.06 瀋陽藥科大學 理學碩士學位/Master's degree, Shenyang Pharmaceutical University, Liaoning, China

2008.09-2012.06 山東中醫藥大學 醫學學士學位/Bachelor's degree, Shandong University of Traditional Chinese Medicine, Shandong, China

工作經歷/Work experience:

2019.10-2021.09 澳門科技大學 博士後 (澳門政府資助)/Postdoctoral Fellow, Macau University of Science and Technology

2021.10-2022.09 澳門科技大學 博士後 /Postdoctoral Fellow, Macau University of Science and Technology

代表性文章/Publications:

1. **Xiqing Bian**, Na Li*, Binbin Tan, Baoqing Sun, Ming-Quan Guo, Guoxin Huang, Li Fu, WL Wendy Hsiao, Liang Liu*, and Jian-Lin Wu*. Polarity-Tuning Derivatization-LC-MS Approach for Probing Global Carboxyl-Containing Metabolites in Colorectal Cancer. *Anal. Chem.* **2018**, *90*, 11210. (IF: 8.008, Q1).
2. **Xiqing Bian**,[#] Yun Qian,[#] Binbin Tan,[#] Kai Li, Xufen Hong, Chi Chun Wong, Li Fu, Jun Zhang, Na Li,* Jian-Lin Wu*. In-depth Mapping Carboxylic Acid Metabolome Reveals the Potential Biomarkers in Colorectal Cancer through Characteristic Fragment Ions and Metabolic Flux. *Anal. Chim. Acta* **2020**, *1128*, 62. (IF: 6.911, Q1, co-first author).
3. **Xiqing Bian**,[#] Baoqing Sun,[#] Peiyan Zheng, Na Li*, and Jian-Lin Wu*. Derivatization enhanced separation and sensitivity of long chain-free fatty acids: application to asthma using targeted and non-targeted liquid chromatography-mass spectrometry approach. *Anal. Chim. Acta* **2017**, *989*, 59. (IF: 6.911, Q1, co-first author).
4. **Xiqing Bian**,[#] Wen Miao,[#] Ming Zhao, Yiran Zhao, Ying Xiao, Na Li,* Jian-Lin Wu* Microbiota drive insoluble polysaccharides utilization via microbiome-metabolome interplay during Pu-erh tea fermentation. *Food Chem* **2022**, *377*, 132007. (IF 9.231, Q1, co-first author).
5. **Xiqing Bian**,[#] Xinyi Xie,[#] Jialing Cai, Yiran Zhao, Wen Miao, Xiaolin Chen, Ying Xiao, Na Li,* Jian-Lin Wu.* Dynamic changes of phenolic acids and antioxidant activity of Citri Reticulatae Pericarpium during aging processes. *Food Chem* **2022**, *373*, 131399. (IF 9.231, Q1, co-first author).
6. Peiyan Zheng[#], **Xiqing Bian**[#], Yingying Zhai[#], Cheng Li, Na Li, Chuangli Hao, Huimin Huang, Wenting Luo, Zhifeng Huang, Chenxi Liao, Mingshan Xue, Ming-Quan Guo, Baoqing Sun*, Jian-Lin Wu*. Metabolomics reveals a correlation between hydroxyeicosatetraenoic acids (HETEs) and allergic asthma: evidence from three years' immunotherapy. *Pediatr Allergy Immu.* **2021**, *32*, 1654. (IF: 5.464, Q1, co-first author).
7. Xiaolan Hu,[#] **Xiqing Bian**,[#] Wan-Yi Gu, Baoqing Sun, Xiang Gao, Jian-Lin Wu*, Na Li*. Stand out from matrix: ultra-sensitive LC-MS/MS method for determination of histamine in complex biological samples using derivatization and solid phase extraction. *Talanta* **2021**, *225*, 122056. (IF: 6.556, Q1, co-first author).
8. Mingshan Xue,[#] Peiyan Zheng,[#] **Xiqing Bian**,[#] Zhifeng Huang, Huimin Huang, Yifeng Zeng, Haisheng Hu, Xiaoqing Liu, Luqian Zhou, Baoqing Sun,* Jian-lin Wu,* Nanshan Zhong*. Exploration and Correlation Analysis of Changes in Krebs Von Den Lungen-6 Levels in COVID-19 Patients With Different Types in China. *BioScience Trends*. **2020**, *14*, 290. (IF: 9.083, Q1, co-first author).

