

吳柏霖



職稱：助理教授

學院/部門：中藥質量研究國家重點實驗室、埃爾文內爾博士生物物理與創新藥物實驗室

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簡介：

吳柏霖博士於 2011 年畢業於香港專業教育學院（沙田），獲應用及分析化學高級文憑，同年獲賀維雅基金會獎學金前往英國謝菲爾德大學升讀，於 2013 年獲得化學學士學位（一級榮譽）。2019 年畢業於香港大學化學系，獲得博士學位。讀博期間主要研究為有機合成及環加成反應。畢業後於澳門科技大學中藥質量研究國家重點實驗室從事博士後研究工作。2024 年 1 月受聘於澳門科技大學中藥質量研究國家重點實驗室擔任助理教授。吳博士現主要研究為抗癌和抗炎的藥物開發，包括中藥天然產物的結構修飾，其衍生物的構效關係及作用機理。現主持兩項 FDCT 項目，科研成果在 *European Journal of Medicinal Chemistry*, *Bioorganic Chemistry*, *Organic Chemistry Frontiers* 和 *Pharmaceuticals* 等多個 SCI 國際期刊上發表了 30 多篇學術論文，並已獲 1 項專利。

教學科目：基礎化學實驗、中藥分析、儀器分析

研究領域及方向：有機化學、藥物化學、開發抗癌和抗炎藥物等

學歷

2013 – 2019	香港大學	化學博士學位
2011 – 2013	英國謝菲爾德大學	化學學士學位（一級榮譽）
2009 – 2011	香港專業教育學院（沙田）	應用及分析化學高級文憑（優異）

工作經歷

2024 - 至今	澳門科技大學中藥質量研究國家重點實驗室	助理教授
2019 - 2023	澳門科技大學中藥質量研究國家重點實驗室	博士後研究員

論文發表 (#共同第一作者)

1. **Jerome P. L. Ng[#]**, Yun Xiao Yun[#], Ali Adnan Nasim, Alessandra Gianoncelli, Betty Yuen Kwan Law, Giovanni Ribaudo*, Vincent Kam Wai Wong*, Paolo Coghi*. Synthesis, docking studies and biological evaluation of 1*H*-1,2,3-triazole-7-chloroquinoline derivatives against SARS-CoV-2. *Bioorganic Chemistry*, **2023**, 141, 106882, doi: 10.1016/j.bioorg.2023.106882.
2. **Jerome P. L. Ng[#]**, Mohit K. Tiwari[#], Ali Adnan Nasim, Rui Long Zhang, Yuanqing Qu, Richa Sharma, Betty Yuen Kwan Law, Dharmendra K. Yadav, Sandeep Chaudhary, Paolo Coghi, Vincent Kam Wai Wong. Biological Evaluation in Resistant Cancer Cells and Study of Mechanism of Action of Arylvinyl-1,2,4-Trioxanes. *Pharmaceuticals*, **2022**, 15, 360, doi: 10.3390/ph15030360.
3. **Jerome P. L. Ng**, Yu Han, Li Jun Yang, Lyn-Marie Birkholtz, Dina Coertzen, Ho Ning Wong, Richard K. Haynes*, Paolo Coghi*, Vincent Kam Wai Wong*. Antimalarial and antitumour activities of the steroidal quinone-methide celastrol and its combinations with artemiside, artemisone and methylene blue. *Frontiers in Pharmacology*, **2022**, 13, 988748, doi: 10.3389/fphar.2022.988748.
4. Paolo Coghi[#], **Jerome P. L. Ng[#]**, Onat Kadioglu, Betty Yuen Kwan Law, Alena Congling Qiu, Mohamed E.M. Saeed, Xi Chen, Chi Kio Ip, Thomas Efferth, Liang Liu, Vincent Kam Wai Wong. Synthesis, computational docking and biological evaluation of celastrol derivatives as dual inhibitors of SERCA and P-glycoprotein in cancer therapy. *European Journal of Medicinal Chemistry*. **2021**, 224, 113676, doi: 10.1016/j.ejmech.2021.113676.
5. **Jerome P. L. Ng**, Paolo Coghi, Betty Yuen Kwan Law, Liang Liu, Vincent Kam Wai Wong. The present and future synthetic strategies of structural modifications of sinomenine. *Organic Chemistry Frontiers*, **2020**, 7, 4089-4107, doi: 10.1039/D0QO00785D.
6. Yu, Xiaoman, Zimo Ren, Paolo Coghi*, **Jerome P. L. Ng***. Structural Modification of Epigallocatechin-3-gallate to (2*R*,3*R*)-5,7-dimethoxy-2-(3,4,5-trimethoxyphenyl)chroman -3-yl l-valinate in Four Steps. *Molbank*, **2024**, M1826, doi: 10.3390/M1826.
7. Yoke Mooi Ng[#], Paolo Coghi[#], **Jerome P. L. Ng[#]**, Fayaz Ali, Vincent Kam Wai Wong, Carmine Coluccini. Synthesis and Coordination Properties of a Water-Soluble Material by Cross-Linking Low Molecular Weight Polyethyleneimine with Armed Cyclotrimeratrilene. *Polymers*, **2021**, 13, 4133, doi: 10.3390/polym13234133.

