# Prof. Vincent Kam Wai Wong



**Position**: Professor,

Assistant Director of SKL

Executive Director of Dr. Neher's

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Prof. Vincent Kam Wai Wong received both his B.S. degree (1999) and MPhil degree (2002) from Hong Kong University of Science and Technology. In 2006, he received his Ph.D. Degree from the University of Hong Kong and then worked as post-doctoral research fellow at School of Chinese Medicine in Hong Kong Baptist University for three years. In 2009, he was promoted to research assistant professor (RAP) in the same department and started his own research area. In 2011, he started to be an assistant professor in State Key Laboratory of Macau University of Science and Technology engaging in the research field of anti-inflammation and anti-cancer. In 2015, he achieved the special promotion standard to associate professor. In 2022, he was promoted as full professor.

Prof. Vincent Wong is experienced in cancer molecular biology, chemical biology and structural activity relationship, and IKK-β – NF-κB signaling. His research focus on relationship between autophagy and multidrug-resistant, apoptosis-resistant anti-tumor effect via SERCA inhibition and AMPK activation. Recently, Prof. Wong deeply interested in the involvement of p53 and P-glycoprotein in drug-resistant phenotype of rheumatoid arthritis. Notably, their research team have recently unraveled the etiology behind the elevated incidence of rheumatoid arthritis in middle-aged and elderly populations and successful published the works in Nature Communications. In addition, with the support of Nobel Laureate Laboratory, he has been cooperating with an innovative technology brand "eefit" in Hong Kong to research and develop medical and health products, e.g. eefit essential oil for COVID-19. Furthermore, Prof. Wong has published over 170 peer-reviewed SCI journals including Nature Communications, Autophagy, Cellular and Molecular Immunology, Angewandte chemie, Hepatology, Journal of Hepatology, Journal of Advanced Research, Clinical Cancer Research, Organic Letters, Cell Death and Disease, Cancer Letters, British Journal of Pharmacology, Pharmacological Research and etc. He obtained more than 30 US, Australia and China patents with the works related to the discovery of novel IKK-beta inhibitor, novel autophagy enhancer for treatment of MDR cancer and neurodegenerative diseases. Since 2013, Prof. Wong achieved the Bank of China Excellent Research Award, First-class High Institute Natural Science Award in China, and Second and First-class Natural Science Award in Macao. Besides, he is one of the world top 2% scientists announced by Standard University.

### **EDUCATION**

2002-2006	The University of Hong Kong
1999-2002	The Hong Kong University of Science and Technology
1996-1999	The Hong Kong University of Science and Technology

### **WORK HISTORY**

7/2022-present Macau University of Science and Technology

Full Professor

**Assistant Director** 

(State Key Laboratory of Quality Research in Chinese

Medicine)

**Executive Director** 

(Dr. Neher's Biophysics Laboratory for Innovative Drug

Discovery)

**Deputy Supervisor** 

(Center for Omics Technology and Innovative Drug

Research)

7/2015-6/2022 Macau University of Science and Technology

**Associate Professor** 

(State Key Laboratory of Quality Research in Chinese

Medicine)

Deputy Supervisor

(Center for Omics Technology and Innovative Drug

Research)

9/2011-6/2015 Macau University of Science and Technology

**Assistant Professor** 

(State Key Laboratory of Quality Research in Chinese

Medicine)

**Deputy Supervisor** 

(Center for Omics Technology and Innovative Drug

Research)

10/2009-8/2011 Hong Kong Baptist University

Research Assistant Professor (Centre for Cancer and

07/2006-10/2009

# **Hong Kong Baptist University**

Post-doctoral-fellow (School of Chinese Medicine)