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9. Yahui Ge,[#] **Xiqing Bian,**[#] Baoqing Sun, Ming Zhao, Yan Ma, Yu-Ping Tang, Na Li*, Jian-Lin Wu*. Dynamic profiling of phenolic acids during Pu-erh tea fermentation using derivatization LC-MS approach. *J. Agr. Food Chem.* **2019**, *67*, 4568. (IF: 5.895, Q1, co-first author).
10. Cheng Luo,[#] **Xiqing Bian,**[#] Qian Zhang, Zhenyan Xia, Bowen Liu, Qi Chen, Chien-Chih Ke, Jian-lin Wu*, and Yonghua Zhao*. Shengui Sansheng San Ameliorates Cerebral Energy Deficiency Via Citrate Cycle after Ischemic Stroke. *Front. Pharmacol.* **2019**, *10*, 386. (IF: 5.988, Q1, co-first author).
11. Chi Chun Wong, Jian-Lin Wu, Fenfen Ji, Wei Kang, **Xiqing Bian**, Huarong Chen, Lam-Shing Chan, Simson Tsz Yat Luk, Samuel Tong, Jiaying Xu, Qiming Zhou, Dabin Liu, Hao Su, Hongyan Gou, Alvin Ho-Kwan Cheung, Ka Fai To, Zongwei Cai, Jerry W Shay, Jun Yu*. The cholesterol uptake regulator PCSK9 promotes and is a therapeutic target in APC/KRAS-mutant colorectal cancer. *Nat Commun.* **2022**, *13*, 3971. (TF: 17.694, Q1)
12. Chi Chun Wong, Jiaying Xu, **Xiqing Bian**, Jian-Lin Wu, Wei Kang, Yun Qian, Weilin Li, Huarong Chen, Hongyan Gou, Dabin Liu, Simson Tszyat Luk, Qiming Zhou, Fenfen Ji, Lam-Shing Chan, Senji Shirasawa, Joseph JY. Sung, Jun Yu*. In Colorectal Cancer Cells With Mutant KRAS, SLC25A22-Mediated Glutaminolysis Reduces DNA Demethylation to Increase WNT Signaling, Stemness, and Drug Resistance. *Gastroenterology* **2020**, *159*, 2163. (IF: 33.883, Q1).
13. Risheng Zhao, Olabisi Oluwabukola Coker, Jianlin Wu, Yunfei Zhou, Liuyang Zhao, Geicho Nakatsu, **Xiqing Bian**, Hong Wei, Anthony WH. Chan, Joseph JY. Sung, Francis KL. Chan, EmadEl-Omar, Jun Yu*. Aspirin Reduces Colorectal Tumor Development in Mice and Gut Microbes Reduce its Bioavailability and Chemopreventive Effects. *Gastroenterology*, **2020**, *159*, 969. (IF: 33.883, Q1).
14. Kai Li, Jian-lin Wu, Baifu Qin, Zongmin Fan, Qin Tang, Weisi Lu, Haipeng Zhang, Fan Xing, Manqi Meng, Shaomin Zou, Wenxia Wei, Honglei Chen, Jian Cai, Huaiming Wang, Hui Zhang, Jiayue Cai, Ling Fang, **Xiqing Bian**, Chuangqi Chen, Ping Lan, Bart Ghesquière, Lekun Fang & Mong-Hong Lee*. ILF3 is a substrate of SPOP for regulating serine biosynthesis in colorectal cancer. *Cell Res.* **2020**, *30*, 163. (IF: 46.297, Q1).
15. Chuanxu Cai,[#] **Xiqing Bian,**[#] Mingshan Xue, Xiaoqing Liu, Haisheng Hu, Jingxian Wang, Song Guo Zheng, Baoqing Sun,* Jian-Lin Wu,* Eicosanoids metabolized through LOX distinguish Asthma-COPD Overlap from COPD by metabolomics study. *Int. J. Chronic. Obstr.* **2019**, *14*, 1769. (IF: 2.893, Q4, co-first author).
16. **Xiqing Bian**, Jiao Bai*, Ke Sun, Shengdong Huang, Kaibo Wang, Shuang Tang, Chunmei Xue, Gaosheng Hu, Xin Wu, Huiming Hua, Yuehu Pei. Trametramide A, a new pyridone alkaloid from the fungus *Trametes trogii* TGC-P-3. *Magn.*

