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教學科目：分析化學（BP12203/ BPAZ0012）；分析化學實驗（BP12204）；基礎化學實驗（BP12103）；ME1012 中藥藥代動力學；ME1002 儀器分析；DCMSZ02 中藥專題導讀；藥物分析（BPAZ0024）

研究方向：

- 1) 基於現代技術的中藥質量評價研究
- 2) 以單鹼基分辨率解析 RNA/DNA 轉錄後修飾以及相关生物標記物研究
- 3) 納米材料應用于中藥活性成分篩選及癌症治療

簡介：張偉博士，教授，2008 年獲得中國葯科大學哲學博士學位。2008-2012 于美國耶魯大學藥理係從事博士後研究工作，2012 年 8 月受聘于澳門科技大學中藥質量研究國家重點實驗室任助理教授，于 2017 年 8 月晉升為副教授，2024 年晉升為教授。張教授的主要研究興趣和領域包括：1) 基於現代技術的中藥質量評價研究；2) 以單鹼基分辨率解析 RNA/DNA 轉錄後修飾以及相关生物標記物研究；3) 納米材料應用于中藥活性成分篩選及癌症治療。已在 Analytical Chemistry, Environment International, Journal of Pharmaceutical Analysis, Food Chemistry, Advanced Functional Materials 和 Science Translational Medicine 等國際期刊上發表了 110 多篇研究論文，H 指數為 23（Web of Science, 2023）。迄今，張教授已獲得 7 項授權專利（含 6 項國際專利和 1 項中國專利）。自 2014 年以來，張教授獲得了中銀學術研究優秀獎（2014，2023）、中珠醫療生命科學科研一等獎（2016，2018）和中珠醫療生命科學科研二等獎（2017）等獎項。作為負責人張教授獲得了 10 多項研究資助，包括澳門科學技術發展基金（FDCT）重點研發項目

(課題：四種中草藥質量控制的整合多組學技術和質量標準理論，第三個子項目負責人)、FDCT-NSFC 和 FDCT-GDST 聯合基金。此外，他還參與了國家自然科學基金、國家重大研究儀器研究專項基金、美國國立衛生研究院 (NIH) 資助和天然藥物國家重點實驗室開放項目等多項研究項目。

學歷：

2003年7月-2008年7月 中國藥科大學藥物分析專業碩博連讀攻讀博士學位

1996年7月-2000年7月 中國藥科大學學士學位

工作經歷：

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2017年8月- 2024年7月 澳門科技大學中藥質量研究國家重點實驗室 副教授

2012年8月- 2017年7月 澳門科技大學中藥質量研究國家重點實驗室 助理教授

2008年8月- 2012年8月 美國耶魯大學醫學院 博士後

學術成果

部分發表的SCI期刊論文：(* Corresponding author)

1. R. Wang, G. Huang, S. Li, H. Huang, G. Zhu, L. Wang, J. Yang, S. Yang*, Z. Jiang*, **W. Zhang***. Blueberry extract for the treatment of ischaemic stroke through regulating the gut microbiota and kynurenine metabolism. *Phytotherapy Research*, 38(2024) 4792-4814. (IF 2023: 6.1, Q1)
2. Z. Li*, Q. Cao, H. Chen, J. Yang, Z. Wang, X. Qu, Y. Yao, Z. Zhou, **W. Zhang**, Dual Phytochemical/Activity-Guided Optimal Preparation and Bioactive Material Basis of *Orthosiphon stamineus* Benth. (Shen Tea) against Nonalcoholic Fatty Liver Disease, *Journal of Agricultural and Food Chemistry*, 72(2024) 18561-72. (IF 2023: 5.7, Q1)
3. J. Liu, T. Xu, J. Ding, H. Wen, J. Meng, Q. Liu, X. Liu, **W. Zhang**, G.-Y. Zhu, Z.-H. Jiang*, J. Gao*, L.-P. Bai*, Discovery of anti-melanogenic components in persimmon (*Diospyros kaki*) leaf using LC-MS/MS-MN, AlphaFold2-enabled virtual screening and biological validation, *Food Chemistry*, 455(2024) 139814. (IF 2023: 8.5, Q1)
4. L. Fu, C.-C. Wang, W. Tian, Z. Liu, M.-Y. Bao, J. Liu, **W. Zhang**, L.-P. Bai*, Z.-H. Jiang*, G.-Y.

