

黃錦偉博士



職稱: 副教授

組學技術與創新藥物研究中心副主任

學院/部門: 埃爾文內爾博士生物物理與創新藥物實驗室，中藥品質研究國家重點實驗室

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簡介:

黃錦偉博士於 2006 年在香港大學取得化學博士學位，繼而轉往香港浸會大學中醫藥學院擔任博士後研究一職，並於 2009 年獲晉升為研究助理教授，致力于抗炎及抗癌研究。2011 年 9 月獲聘任為澳門科技大學中藥品質研究國家重點實驗室助理教授，並擔任組學技術與創新藥物研究中心副主任一職，在 2015 年更破格升職為副教授。

黃錦偉博士的研究範疇主要在腫瘤分子生物學，化學分子生物學與結構活性關係，以及 IKK- β - NF- κ B 傳遞信號通路等。同時，黃博士也專注於研究細胞自體吞噬與抗癌抗腦神經退化及對抗耐藥耐凋亡等問題，如天然化合物的自噬抗癌抗炎功效，天然小分子 SERCA 抑制劑及 AMPK 激活劑的抗耐藥耐凋亡作用，人參總提取物及其單一小分子衍生物的抗癌療效，發現及剖析在 IKK- β 蛋白酶上最新的藥靶點等，並分別於多個國際期刊上發表超過 120 篇 SCI 研究文章；同時亦擔任 *Frontiers in Pharmacology* 的副編輯及 *Phytomedicine* 的編委；近十年間共獲資助項目總金額超過二千萬元澳門幣。在現階段，黃博士專注於研究抗癌基因 p53 及 P-糖蛋白(P-gp)導致關節炎耐藥等問題；此外，在諾獎實驗室支持下，與香港新創健康科技品牌 eefit 依飛共同研發醫療及健康產品，當中包括抗 2019 新冠病毒精油等。黃博士亦是 25 個國際專利擁有者之一。在 2013-2018 年間，分別榮獲澳門中銀學術研究優秀獎、高等學校科學研究優秀成果獎自然科學獎一等獎(團體獎)、並先後獲得澳門特別行政區科學技術獎自然科學獎二等獎及一等獎(團體獎)。

教研領域

教學科目：生物化學、現代生物科技、中藥藥理實驗方法學、藥理實驗方法學、
分子及生物學、臨床藥理學、藥理學實驗、生物化學及分子生物學、
生物化學及分子生物學實驗、中醫學 / 生物醫學專題項目之醫學實驗
方法

研究方向：炎症及癌症、分子生物學、化學生物學

學歷

2006. 9 香港大學化學博士學位

2002. 8 香港科技大學生物學碩士學位

1999. 6 香港科技大學生物化學學士學位

教學經驗

2015.7 - 今 澳門科技大學中藥品質研究國家重點實驗室副教授

2011.9 - 2015.6 澳門科技大學中藥品質研究國家重點實驗室助理教授

2009.10 - 2011.8 香港浸會大學中醫藥學院研究助理教授

2006.12 - 2009.10 香港浸會大學中醫藥學院博士後研究員

學術成果(近 5 年)

1. Yun Zhang[†], Xing Wang[†], He Zhang, Hongmei Tang, Hang Hu, Songping Wang, **Vincent Kam Wai Wong***, Yuying Li* and Jun Deng*. Autophagy modulators from Chinese herb medicines: Mechanisms and therapeutic potentials for asthma. *Front. Pharmacol.* 12:710679. doi: 10.3389/fphar.2021.710679.
2. Mohit K. Tiwari,^{†,a} Paolo Coghi,^{†,b} Prakhar Agrawal,^{†,c} Dharmendra K. Yadav,^d Li Jun Yang,^e Qiu Congling,^e Dinkar Sahal,^{c,*} **Vincent Kam Wai Wong,^{e,*}** Sandeep Chaudharya,^{*}. Novel Halogenated Arylvinyl-1,2,4 Trioxanes as Potent Antiplasmodial as well as Anticancer Agents: Synthesis, Bioevaluation, Structure-Activity Relationship and In-silico Studies. *European Journal of Medicinal Chemistry*. <https://doi.org/10.1016/j.ejmech.2021.113685>