8. Jiu Jie Yang, Zhi Li, Lin Na Wang, Bai Xiong Huang, **Jerome P.L. Ng**, Xiong Fei Xu, Yu Ping Wang, David Wei Zhang, Bo Qin, Ding Qi Zhang, Chang-Liu, Wei Dan Luo, Betty Yuen Kwan Law, Hui Miao Wang, Meng Han Liu, Xiao Yun Yun, Joyce Tsz Wai Chan, Wan Yu Wu, Yi Ting Li, Peter Kam Fai Cheung, Man Chon Pou, Kat Sang Ha, Wang Fai Ao Ieong, Chi Hou Leong, Kit Ieng Leong, Chan Wang Lei, Lek Hang Cheang, Vincent Kam Wai Wong. X-chromosome-linked miR-542-5p as a key regulator of sex disparity in rheumatoid arthritis by promoting Th17 differentiation, *Biomarker Research*, Accepted.
9. Wang, M., Qu, L., Du, X., Song, P., **Ng, J.P.L.**, Wong, V.K., Law, B.Y., Fu, X. Natural Products and Derivatives Targeting Metabolic Reprogramming in Colorectal Cancer: A Comprehensive Review. *Metabolites*, **2024**, 14, doi: 10.3390/metabo14090490.
10. Qu, L., Tang, Y., Wu, J., Yun, X., Lo, H.H., Song, L., Wang, X., Wang, H., Zhang, R., Liu, M., Wang, C., **Ng, J.P.L.**, Fu, X., Wong, I.N., Wong, V.K.W., Law, B.Y.K. FBXL16: a new regulator of neuroinflammation and cognition in Alzheimer's disease through the ubiquitination-dependent degradation of amyloid precursor protein. *Biomarker Research*, **2024**, 12, 144, doi: 10.1186/s40364-024-00691-w.
11. Ruihong Chen, Hang Hong Lo, Chenxu Yang, Betty Yuen Kwan Law, Xi Chen, Calista Chi In Lam, Charles Ho, Hio Lam Cheong, Qianzi Li, Chenyu Zhong, **Jerome Pak Lam Ng**, Cheung Kam Fai Peter, Vincent Kam Wai Wong*. Natural small-molecules reverse Xeroderma Pigmentosum Complementation Group C (XPC) deficient-mediated drug-resistance in renal cell carcinoma. *Phytomedicine*, **2024**, 124, 155310, doi: 10.1016/j.phymed.2023.155310.
12. Yaling Zeng, **Jerome P. L. Ng**, Linna Wang, Xiongfei Xu, Betty Yuen Kwan Law, Guobing Chen, Hang Hong Lo, Lijun Yang, Jiujie Yang, Lei Zhang, Liquan Qu, Xiaoyun Yun, Jing Zhong, Ruihong Chen, Dingqi Zhang, Yuping Wang, Weidan Luo, Congling Qiu, Baixiong Huang, Wenfeng liu, Liang Liu*, Vincent Kam Wai Wong*. Mutant p53^{R211*} ameliorates inflammatory arthritis in AIA rats via inhibition of TBK1-IRF3 innate immune response. *Inflammation Research*, **2023**, 72, 2199-2219, doi: 10.1007/s00011-023-01809-w.
13. Linna Wang, Baixiong Huang, Yaling Zeng, Jiujie Yang, Zhi Li, **Jerome P. L. Ng**, Xiongfei Xu1, Lu Su, Xiaoyun Yun1, Liquan Qu, Ruihong Chen, Weidan Luo, Yuping Wang, Chang Chen1, Lijun Yang, Yuanqing Qu, Wei Zhang, Joyce Tsz Wai Chan, Xingxia Wang, Betty Yuen Kwan Law, Simon Wing Fai Mok, Sookja Kim Chung, Vincent Kam Wai Wong. N-Acetylcysteine overcomes epalrestat-mediated increase of toxic 4-hydroxy-2-nonenal and potentiates the anti-arthritic effect of epalrestat in AIA model. *International Journal of Biological Sciences*, **2023**, 19, 4082-4102, doi: 10.7150/ijbs.85028.
14. Xingxia Wang, Wei Hu, Liquan Qu, Jian Wang, Anguo Wu, Hang Hong Lo, **Jerome P. L. Ng**, Yong Tang, Xiaoyun Yun, Jianhui Wu, Vincent Kam Wai Wong, Sookja Kim Chung, Linna Wang, Weidan Luo, Xiang Ji, Betty Yuen Kwan Law*. Tricin promoted ATG-7 dependent autophagic degradation of α -synuclein and dopamine release for improving cognitive and

motor deficits in Parkinson's disease. *Pharmacological Research*, **2023**, 196, 106874, doi: 10.1016/j.phrs.2023.106874.