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5. L. Fu, W. Tian, M.-Y. Bao, Z. Liu, W.-J. Ren, J. Liu, **W. Zhang**, Z. Zhang, J. Gao, L.-P. Bai*, Z.-H. Jiang*, G.-Y. Zhu*, Cevanine-type alkaloids from the bulbs of *Fritillaria unibracteata* var. *wabuensis* and their antifibrotic activities in vitro, *Phytochemistry*, 220(2024) 114018. (IF 2023: 3.3, Q1)
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 7. Z.-R. Lin, M.-Y. Bao, H.-M. Xiong, D. Cao, L.-P. Bai, **W. Zhang**, C.-Y. Chen, Z.-H. Jiang*, G.-Y. Zhu*, Boswellianols A–I, Structurally Diverse Diterpenoids from the Oleo-Gum Resin of *Boswellia carterii* and Their TGF- β Inhibition Activity, *Plants*, 13(2024) 1074. (IF 2023: 4.0, Q1)
 8. L. Zeng, C. Zhang, M. Yang, J. Sun, J. Lu, H. Zhang, J. Qin, **W. Zhang**, Z. Jiang*, Unveiling the Diversity and Modifications of Short Peptides in *Buthus martensii* Scorpion Venom through Liquid Chromatography-High Resolution Mass Spectrometry, *Toxins*, 16(2024) 155. (IF 2023: 3.9, Q1)
 9. L. Yang, C. Zi, Y. Li, J. Huang, Z. Gu, C. Wang, J.M. Hu*, Z. Jiang*, **W. Zhang***, An in-depth investigation of molecular interaction in zeaxanthin/corn silk glycan complexes and its positive role in hypoglycemic activity, *Food Chem*, 438(2024) 137986. (IF 2022: 8.8, Q1)
 10. Y. Wang, F. Yu, Q. Liu, C. Wang, G. Zhu, L. Bai, S. Shi, Y. Zhao*, Z. Jiang*, **W. Zhang***, A novel and sensitive dual signaling ratiometric electrochemical aptasensor based on nanoporous gold for determination of Ochratoxin A, *Food Chem*, 432(2024) 137192. (IF 2022: 8.8, Q1)
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 12. H.Y. Lyu, M.Y. Bao, C.C. Io, H.M. Xiong, F.L. Chen, L.P. Bai, **W. Zhang**, Z.H. Jiang*, G.Y. Zhu*, Sesquiterpenoids from the roots of *Aucklandia costus* and their anti-inflammatory activities, *Fitoterapia*, 169(2023) 105604. (IF 2022: 3.4, Q2)