3. 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* and **Vincent Kam Wai Wong***. Synthesis, computational docking and biological evaluation of celastrol derivatives as dual inhibitors of SERCA and P-glycoprotein in cancer therapy. Submitted to *European Journal of Medicinal Chemistry*. Minor Revision
4. Xi Chen, Hui Zhang, Wu Zeng, Nick Wang, Hang Hong Lo, Chi Kio Ip, Li Jun Yang, W.L. Wendy Hsiao, Wai Man Sin, Chenglai Xia, Betty Yuen Kwan Law* and **Vincent Kam Wai Wong***. Far infrared irradiation suppresses experimental arthritis in rats by down-regulation of genes involved inflammatory response and autoimmunity. *Journal of Advanced Research*. Minor Revision
5. 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 May 29;105697.
6. Ivo Ricardo de Seabra Rodrigues Dias, Hang Hong Lo, Kaixi Zhang, Betty Yuen Kwan Law, Ali Adnan Nasim, Sookja Kim Chung#, **Vincent Kam Wai Wong#**, Liang Liu#. Potential therapeutic compounds from traditional Chinese medicine targeting endoplasmic reticulum stress to alleviate rheumatoid arthritis. *Pharmacological Research*. 2021 May 28;170:105696.
7. Paolo Coghi*, Jerome P. L. Ng, Ali Adnan Nasim, **Vincent Kam Wai Wong***. N-[7-Chloro-4-[4-(phenoxyethyl)-1H-1,2,3-triazol-1-yl] quinoline]-acetamide. *Molbank*. 2021(2), M1213
8. Giovanni Ribaudo*, Paolo Coghi*, Li Jun Yang, Jerome P. L. Ng, Andrea Mastinu, Maurizio Memo, **Vincent Kam Wai Wong** and 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*. 2021 May 12;1-6.
9. Guodong Li, Chung-Nga Ko, Dan Li, Chao Yang, Wanhe Wang, Guan-Jun Yang, Carmelo Di Primo, **Vincent Kam Wai Wong**, Yaozu Xiang, Ligen Lin, Dik-Lung Ma*, and Chung-Hang Leung*. Small molecule HIF-1 α stabilizer that accelerates diabetic wound healing. *Nature Communication*. 2021 Jun 7;12(1):3363.
10. Li Jun Yang*, Rui Hong Chen*, Sami Hamdoun, Paolo Coghi, Jerome Pak Lam Ng, David Wei Zhang, Xiaoling Guo, Chenglai Xia, Betty Yuen Kwan Law# and **Vincent Kam Wai Wong#**. Corilagin, a novel anti-SARS-CoV-2 agent targets RBD-

ACE2 binding to prevent viral infection. *Phytomedicine*. Volume 87, July 2021, 153591..

11. Douglas Ochora, Esezah Kakudidi, Jane Namukobe, Matthias Heydenreich, Paolo Coghi, Li Jun Yang, Edwin Mwakio, Ben Andagalu, Amanda Roth, Hoseah M Akala, **Vincent K. W. Wong** and Yenesew Abiy*. A new benzophenone and the Antiplasmodial activities of the constituents of *Securidaca longipedunculata*. *Natural Product Research*. <https://doi.org/10.1080/14786419.2021.1925272>
12. Xiaoang Li, Imran Khan, Wenrui Xia, Guoxin Huang, Liang Liu, Betty Yuen Kwan Law, Lin Yin, Weilin Liao, Waikit Long, Ruixuan Han, **Vincent Kam Wai Wong**, Chenglai Xia, Xiaoling Guo, Wendy Hsiao. Icariin enhances youth-like features by attenuating the declined gut microbiota in the aged mice. *Pharmacological Research*. Volume 168, June 2021, 105587
13. Klionsky DJ,,.....Betty Yuen Kwan Law,,.....**Vincent Kam Wai Wong**,...*et al*. Guidelines for the use and interpretation of assays for monitoring autophagy (4th edition). *Autophagy*. 2021 Feb 8;1-382.
14. Rui Hong Chen1*, Li Jun Yang1*, Sami Hamdoun1 , 4, Sookja Kim Chung2, Christopher Wai-kei Lam2, Kai Xi Zhang1, Xiaoling Guo3, Chenglai Xia3, Betty Yuen Kwan Law1# and **Vincent Kam Wai Wong1#**. 1,2,3,4,6-Pentagalloyl glucose, a RBD-ACE2 binding inhibitor to prevent SARS-CoV-2 infection. *Front. Pharmacol* 12:634176. doi: 10.3389/fphar.2021.634176.
15. **Vincent Kam-Wai Wong#**. Editorial overview: New technologies in 2020: Drug Resistance. *Current Opinion in Pharmacology*. 2020, 54: iii–vi.
16. An-Guo Wu*, Rong Pan*, Betty Yuen-Kwan Law*, Yong Tang, Jian-Ming Wu, Chang-Long He, **Vincent Kam-Wai Wong**, Lu Yu, Wen-Qiao Qiu, Jin-Feng Teng, Chong-Lin Yu#, Xiao-Gang, Zhou#, Da-Lian Qin#. Targeting autophagy as a therapeutic strategy for identification of ligandans from *Peristrophe japonica* in Parkinson's disease. *Signal Transduction and Targeted Therapy*. Accepted on 26 Nov, 2020.
17. Carolyne Chepkirui, Purity J. Ochieng, Biswajyoti Sarkar, Aabid Hussain, Chiranjib Pal, Li Jun Yang, Paolo Coghi, Hoseah M. Akala, Solomon Derese, Albert Ndakala, Matthias Heydenreich, **Vincent K. W. Wong**, Mate Erdelyi*, Abiy Yenesew*. Antiplasmodial and Antileishmanial Flavonoids from *Mundulea sericea*. *Fitoterapia* 2020 Nov 30;149:104796.
18. Moses Andima, Albert Ndakala, Solomon Derese, Sarkar Biswajyoti, Aabid Hussain, Li Jun Yang, Otieno Elsie Akoth, Paolo Coghi, Chiranjib Pal, Matthias Heydenreich, **Vincent Kam-Wai Wong** & Abiy Yenesew *. Antileishmanial and Cytotoxic Activity of Secondary Metabolites from *Tabernaemontana ventricosa* and Two *Aloe* Species. *Natural Product Research*. 2021 Jan 18;1-5.

