

# 謝瑩



職稱 : 澳門科技大學, 副教授  
藥學院, 課程主任

學院/部門 : 中藥質量研究國家重點實驗室（澳門科  
技大學）, 藥學院

電郵地址 : [yxie@must.edu.mo](mailto:yxie@must.edu.mo)

電話 : (853) 8897-2426

辦公室 : E213d

郵寄地址 : 澳門氹仔偉龍馬路澳門科技大學 E 座  
213d 室

**教學科目:** 生物製劑；生物製劑與藥代動力學；藥物分析；藥物分析實驗；分  
析化學；分析化學實驗；專題研究；中藥藥代動力學；儀器分析；中藥專題導  
讀；藥學專題導讀；專業英語。

**研究方向:** 代謝與免疫研究；轉運蛋白研究；藥代動力學和藥效及機制研究；  
中藥質量控制。

**簡介:** 謝瑩博士，副教授，2007年獲香港浸會大學哲學學位，隨後前往美  
國馬裡蘭大學醫學院進行博士後研究工作。2009至2012年間在美國北卡羅來  
納大學教堂山分校藥學院任副研究員。2012年8月，加入中藥質量研究國家重  
點實驗室(澳門科技大學)，2016年兼任澳門科技大學藥學院課程主任。謝瑩博  
士目前主要從事在結合生物醫學和化學分析研究前沿方法開發中藥新藥研究的  
各個領域，具體包括：用新的組學技術進行疾病的病理以及藥物治療代謝綜合  
征疾病的藥效和機制研究；中藥對轉運蛋白的影響；中藥藥代動力學及藥理學  
等。近年來，謝瑩博士研究成果發表於 *Pharmacological Research, Scientific  
Reports, Journal of Experimental Medicine, Talanta, Journal of Chromatography A* 等世界著名雜誌，迄今已發表 SCI 收錄論文 90 多篇，主持多項澳門和國家研究  
基金項目。她亦擔任國際標準組織 ISO/TC249 工作組委員，《藥學進展》雜誌  
青年編委，多個國際期刊的特邀審稿人，並於 2010 年獲得 Elsevier B.V.評出的  
最佳評審人獎（藥理學）。2012 年獲得國家科技進步二等獎，李時珍藥學發明  
獎，2014 年獲得澳門科技進步特別獎，2017 年獲得中國藥理學會優秀青年科  
技工作者獎，2018 年度澳門科學技術獎（自然科學獎）二等獎，2018 年度中  
國高校科研優秀成果獎（自然科學獎）一等獎，2019 年中銀學術研究獎，2020  
年度澳門科學技術獎（科技進步獎）二等獎。

## 學歷

- 2007.11 香港浸會大學藥學博士學位  
2001.7 中國藥科大學理學碩士學位  
1998.7 中國藥科大學理學學士學位

## 工作經驗

- 2017.07 - 今 澳門科技大學 副教授  
2016.07 - 今 澳門科技大學藥學院 課程主任  
2012.08 - 2017.6 澳門科技大學 助理教授  
2009.09 - 2012.07 美国北卡罗莱纳州大学藥學院 副研究員  
2007.11 - 2009.09 美国马里兰大学藥理學系 博士後

## 學術成果

代表 SCI 期刊文章: (\* Corresponding author(s); †, contribution equally first authorship)