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15. C.H. Deng, T.Q. Li, **W. Zhang**, Q. Zhao, Y. Wang*, Targeting Inflammasome Activation in Viral Infection: A Therapeutic Solution?, *Viruses*, 15(2023). (IF 2022: 4.7, Q1)
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17. H.X. Zhang, J.F. Qin, J.F. Sun, Y. Pan, T.M. Yan, C.Y. Wang, L.P. Bai, G.Y. Zhu, Z.H. Jiang*, **W. Zhang*** Selective Chemical Labeling Strategy for Oligonucleotides Determination: A First Application to Full-Range Profiling of Transfer RNA Modifications, *Anal Chem*, 95(2023) 686-94. (IF 2022: 7.4, Q1)
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19. H.X. Zhang, D. Yu, J.F. Sun, L. Zeng, C.Y. Wang, L.P. Bai, G.Y. Zhu, Z.H. Jiang*, **W. Zhang***, An integrated approach to evaluate acetamidiprid-induced oxidative damage to tRNA in human cells based on oxidized nucleotide and tRNA profiling, *Environ Int*, 178(2023) 108038. (IF 2022: 11.8, Q1)
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29. R.S. Shen, D. Cao, F.L. Chen, X.J. Wu, J. Gao, L.P. Bai, **W. Zhang**, Z.H. Jiang*, G.Y. Zhu*, New Monoterpene-Conjugated Phenolic Constituents from Nutmeg and Their Autophagy Modulating Activities, *J Agric Food Chem*, 70(2022) 9684-93. (IF 2021: 5.895, Q1)
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combination with ginsenosides or resveratrol, *Pharmacol Res Perspect*, 10(2022) e00986. **(IF 2021: 2.963, Q3)**

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33. Q.B. Liu, J.G. Lu, Z.H. Jiang*, **W. Zhang**, W.J. Li, Z.M. Qian, L.P. Bai*, In situ Chemical Profiling and Imaging of Cultured and Natural *Cordyceps sinensis* by TOF-SIMS, *Front Chem*, 10(2022) 862007. **(IF 2021: 5.545, Q1)**
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40. P. Zhu, W. Luo, J. Qian, C. Meng, W. Shan, Z. Xu, **W. Zhang**, X. Liu*, Y. Ling*, GSH/ROS Dual-Responsive Supramolecular Nanoparticles Based on Pillar[6]arene and Betulinic Acid Prodrug for Chemo-Chemodynamic Combination Therapy, *Molecules*, 26(2021). **(IF 2020: 4.411, Q1)**
41. K. Chen, J. Qu, H. Chen, J. Wang, H. Hua, J. Li, L. Zhou, **W. Zhang***, Z. Li*, Investigating the medicinal potential, material basis and mechanism of *Polygoni Orientalis Fructus* based on multi-technology integrated network pharmacology, *Phytomedicine*, 91(2021) 153685. **(IF 2020: 5.340, Q1)**
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43. C.R. Wang, H.W. Chen, Y. Li, M.Y. Zhou, V.K. Wong, Z.H. Jiang*, **W. Zhang***, Network Pharmacology Exploration Reveals Anti-Apoptosis as a Common Therapeutic Mechanism for Non-Alcoholic Fatty Liver Disease Treated with Blueberry Leaf Polyphenols, *Nutrients*, 13(2021). **(IF 2020: 5.717, Q1)**
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Hydroxycamptothecin via the Metabolic Perturbation of Ribonucleotide and Deoxyribonucleotide in Human Colorectal Carcinoma Cells, *Molecules*, 26(2021). (IF 2020: 4.411, Q1)

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- application to rapid screening of potentially active compounds from *Vaccinium corymbosum* L. leaves, *Mikrochim Acta*, 187(2020) 630. (IF 2020: 6.232, Q1)
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學術書籍

Wing Lam , Scott Bussom , Zaoli Jiang , **Wei Zhang** , Fulan Guan , Shwu-Huey Liu , and Yung-Chi Cheng , “Inflammation, Oxidative Stress and Cancer: Dietary Approaches for Cancer Prevention” CRC press, INC.,(ISBN 9781466503700), Chapter Number 29, ”PHY906,a cancer adjuvant therapy,differentially affects inflammation of different tissues”

承擔主要科研項目

1. 2024-2027 The development and application of an innovative platform for the analysis of mitochondrial mRNA modifications based on the magnetic carbon-based nanomaterials and chemical labeling, Macao Science and Technology Development Fund (project number 0054/2024/RIA1), MOP 1,733,600.00, PI