15. Fang Ren[#], Ming Tan[#], **Jerome P. L. Ng**, An Guo Wu, Si Yu Yuan, Hui Zhang, Ji Hua Ren, Sheng Tao Cheng, Juan Zhang, Hang Hong Lo, Vincent Kam Wai Wong*, Betty Yuen Kwan Law*, Juan Chen*. Ciliatoside A, isolated from *Peristrophe japonica*, inhibits HBsAg expression and cccDNA transcription by inducing autophagy. *Antiviral Research*, **2023**, 209, 105482, doi: 10.1016/j.antiviral.2022.105482.
16. Giovanni Ribaudò, Xiaoyun Yun, Alberto Ongaroa, Erika Oselladorea, **Jerome P. L. Ng**, Richard K. Haynes, Betty Yuen Kwan Law, Maurizio Memo, Vincent Kam Wai Wong*, Paolo Coghi* and Alessandra Gianoncellia*. Combining computational and experimental evidence on the activity of antimalarial drugs on papain-like protease of SARS-CoV-2: A repurposing study. *Chemical Biology & Drug Design*, **2023**, 101, 809-1018, doi: 10.1111/cbdd.14187.
17. Jiujiè Yang[#], Zhi Li[#], Linna Wang, Xiaoyun Yun, Yaling Zeng, **Jerome P. L. Ng**, Kaixi Zhang, Hanghong Lo, Yan Wang, Kaixi Zhang, Betty Yuen Kwan Law, Vincent Kam Wai Wong*. The role of non-coding RNAs (miRNA and lncRNA) in the clinical management of rheumatoid arthritis. *Pharmacological Research*, **2022**, 186, 106549, doi: 10.1016/j.phrs.2022.106549.
18. Paolo Coghi, Ivan A. Yaremenko, Parichat Prommana, Jia Ning Wu, Rui Long Zhang, **Jerome P. L. Ng**, Yulia Yu Belyakova, Betty Yuen Kwan Law, Peter S. Radulov, Chairat Uthaiyibull*, Vincent Kam Wai Wong*, Alexander O. Terent'ev*. Antimalarial and Anticancer Activity Evaluation of Bridged Ozonides, Aminoperoxides, and Tetraoxanes. *ChemMedChem*, **2022**, 17, e202200328, doi: 10.1002/cmdc.202200328.
19. Paolo Coghi, Xiao Yun Yun, **Jerome P. L. Ng**, Betty Yuan Kwan Law, Maurizio Memo, Alessandra Gianoncelli, Vincent Kam Wai Wong*, Giovanni Ribaudò*. Exploring SARS-CoV-2 Delta variant spike protein receptor-binding domain (RBD) as a target for tanshinones and antimalarials. *Natural Product Research*, **2022**, 36, 6150-6155, doi: 10.1080/14786419.2022.2057492.
20. Si-Yu Yuan, Hai-Bo Yu, Zhen Yang, Yi-Ping Qin, Ji-Hua Ren, Sheng-Tao Cheng, Fang Ren, Betty Yuen Kwan Law, Vincent Kam Wai Wong, **Jerome P. L. Ng**, Yu-Jiao Zhou, Xin He, Ming Tan, Zhen-Zhen Zhang*, Juan Chen*. Pimobendan Inhibits HBV Transcription and Replication by Suppressing HBV Promoters Activity, *Frontiers in Pharmacology*, **2022**, 13, 837115, doi: 10.3389/fphar.2022.837115.
21. Giovanni Ribaudò*, Paolo Coghi*, Li Jun Yang, **Jerome P. L. Ng**, Andrea Mastinu, Maurizio Memo, Vincent Kam Wai Wong, Alessandra Gianoncelli. Computational and experimental insights on the interaction of artemisinin, dihydroartemisinin and chloroquine with SARS-CoV-2 spike protein receptor-binding domain (RBD). *Natural Product Research*, **2022**, 36, 5358-5363, doi: 10.1080/14786419.2021.1925894.