## **Selected Publications (Recent 5 years)**

- 1. Hui Miao Wang, Hong Juan Lai, An Guo Wu, Yong Tang, Lin Lin Song, Hang Hong Lo, Io Nam Wong, Vincent Kam Wai Wong & Betty Yuen-Kwan Law\*. Melanogenic effects of 5-demethylnobiletin on mouse model of chemical-induced vitiligo. *Journal of Functional Foods.* https://doi.org/10.1016/j.jff.2023.105962
- 2. 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 and Vincent Kam Wai Wong\*. Natural small-molecules reverse Xeroderma Pigmentosum Complementation Group C (XPC) deficient-mediated drug-resistance in renal cell carcinoma. *Phytomedicine*. https://doi.org/10.1016/j.phymed.2023.155310
- 3. Ding-qi Zhang\*, Qin-hai Ma\*, Meng-chu Yang\*, Yulia Yu Beliakova, Zi-feng Yang, Peter S. Radulov, Rui-hong Chen, Li-jun Yang, Jing-yuan Wei, Yu Tong Peng, Wu Yan Zheng, Ivan A. Yaremenko, Alexander Terent'ev#, Paolo Coghi#, Vincent Kam Wai Wong#. Peroxide derivative as SARS-CoV2 entry inhibitors. *Viral Research*, 2023 Dec 12:340:199295.
- 4. 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, Liqun 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<sup>R211\*</sup> ameliorates inflammatory arthritis in AIA rats via inhibition of TBK1-IRF3 innate immune response. *Inflammation Research*. 2023 Dec;72(12):2199-2219..
- 5. Lu Yu, Huimiao Wang, Qianfang Yao, Keru Li, Liqun Qu, Bin Tang, Wu Zeng, Gan Qiao, Yong Tang, Guishan Hu, Guangqiang Hu, Vincent Kam-Wai Wong, Qiong Wang, Dalian Qin, Jianming Wu, Xiaogang Zhou, Xiaolei Sun, Betty Yuen-Kwan Law\*, Anguo Wu\*. Thonningianin A from Penthorum chinense Pursh as a targeted inhibitor of Alzheimer's disease-related β-amyloid and Tau proteins. *Phytotherapy Research* Accepted
- 6. Jialing Shen, Cheng Zhang, Yong Liu, Qianqian Wang, Pengyun Li, Runyu Liu, Vincent Kam Wai Wong, Chunxiang Zhang, xiaolei Sun. L-type calcium ion channel-mediated activation of autophagy in vascular smooth muscle cells via

- thonningianin A (TA) alleviates vascular calcification in type 2 diabetes mellitus. *European Journal of Pharmacology.* 2023 Nov 15:959:176084.
- 7. Liu, menghan, Tang, Yong, Qu, Li Qun, Song, Lin Lin, Lo, Hang Hong, Zhang, Rui Long, Yun, Xiaoyun, Wang, Hui-Miao, Chan, Joyce Tsz Wai, Wu, Jian Hui, Wang, Cai Ren, Wong, Vincent Kam Wai, Wu, An Guo, Law, Betty Yuen Kwan. Raddeanin A isolated from Anemone raddeana Regel improves pathological and cognitive deficits of the mice model of Alzheimer's disease by targeting β-amyloidosis. *Phytomedicine*. 122 (2024) 155121.
- 8. Jerome P. L. Ng§, Yun Xiao Yun§, Ali Adnan Nasim, Alessandra Gianoncelli, Betty Yuan Kwan Law, Giovanni Ribaudo\*, Vincent Kam Wai Wong\* and Paolo Coghi\*. Synthesis, docking studies and biological evaluation of 1H-1,2,3-triazole-7-chloroquinoline derivatives against SARS-CoV-2. *Bioorganic Chemistry.* 2023 Dec:141:106882.
- Richa Sharma, Lalit Yadav, Ali Adnan Nasim, Ravi Kant Yadav, Ruihong Chen, Neha Kumari, Fan Ruiqi, Ashoke Sharon, Nawal Kishore Sahu, Sirish Kumar Ippagunta, Paolo Coghi \*, Vincent Kam Wai Wong \*, Sandeep Chaudhary\*. Chemo-/Regio-Selective Synthesis of Novel Functionalized Spiro[pyrrolidine-2,3'-oxindoles] under Microwave Irradiation and Their Anticancer Activity *Molecules*. 2023, 28(18), 6503.
- 10. Xingxia Wang†, Wei Hu†, Liqun 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 Oct:196:106874.
- 11. Linna Wang, Baixiong Huang, Yaling Zeng, Jiujie Yang, Zhi Li, Jerome P. L. Ng, Xiongfei Xu, Lu Su, Xiaoyun Yun, Liqun Qu, Ruihong Chen, Weidan Luo, Yuping Wang, Chang Chen, 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. Int J Biol Sci 2023 Aug 6;19(13):4082-4102.
- 12. Weidan Luo, Yuping Wang, Jun Lv, Yong Liu, Lijun Yang, Yuanqing Qu, Zicong Lin, Xiongfei Xu, Linna Wang, Ruihong Chen, Jiujie Yang, Yaling Zeng, Ruilong Zhang, Baixiong Huang, Linlin Song, Xiaoyun Yun, Xi Chen, Wei Zhang, Kaixi Zhang, Huimiao Wang, Xingxia Wang, Liqun Qu, Menghan Liu, Liang Liu\*, Betty Yuen Kwan Law\*, Vincent Kam Wai Wong\*. Age-related self-DNA