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and Techniques for Tumor-targeted Systems”. Editors: Huang, Rongqin, Wang, Yi (Eds.). Publisher: Springer Singapore; ISBN: 978-981-15-5158-1.

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28. Bin Tang, Hang Hong Lo, W.L.Wendy Hsiao, Cheng Lei, Ka In U, Lu Yu, **Vincent Kam Wai Wong*** and Betty Yuen Kwan Law*. Adjuvant Herbal Therapy for Targeting Susceptibility Genes to Kawasaki Disease: An Overview of Epidemiology, Pathogenesis, Diagnosis and Pharmacological Treatment of Kawasaki Disease *Phytomedicine*. <https://doi.org/10.1016/j.phymed.2020.153208>.
29. Ivan A. Yaremenko‡, Paolo Coghi‡, Parichat Prommana, Congling Qiu, Peter S. Radulov, Yuanqing Qu, Yulia Yu Belyakova, Enrico Zanforlin, Vladimir A. Kokorekin, Yuki Yu Jun Wu, Fabrice Fleury, Chairat Uthaipibull*, **Vincent Kam Wai Wong***, and Alexander O. Terent’ev*. Synthetic peroxides promote apoptosis of cancer cells inhibiting of P-glycoprotein ABCB5. *ChemMedChem.*: **10.1002/cmdc.202000042, Front Cover**
30. Yun Zhang*, Linlin Guo*, Betty Yuen Kwan Law, Xiaobo Liang, Ning Ma, Guofeng Xu, Xiaoyun Wang, Xiefang Yuan, Hongmei Tang, Qi Chen, **Vincent Kam Wai Wong#** and Xing Wang#. Resveratrol decreases cell apoptosis through inhibiting DNA damage in bronchial epithelial cells. *International Journal of Molecular Medicine* DOI: 10.3892/ijmm.2020.4539
31. Ni Zhang¹, Hui Zhang¹, Betty Yuen Kwan Law¹, Ivo Ricardo De Seabra Rodrigues Dias¹, Cong Ling Qiu¹, Wu Zeng¹, Hu Dan Pan¹, Jin Yun Chen², Yan Fu Bai³, Jing Lv⁴, Li Qun Qu¹, Xi Chen¹, Qi Huang¹, Wei Zhang¹, Li Jun Yang¹, Lu Yu¹, Yu Han¹, Guo Xin Huang¹, Hui Miao Wang¹, Xiao Lei Sun¹, Yun Zhang¹, Hu Qiang He¹, Wei Dan Luo¹, Yao Xiao¹, Jian Zhou⁵, Ting Xu², Qing Chun Huang⁶, Min Wu², Zhi Sheng Huang³, Wei Liu⁴, **Vincent Kam Wai Wong^{1*}**, Liang Liu^{1*}. Sirtuin 5 Deficiency Increases the Severity in Rat with Adjuvant-Induced Arthritis. *Cellular & Molecular Immunology*. (2020). <https://doi.org/10.1038/s41423-020-0380-4>
32. Su-Wei Xu^{1,7}, Betty Yuen Kwan Law¹, Steven Li Qun Qu¹, Sami Hamdoun^{1,2}, Juan Chen³, Wei Zhang¹, Jian-Ru Guo¹, An-Guo Wu⁴, Simon Wing Fai Mok¹, David Wei Zhang¹, Chenglai Xia⁵, Yoshikazu Sugimoto⁶, Thomas Efferth^{2*}, Liang Liu^{1*} and **Vincent Kam Wai Wong^{1*}**. SERCA and P-glycoprotein inhibition and ATP depletion are necessary for celastrol-induced autophagic cell death and collateral sensitivity in multidrug-resistant tumor cells. *Pharmacological Research*. 153 (2020) 104660.