- 1) Feng S-L, Zhou HF, Wu DC, Qu B, Liu RM, Li Z, Xie Y\*, Luo H-B\*. Nobiletin and its derivatives overcome multidrug resistance (MDR) in cancer: total synthesis and discovery of potent MDR reversal agents, *Acta Pharmaceutica Sinica B*, 2020 Feb;10(2):327-343.
- 2) Can-Jian Wang ,Fan He ,Yu-Feng Huang ,Hong-Liang Ma ,Ying-Ping Wang ,Chun-Song Cheng ,Jin-Le Cheng ,Chi-Chou Lao ,Di-an Chen ,Zhi-Feng Zhang ,Zhen Sang,Pei Luo, Sheng-Yuan Xiao , Xie Y\*, Hua Zhou\*. Discovery of chemical markers for identifying species, growth modeand production area of Astragalus Radix by usingultra-high-performance liquid chromatography coupled to triplequadrupole mass spectrometry, *Phytomedicine*, 2020 Feb;67:153155.
- 3) Feng S-L, Tian Y, Huo S, Qu B, Liu RM, Xu P, Li YZ, Xie Y\*. Nobiletin potentiates paclitaxel anticancer efficacy in A549/T xenograft model: pharmacokinetic and pharmacological study, *Phytomedicine*, 2020 Feb;67:153141.
- 4) Suguro R, Pang XC, Yuan ZW, Chen SY, Zhu YZ, Xie Y.\*. Combinational applicaton of silybin and tangeretin attenuates the progression of non-alcoholic steatohepatitis (NASH) in mice via modulating lipid metabolism, *Pharmacological Research* 2019 Nov 6;151:104519.
- 5) Xie Y\*, Zhang DQ, Zhang J, and Yuan JL. Metabolism, Transport and Drug-Drug Interactions of Silymarin. *Molecules*. 2019 Oct 14; 24(20).
- 6) Zhang J, Wang Z, Liu H, Cai L, Feng Y, Zhou L, Wei H, Xie Y\*, Chen Y\*. In vivo and in vitro evaluation of <sup>177</sup>Lu-labeled DOTA-2-deoxy-D-glucose in mice. A novel radiopharmaceutical agent for cells imaging and therapy, *Hellenic Journal of Nuclear Medicine* 2019 May-Aug; 22(2):103-110.
- 7) Li YZ, Xie Y, He Y, Hou WB, Liao ML, Liu CX\*. Quality Markers of Traditional Chinese Medicine: Concept, Progress, and Perspective, *Engineering*, 2019, 5(5): 888-894.
- 8) Pan H-D, Zheng Y-F, Liu Z-Q, Yuan Z-W, Zhou H, Ren R-T, Xie Y\*, Liu L\*. Deciphering the pharmacological mechanism of Guan-Jie-Kang in treating rat adjuvant-induced arthritis using omics analysis, *Frontiers of Medicine*. In press 2019
- 9) Bi X-L, Yuan Z-W, Qu B, Zhou H, Liu Z-Q, Xie Y\*, Piperine enhances the bioavailability of silybin via inhibition of efflux transporters BCRP and MRP2, *Phytomedicine*. 54:98-108, 15 February 2019.
- 10) Zhang X-J, Yuan Z-W, Qu C, Yu X-T, Huang T, Chen P-V, Su Z-R, Dou Y-X, Wu J-Z, Zeng H-F\*, Xie Y\* and Chen J-N\*, Palmatine ameliorated murine colitis by suppressing tryptophan metabolism and regulating gut microbiota, *Pharmacology Research*. 2018 Nov;137:34-46
- 11) Xu P, Zhou H, Li Y-Z, Yuan Z-W, Liu C-X, Liu L and Xie Y\*. Baicalein enhances the oral bioavailability and hepatoprotective effects of Silybin through the inhibition of efflux transporters

BCRP and MRP2. *Frontier in Pharmacology*. 9:1115. (2018)