- accumulation may accelerate arthritis in rats and in human rheumatoid arthritis. *Nat Commun.* 2023 Jul 20;14(1):4394.
- 13. Hoi Hei Tam, Dongxing Zhu, Samuel Sze King Ho, Heng Wai Vong, Vincent Kam Wai Wong, Simon Wing-Fai Mok\* and Io Nam Wong\*. Potential enhancement of post-stroke angiogenic response by targeting the oligomeric aggregation of p53 protein. *Front. Cell. Neurosci.* 2023 Jul 18:17:1193362.
- 14. Feng-Dan Zhu<sup>†</sup>, Xue Chen<sup>†</sup>, Lu Yu<sup>†</sup>, Meng-Ling Hu, Yi-Ru Pan, Da-Lian Qin, Jian-Ming Wu, Ling Li, Betty Yuen-Kwan Law, Vincent Kam-Wai Wong, Xiao-Gang Zhou\*, An-Guo Wu\*, Dong-Sheng Fan\*. Targeting autophagy to discover the Piper wallichii petroleum ether fraction exhibiting antiaging and anti-Alzheimer's disease effects in Caenorhabditis elegans. *Phytomedicine*. 2023 Aug;117:154916.
- 15. Richa Sharma<sup>1</sup>, Mohit Kumar Tiwari<sup>1</sup>, Ali Adnan Nasim, Dharmendra Kumar Yadav, Paolo Saul Coghi\*, Vincent Kam Wai Wong\*, Prof. Sandeep Chaudhary\*. Artemisinin-Inspired Novel Functionalized Aryloxy-Arylvinyl-1,2,4-trioxanes as Potent Anticancer Agents: Design, Synthesis, Bioevaluation, SAR and in silico Studies. *Journal of Molecular Structure*. Volume 1288, 15 September 2023, 135707.
- 16. Ying-Qi Song, Guo-Dong Li, Dou Niu, Feng Chen, Shaozhen Jing, Vincent Kam Wai Wong, Wanhe Wang\* & Chung-Hang Leung\*. A robust luminescent assay for screening alkyladenine DNA glycosylase inhibitors to overcome DNA repair and temozolomide drug resistance. *Journal of Pharmaceutical Analysis* 2023 May;13(5):514-522.
- 17. Yuan-Qing Qu<sup>a,b\*</sup>, Lin-Lin Song<sup>a\*</sup>, Su-Wei Xu<sup>a,c</sup>, Margaret Sum Yee Yu<sup>a</sup>, Onat Kadioglu<sup>d</sup>, Francesco Michelangeli<sup>e</sup>, Betty Yuen Kwan Law<sup>a</sup>, Thomas Efferth<sup>d</sup>, Christopher Wai-Kei Lam<sup>b#</sup>, Vincent Kam Wai Wong<sup>a#</sup>. Pomiferin targets SERCA, mTOR, and P-gp to induce autophagic cell death in apoptosis-resistant cancer cells, and reverses the MDR phenotype in cisplatin-resistant tumors *in vivo*. *Pharmacological Research*. 2023 May:191:106769.
- 18. Ou, Yi, You, Zonglin, Yao, Min, Xue, Xiu, Chen, Min, Wu, Rihui, Gan, Li-She, Li, Dongli, Wu, Panpan, Xu, Xuetao, Wong, Wing-Leung, Wong, Vincent Kam Wai, Liu, Wenfeng, Ye, Jiming, Jin, Jingwei. Naproxen-Derived New Compound Inhibits the NF-κB, MAPK and PI3K/Akt Signaling Pathways Synergistically with Resveratrol in RAW264.7 Cells. *Molecules* 2023 Apr 12;28(8):3395.
- 19. Linlin song, Yuan Qing Qu, Yong Pei Tang, Xi Chen, Hang Hong lo, Li Qun Qu, Xiao Yun Yun, Vincent Kam Wai Wong, Rui Long Zhang, Hui Miao Wang, Meng Han Liu, Wei Zhang, Hui Xia Zhang, Joyce Tsz Wai Chan, Cai Ren Wang, Jian Hui Wu, Betty Yuen Kwan Law\*. Hyperoside alleviates toxicity of