22. Hui-Miao Wang, Li Qun Qu, **Jerome P. L. Ng**, Wu Zeng, Lu Yu, Lin Lin Song, Vincent Kam Wai Wong, Cheng Lai Xia*, Betty Yuen Kwan Law*. Natural Citrus flavanone 5-demethylnobiletin stimulates melanogenesis through the activation of cAMP/CREB pathway in B16F10 cells. *Phytomedicine*, **2022**, 98, 153941, doi: 10.1016/j.phymed.2022.153941.
23. XiaoYun Yun, Yuhan Xie, **Jerome P. L. Ng**, Betty Yuen Kwan Law, Vincent Kam Wai Wong*, Paolo Coghi*,
2-Bromo-3-((1-(7-chloroquinolin-4-yl)-1H-1,2,3-triazol-4-yl)-methoxy)-benzaldehyde. *Molbank*, **2022**, 2022, M1351, doi: 10.3390/M1351.
24. Nuha Mahmoud, Mona Dawood, Qi Huang, **Jerome P. L. Ng**, Fang Ren, Vincent K.W. Wong*, Thomas Efferth*. Nimbolide inhibits 2D and 3D prostate cancer cells migration, affects microtubules and angiogenesis and suppresses B-RAF/p.ERK-mediated *in vivo* tumor growth. *Phytomedicine*, **2022**, 94, 153826, doi: 10.1016/j.phymed.2021.153826.
25. Paolo Coghi, Li Jun Yang, **Jerome P. L. Ng**, Richard K. Haynes, Maurizio Memo, Alessandra Gianoncelli, Vincent K. W. Wong*, Giovanni Ribaud*. A Drug Repurposing Approach for Antimalarials Interfering with SARS-CoV-2 Spike Protein Receptor Binding Domain (RBD) and Human Angiotensin-Converting Enzyme 2 (ACE2). *Pharmaceuticals*, **2021**, 14, 954, doi:10.3390/ph14100954.
26. Wu Zeng, An Guo Wu, Xiao-Gang Zhou, Imran Khan, Rui Long Zhang, Hang Hong Lo, Li Qun Qu, Lin Lin Song, Xiao Yun Yun, Hui Miao Wang, Juan Chen, **Jerome P. L. Ng**, Fang Ren, Si Yu Yuan, Lu Yu, Yong Tang, Guo Xin Huang, Vincent Kam Wai Wong, Sookja Kim Chung, Simon Wing Fai Mok, Da Lian Qin, Hua Lin Sun, Liang Liu*, W.L. Wendy Hsiao*, Betty Yuen Kwan Law*. Saponins isolated from *Radix polygalae* extend lifespan by modulating complement C3 and gut microbiota. *Pharmacological Research*, **2021**, 170, 105697, doi: 10.1016/j.phrs.2021.105697.
27. Paolo Coghi*, **Jerome P. L. Ng**, Ali A. Nasim, and Vincent K.W. Wong*. N-[7-Chloro-4-[4-(phenoxyethyl)-1H-1,2,3-triazol-1-yl]quinoline]-acetamide. *Molbank*, **2021**, 2021, M1213, doi: 10.3390/M1213.
28. Li Jun Yang, Rui Hong Chen, Sami Hamdoun, Paolo Coghi, **Jerome P. L. Ng**, David Wei Zhang, Xiaoling Guo, Chenglai Xia, Betty Yuen Kwan Law*, Vincent Kam Wai Wong*. Corilagin prevents SARS-CoV-2 infection by targeting RBD-ACE2 binding. *Phytomedicine*, **2021**, 87, 153591, doi: 10.1016/j.phymed.2021.153591.
29. Jiayun He, Shuk Mei Lam, **Jerome P. L. Ng**, Wing-Tak Wong, Pauline Chiu*. Intramolecular (4+3) Cycloadditions of Nitrogen-tethered Epoxy Enosilanes for the Synthesis of Heteropolycycles. *Chinese Chemical Letters*, **2019**, 30, 1523-1526, doi: 10.1016/j.ccllet.2019.04.051.
30. Fan Hu, **Jerome P. L. Ng**, Pauline Chiu*. Pyrroles as Dienes in (4+3) Cycloadditions.

Synthesis **2019**, *51*, 1073-1086, doi: 10.1055/s-0037-1611660.

31. Elizabeth H. Krenske*, Sarah Lam, **Jerome P. L. Ng**, Brian Lo, Sze Kui Lam, Pauline Chiu*, Kendall N. Houk*. Concerted Ring-Opening and Cycloaddition of Chiral Epoxy Enolsilanes with Dienes. *Angew. Chem. Int. Ed.* **2015**, *54*, 7422-7425, doi: 10.1002/anie.201503003.

著作

1. JiuJie Yang, **Jerome P. L. Ng**, Kaixi Zhang, Liang Liu and Vincent Kam Wai Wong. "Pathogenic Role of microRNA in Rheumatoid Arthritis" In Rheumatoid Arthritis, edited by Hechmi Toumi. London: *IntechOpen*, **2021**, doi: 10.5772/intechopen.99212.

專利

1. Vincent Kam Wai Wong, Liang Liu, Paolo Coghi, Betty Yuen Kwan Law, **Jerome Pak Lam Ng**. Tripterine derivative and preparation method and application thereof. *CN patent*, **2021**, CN111848722B.