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- Reson. Chem.* **2016**, *54*, 773. (IF: 2.392, Q3, first author).
17. **Xiqing Bian**, Meili Shao, Huaqi Pan, Kaibo Wang, Shengdong Huang, Xin Wu, Chunmei Xue, Huiming Hua, Yuehu Pei, Jiao Bai*. Paenibacillin A, a new 2 (1H)-pyrazinone ring-containing natural product from the endophytic bacterium *Paenibacillus* sp. Xy-2. *Nat. Prod. Res.* **2016**, *30*, 125. (IF: 2.448, Q3, first author).
 18. **Xiqing Bian**, Jiao Bai*, Xiaolan Hu, Xin Wu, Chunmei Xue, Aihong Han, Guangyue Su, Huiming Hua, and Yuehu Pei. Penioxalicin, a novel 3-nor-2, 3-seco-labdane type diterpene from the fungus *Penicillium oxalicum* TW01-1. *Tetrahedron Lett.* **2015**, *56*, 5013. (IF: 2.032, Q3, first author).
 19. Shengshuang Chen,[#] Yu Fu,[#] **Xiqing Bian**, Ming Zhao, Yilang Zuo, Yahui Ge, Ying Xiao, Jianbo Xiao, Na Li,* Jian-Lin Wu.* Investigation and dynamic profiling of oligopeptides, free amino acids and derivatives during Pu-erh tea fermentation by ultra-high performance liquid chromatography tandem mass spectrometry. *Food Chem* **2022**, *371*, 131176. (IF 9.231, Q1).
 20. Yaqi Zhang[#], Guanyu Yan[#], Min Song, **Xiqing Bian**, Tiantian Xu, Yida Zhang, Jian-Lin Wu, Ging Chan, Qingwen Zhang*, Na Li*. Identification and quantification of markers in Azedarach Fructus and Toosendan Fructus. *J Pharm Biomed Anal.* **2021**, *202*, 114173. (IF: 3.571, Q2).
 21. Zhou Wang[#], Yue Yu[#], Junyi Liao[#], Wei Hu, **Xiqing Bian**, Jianlin Wu, Yi Zhun Zhu*. S-propargyl-cysteine remodels gut microbiota to alleviate rheumatoid arthritis by regulating bile acids metabolism. *Front Cell Infect Microbiol.* **2021**, *11*, 670593. (IF: 6.073, Q1).
 22. Jing Ma[#], Jiaying Luo[#], Maomao He, **Xiqing Bian**, Jing Li, Yingsi Du, Baoqing Sun*, Hao Chen*. Umbilical cord blood metabolomics: association with intrauterine hyperglycemia. *Pediatr Res.* **2022**, *91*, 1530. (IF: 3.953, Q1).
 23. Ying Shi[#], Hu-Dan Pan[#], Jian-Lin Wu, Qing-Hua Zou, Xin-Yi Xie, Hong-Gang Li, Hua Zhou, **Xi-Qing Bian**, Wen-Fei Leng, Can-Jian Wang, Ya-Feng Wang, Ping Qiu, Fei-Chi Wu, Yong-Fei Fang*, Liang Liu*. The Correlation Between Decreased Ornithine Level and Alleviation of Rheumatoid Arthritis Patients Assessed by a Randomized, Placebo-Controlled, Double-Blind Clinical Trial of Sinomenine. *Engineering.* **2021**. DOI: 10.1016/j.eng.2021.04.014. (IF: 12.834, Q1).
 24. Lu Li, Jianlin Wu, **Xiqing Bian**, Ge Wu, Peiyan Zheng, Mingshan Xue, Baoqing Sun*. Analysis of serum polyunsaturated fatty acid metabolites in allergic bronchopulmonary aspergillosis. *Respir Res.* **2020**, *21*, 205. (IF: 7.162, Q1).
 25. Binbin Tan, Ying Zhang, Tiantian Zhang, Jinsong He, Xueying Luo, **Xiqing Bian**, Jianlin Wu, Chang Zou, Yangzhi Wang, Li Fu. Identifying potential serum biomarkers of breast cancer through targeted free fatty acid profiles screening