- 12) Feng S-L, Luo H-B, Cai L, Zhang J, Wang D, Chen Y-J, Zhan H-X, Jiang Z-H, **Xie Y\***, Ginsenoside Rg5 overcomes chemotherapeutic multidrug resistance mediated by ABCB1 transporter: in vitro and in vivo study, *Journal of Ginseng Research*. <https://doi.org/10.1016/j.jgr.2018.10.007>
- 13) Yuan ZW, Li YZ, Liu ZQ, Feng SL, Zhou H, Liu CX, Liu L\* and **Xie Y.\***. Role of tangeretin as a potential bioavailability enhancer for silybin: pharmacokinetic and pharmacological studies, *Pharmacological Research*. 2017 Sep 27. pii: S1043-6618(17)30789-2.
- 14) Qua C.†, Yuan Z.W.†, Yu X.T.†, Huang Y.F., Yang G.H., Chen J.N., Lai X.P., Sua Z.R., Zeng H.F.\*, **Xie Y.\***, and Zhang X.J.\* , Patchouli alcohol ameliorates dextran sodium sulfate-induced experimental colitis and suppresses tryptophan catabolism, *Pharmacological Research*. 2017(121):70-82.
- 15) Tan B., Jin S, Sun JP, Gu ZK, Sun XT, Zhu YC, Huo KK, Cao ZL, Yang P, Xin XM, Liu XH, Pan LL, Qiu FR, Jiang J, Jia YQ, Ye FY, **Xie Y.\***, and Zhu YZ\*, New method for quantification of gasotransmitter hydrogen sulfide in biological matrices by LC-MS/MS, *Scientific Reports*. 2017:46278
- 16) **Xie Y.**, Miranda S., Hoskins J., and Hawke R. \*, Role of UDP-Glucuronosyltransferase 1A1 in the Metabolism and Pharmacokinetics of Silymarin Flavonolignans in Patients with HCV and NAFLD, *Molecules*, 2017, 22(1), 142.
- 17) Wu J.†, **Xie Y.†**, Xiang Z., Wang C.J. Zhou H. \*, Liu L.\*, Simultaneous Determination of Multiple Components in Guanjiiekang in Rat Plasma via the UPLC-MS/MS Method and Its Application in Pharmacokinetic Study. *Molecules* 2016, 21(12), 1732
- 18) Feng SL, Yuan ZW, Yao XJ, Ma WZ, Liu L, Liu ZQ, **Xie Y\***. Tangeretin, a citrus pentamethoxyflavone, antagonizes ABCB1-mediated multidrug resistance by inhibiting its transport function. *Pharmacological Research*. 2016; 110:193-204.
- 19) Lin W, Huang J, Liao X, Yuan Z, Feng S, **Xie Y\***, Ma W\*. Neo-tanshinolactone selectively inhibits the proliferation of estrogen receptor positive breast cancer cells through transcriptional down-regulation of estrogen receptor alpha. *Pharmacological Research*. 2016 Aug 1; 111:849-858.
- 20) Ma W-Z, Feng S-L, Yao X-J, Yuan Z-W, Liu L, **Xie Y\***. Nobiletin enhances the efficacy of chemotherapeutic agents in ABCB1 overexpression cancer cells. *Scientific Reports*. 2015 Dec 22; 5:18789.
- 21) Yuan Z-W, Leung L-H, Fan X-X, Zhou H, Ma W-Z, Liu L\*, **Xie Y\***. Quantitative evaluation of berberine subcellular distribution and cellular accumulation in non-small cell lung cancer cells by UPLC-MS/MS. *Talanta*. 2015 November, 144: 20-28.
- 22) **Xie Y**, Jiang Z-H, Zhou H, Ma W-Z, Wong Y-F, Liu Z-Q, Liu L\*. The pharmacokinetic study of sinomenine, paeoniflorin and paeonol in rats after oral administration of an herbal product Qingfu Guanjesu capsule by HPLC. *Biomedical Chromatography*. 2014 Sep;28(9):1294-302
- 23) **Xie Y**, Akpinarli A, Maris C, Hipkiss E-L, Lane M, Kwon E-M, Antony P-A\*. Naïve tumor-specific CD4<sup>+</sup> T cells differentiated in vivo eradicate established melanoma in absence of vaccination. *The Journal of Experimental Medicine* 2010, 207(3): 651.
- 24) **Xie Y**, Todd N-W, Liu Z, Zhan M, Fang H, Peng H, Alattar M, Deepak J, Stass S-A, Jiang F\*. Altered miRNA expression in sputum for diagnosis of non-small cell lung cancer. *Lung Cancer*. 2010, 67(2): 170-176.
- 25) **Xie Y**, Zhou H, Wong Y-F, Xu H-X, Jiang Z-H, Liu L\*. Study on the pharmacokinetics and metabolism of paeonol in rats treated with pure paeonol and an herbal preparation containing paeonol by using HPLC-DAD-MS method. *Journal of Pharmaceutical and Biomedical Analysis*. 2008, 46(4): 748-756.
- 26) **Xie Y**, Zhou H, Wong YF, Liu Z, Xu H, Jiang Z, Liu L\*. An optimized high-performance liquid chromatography (HPLC) method for benzoylmesaconine determination in Radix

- AconitiLateralisPreparata (Fuzi, aconite roots) and its products. *Chinese Medicine*. 2008 3: 6-13.
- 27) Xie Y, Jiang Z-H, Zhou H, Cai X, Wong YF, Liu Z-Q, Bian Z-X, Xu H-X, Liu L\*. Combinative method using HPLC quantitative and qualitative analyses for quality consistency assessment of an herbal medicinal preparation. *Journal of Pharmaceutical and Biomedical Analysis*, 2007, 43(1): 204-212.
  - 28) Xie Y, Jiang Z-H, Zhou H, Xu H-X and Liu L\*. Simultaneous determination of six Aconitum alkaloids in proprietary Chinese medicines by high-performance liquid chromatography, *J. Chromatography A*, 2005, 1093: 195-203.

### 學術機構及社會任職

- 1) «藥學進展»雜誌青年編委, 2018-Present
- 2) Expert, Working Group One of ISO/TC249 on Traditional Medicine, 2016- Present
- 3) Expert, Working Group Two of ISO/TC249 on Traditional Medicine, 2018- Present
- 4) Expert , Unit of Traditional, Complementary and Integrative Medicine (TCI), Service Delivery and Safety Department (SDS), World Health Organization (WHO).世衛傳統醫藥合作中心(澳門)
- 5) Member, The Second Council of Committee of Standard Construction of World Federation of Chinese Medicine Societies, 2016 - 2019
- 6) Executive supervisor, The First Specialty Committee of Macau Society of Clinical Oncology, Macau
- 7) Member, Committee of Plant Drug Metabolism and Clinical Drug Monitoring

### 專業資格認證及獎項

- 1) 2020 年度澳門科學技術獎（科技進步獎）二等獎
- 2) 2019 年中銀學術研究獎
- 3) 2018 年中國高校科研優秀成果獎（自然科學獎）一等獎
- 4) 2018 年澳門科學技術獎（自然科學獎）二等獎
- 5) 2017 年獲得中國藥理學會藥物代謝專業委員會劉昌孝人才獎勵基金-優秀青年科技工作者獎,
- 6) 2014 年澳門特別行政區科學技術獎勵特別獎
- 7) 2012 年國家科技進步二等獎
- 8) 2012 年李時珍藥學發明獎