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35. Betty Yuen Kwan Law^a, Francesco Michelangeli^{b,c}, Yuan Qing Qu^a, Su-Wei Xu^d, Yu Han^a, Simon Wing Fai Mok^a, Ivo Ricardo de Seabra Rodrigues Dias^a, Masood-ul-Hassan Javed^e, Wai-Kit Chan^a, Wei-Wei Xue^f, Xiao-Jun Yao^{a,f}, Wu Zeng^a, Hui Zhang^a, Jing-Rong Wang^a, Liang Liu^{a*} and Vincent Kam Wai Wong^{a*}. Neferine induces autophagy-dependent cell death in apoptosis-resistant cancers via ryanodine receptor and Ca²⁺ dependent mechanism. **Scientific Reports**. (2019) 9:20034
36. Imran Khan, Sabrina Pathan, Xiao Ang Li, Wai Kit Leong, Wei Lin Liao, Vincent Kam Wai Wong and W.L. Wendy Hsiao. Far infrared radiation induces changes in gut microbiota and activates host's GPCRs in mice. **Journal of Advanced Research** (2019), doi: <https://doi.org/10.1016/j.jare.2019.12.003>
37. Fang Ren; Zhong-Wen Hu; Xiao Yang; Vincent K Wong; Hong-Yan Xu; Ji-Hua Ren; Shan Zhong; Xiao-Jiong Jia; Hui Jiang; Jie-Li Hu; Xue-Fei Cai; Wen-Lu Zhang; Fang-Long Yao; Hai-Bo Yu; Sheng-Tao Cheng; Hong-Zhong Zhou; Ai-Long Huang; Betty Y Law. Niacin analogue, 6-Aminonicotinamide, a novel inhibitor of hepatitis B virus and HBsAg secretion. **EBioMedicine**. 49 (2019), 232-246
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glycerophosphate-mediated vascular calcification and apoptosis via activation of mTOR-dependent autophagy and suppression of Wnt signaling. *Front. Pharmacol.*, 19 December 2019, <https://doi.org/10.3389/fphar.2019.01427>

41. Xiaolei Sun^{#1,2,3}, Anguo Wu^{#1,4}, Betty Yuen Kwan Law¹, Chaolin Liu², Wu Zeng¹, Alena Cong Ling Qiu¹, Yu Han¹, Yanzheng He^{2,3*} & **Vincent Kam Wai Wong^{1*}**. The active components derived from *Penthorum chinense* Pursh protect against oxidative-stress induced vascular injury via autophagy induction. *Free Radical Biology and Medicine*. 2019 Nov 2. pii: S0891-5849(19)31002-0.
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43. Teng Jinfeng, Qin Dalian, Mei Qibing, Qiu Wenqiao, Pan Rong, Xiong Rui, Zhao Ya, Betty Law, **Vincent Kam Wai Wong**, Tang Yong, Yu Chonglin, Jianming Wu, Feng Zhang and Wu An Gao. Polyphyllin VI, a saponin from *Trillium tschonoskii* Maxim. induces apoptotic and autophagic cell death via the ROS triggered mTOR signaling pathway in non-small cell lung cancer. *Pharmacology Research*. 2019 Sep;147:104396.
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45. Yu Han¹, Yuan Qing Qu¹, Simon Wing Fai Mok¹, Juan Chen², Chenglai Xia³, Hu Qiang He¹, Zheng Li¹, Wei Zhang¹, Cong Ling Qiu¹, Liang Liu^{1*}, Betty Yuen Kwan Law^{1*} and **Vincent Kam Wai Wong^{1*}**. A Novel Drug Resistance Mechanism: Genetic loss of xeroderma pigmentosum complementation group C (XPC) enhances glycolysis-mediated drug resistance in DLD-1 colon cancer cells. *Frontiers in Pharmacology*. 2019 Sep 10;10:912.
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47. **Vincent Kam Wai Wong#**, Congling Qiu#, Su-Wei Xu#, Betty Yuen Kwan Law, Wu Zeng, Hui Wang, Francesco Michelangeli, Ivo Ricardo De Seabra Rodrigues Dias, Yu Han, Ni Zhang, Yuan Qing Qu, Tsz Wai Chan, Simon Wing Fai Mok, Xi Chen, Lu Yu, Hudan Pan, Sami Hamdoun, Thomas Efferth, Wen Jing Yu, Wei

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