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- 26. Zhen-Yan Xia, Cheng Luo, Bo-Wen Liu, **Xi-Qing Bian**, Yang Li, Ai-Ming Pang, You-Hua Xu, Hong-Mei Tan, Yong-Hua Zhao*. Shengui Sansheng Pulvis maintains blood-brain barrier integrity by vasoactive intestinal peptide after ischemic stroke. *Phytomedicine*, **2020**, *60*, 153158. (IF: 6.656, Q1).
 - 27. Imran Khan, Guoxin Huang, Xiao-ang Li, Weilin Liao, Wai Kit Leong, Wenrui Xia, **Xiqing Bian**, Jianlin Wu, W.L. WendyHsiao*, Mushroom polysaccharides and jiaogulan saponins exert cancer preventive effects by shaping the gut microbiota and microenvironment in *Apc^{Min/+}* mice. *Pharmacol Res.* **2019**, *148*, 104448. (IF: 10.334, Q1).
 - 28. Yida Zhang, **Xiqing Bian**, Jing Yang, Haiying Wu*, Jian-lin Wu*, and Na Li*. Metabolomics of Clinical Poisoning by Aconitum Alkaloids using derivatization LC-MS. *Front. Pharmacol.* **2019**, *10*, 275. (IF: 5.988, Q1).
 - 29. Xiaojing Yan, Yue Zhuo, **Xiqing Bian**, Jianmin Li, Yida Zhang, Lidong Ma, Guanghua Lu, Ming-Quan Guo, Jian-Lin Wu*, and Na Li*. Integrated proteomics, biological functional assessments and metabolomics reveal toosendanin induced hepatic energy metabolic disorders. *Chem. Res. Toxicol.* **2019**, *32*, 668. (IF: 3.973, Q2).
 - 30. Xiao-Lan. Hu, **Xi-Qing Bian**, Xin Wu, Jian-Yong Li, Hui-Ming Hua, Yue-Hu Pei, Ai-Hong Han, Jiao Bai*. Penioxalamine A, a novel prenylated spiro-oxindole alkaloid from *Penicillium oxalicum* TW01-1. *Tetrahedron Lett.* **2014**, *55*, 3864. (IF: 2.032, Q3).
 - 31. Yu-Hong Zhang, Sheng-Dong Huang, Hua-Qi Pan, **Xi-Qing Bian**, Zai-Ying Wang, Ai-Hong Han, Jiao Bai*. Structure determination of two new indole-diterpenoids from *Penicillium* sp. CM-7 by NMR spectroscopy. *Magn. Reson. Chem.* **2014**, *52*, 306. (IF: 2.392, Q3).

專利/Patents:

- 1. JL Wu, N Li, L Liu, **XQ Bian**. Method and Kit for Detecting Carboxyl-Containing Compound. AST Patent 2018100592.
- 2. JL Wu, N Li, L Liu, WY Gu, **XQ Bian**. Method of determining histamine in a sample and kit for doing the same. AST Patent 2017100545.