2. 2023-2026 Development of Next-Generation Anti-Aging Products Based on Synergistic Enhancement Techniques with Edible TCMs, FDCT Key R & D research project (project number 0001/2023/AKP, PI: Professor JIANG Zhi-Hong), MOP 11,916,000.00, Co-PI. (PI of the third subproject on “Development of NMN delivery system”)
3. 2022-2024 Research on Quality Evaluation and Product Development of Cultivated Cordyceps Sinensis , FDCT-GDST Joint Fund (project number 0040/2021/AGJ), MOP 865,000, PI.
4. 2020-2023 Study on multi-dimensional quality control of six Chinese herbal medicines by combining artificial intelligence and multi-omics technologies, FDCT Key R & D research project (project number 0023/2019/AKP, PI: Professor JIANG Zhi-Hong), MOP 8,000,000.00, Co-PI. (PI of the third subproject on “Integrated multi-omics technology and quality marker theory for quality control of four Chinese herbal medicines”)
5. 2019-2022 Synergistic antitumor activity of 5-fluorouracil in colorectal cancer based on the targeted-regulation of nucleotide metabolism, Macao Science and Technology Development Fund (project number 0077/2019/A2), MOP 1,434,400.00, PI
6. 2018-2021 Integrative patterns of efficient components recognition of Aloe based on Wnt/ β -Catenin Signaling Pathway, Macao Science and Technology Development Fund (project number 0052/2018/A2), MOP 1,112,100.00, PI
7. 2018-2021 Reduction of CO₂ into Energy Products through Electro- and Photo-Catalysts Using Nanoporous Functional Materials, FDCT-MOST Joint Fund(FDCT project number 002/2017/ AFJ) MOP 1,772,100, PI
8. 2016-2018 Using nucleotide metabolomics to investigate the impacts of tonic Chinese Herbs on DNA damage and Repair, Macao Science and Technology Development Fund (project number 006/2015/A1), MOP 2,820,000, PI
9. 2013-2015 The Profiling of Bioactive Compounds of Phyllanthus urinaria and Mechanism of Toxicity Reducing and Efficacy enhancing in Combination with Nucleoside Analogues, Macao Science and Technology Development Fund (project number 091/2012/A3) MOP 1,963,000, PI
10. 2013-2015 Metabolism and pharmacokinetics of Phyllanthus urinaria in the mouse, open project of Guangxi Key Laboratory of Traditional Chinese Medicine Quality Standards (project number Guizhongzhongkai201301) , PI

11. 2012-2014 Metabolomic study of Huang Qin decoction to decrease chemotherapy toxicities, open project of the State Key Laboratory of Natural Medicines (project number SKLNMKF201220), RMB 40,000, PI
12. 2013-2013 In-depth study on the metabolism process of flavonoids in Huangqin decoction, Macao Foundation (#0272), MOP 98,000, Principal Investigator, PI
13. 2014-2016 Huangqin Decoction Attenuates CPT-11-Induced Gastrointestinal Toxicity by Regulating Brain-gut axis of tryptophan metabolism National Natural Science Foundation of China(project number 81307949) RMB 230,000,Co-I
14. 2019-2023 Living single-cell analyzer based on light beam control and manipulation, Special Fund for Research on National Major Research Instrument (project number 61827819), RMB 7,769,600,Co-I

學術機構及社會任職

世界中联中医药免疫专业委员会常务理事

澳門化驗師公會會員

澳門科學技術協進會會員

學術獎勵

1. Bank of China (BOC, Macau Branch) Excellent Research Award 2014 中銀(澳門)學術研究優秀獎 2014
2. Zhongzhu Awards for Life Science Recognizing First Prize in Research 中珠醫療生命科學科研一等獎 2016
3. Zhongzhu Awards for Life Science Recognizing second Prize in Research 中珠醫療生命科學科研二等獎 2017
4. Zhongzhu Awards for Life Science Recognizing First Prize in Research 中珠醫療生命科學科研一等獎 2018
5. Bank of China (BOC, Macau Branch) Excellent Research Award 2023 中銀(澳門)學術研究優秀獎 2023