- β-amyloid via endoplasmic reticulum-mitochondrial calcium signal transduction cascade in APP/PS1 double transgenic Alzheimer's disease mice. *Redox Biology* 2023 May;61:102637.
- 20. Shijie Fu, Yujian Lan, Guoyou Wang, Dingsu Bao, Bo Qin, Qiu Zheng, Huan Liu, Vincent Kam Wai Wong\*. External stimulation: A potential therapeutic strategy for tendon-bone healing. *Front Bioeng Biotechnol.* 2023 Mar 31;11:1150290.
- 21. Congling Qiu<sup>#</sup>, Joyce Tsz Wai Chan<sup>#</sup>, David Wei Zhang<sup>#</sup>, Io Nam Wong, Yaling Zeng, Betty Yuen Kwan Law, Simon Wing Fai Mok, Ivo Ricardo De Seabra Rodrigues Dias, Wenfeng Liu, Liang Liu\* & Vincent Kam Wai Wong\*. The potential development of drug resistance in rheumatoid arthritis patients identified with p53 mutations. *Genes & Diseases*. 2023 Mar 24;10(6):2252-2255.
- 22. Guodong Li<sup>1</sup>, Qi Huang<sup>1</sup>, Vincent Kam Wai Wong<sup>#</sup>, Wanhe Wang<sup>#</sup>, Chung-Hang Leung<sup>#</sup>. Development of a dual targeting scaffold of SET7/MLL inhibitor for castration-resistant prostate cancer treatment. *Genes & Diseases*. 2023 Nov; 10(6): 2260–2262.
- 23. Yunjian Ma, Zongquan Li, Hao Zhang, Vincent Kam Wai Wong, Frank Hollmann\*, Yonghua Wang\*. Bienzymatic Cascade Combining a Peroxygenase with an Oxidase for the Synthesis of Aromatic Aldehydes from Benzyl Alcohols. *Catalysts.* 2023, 13(1), 145.
- 24. Ren Fang, Tan Ming, Jerome P. L. Ng, Wu An Guo, Yuan Si Yu, Zhang Hui, Ren Ji Hua, Cheng Sheng Tao, Zhang Juan, Lo Hang Hong, 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 Jan;209:105482.
- 25. Giovanni Ribaudo•, Xiao Yun Yun•, Alberto Ongaro, Erika Oselladore, Jerome P. L. Ng, Richard K. Haynes, Betty Yuen Kwan Law, Maurizio Memo, Vincent Kam Wai Wong\*, Paolo Coghi\* and Alessandra Gianoncelli\*. Combining computational and experimental evidence on the activity of antimalarial drugs on papain-like protease of SARS-CoV-2: A repurposing study. *Chem Biol Drug Des.* 2023 Apr;101(4):809-818.
- 26. Chang-Long He, Yong Tang, Xue Chen, Tao Long, Yan-Ni He, Jing Wei, Jian-Ming Wu, Cai Lan, Lu Yu, Fei-Hong Huang, Cong-Wei Gu, Jian Liu, Chong-Lin Yu, Vincent Kam-Wai Wong, Betty Yuen-Kwan Law, Da-Lian Qin, An-Guo Wu, Xiao-Gang Zhou. Folium Hibisci Mutabilis extract, a potent autophagy enhancer, exhibits neuroprotective properties in multiple models of neurodegenerative diseases. *Phytomedicine*. 2023 Jan;109:154548.
- 27. Xi Chen, Jiaqi Li, Ren Zhang, Yao Zhang, Xiaoxuan Wang, Elaine Lai-Han Leung, Lijuan Ma, Vincent Kam Wai Wong#, Liang Liu#, Erwin Neher#, Haijie

- Yu<sup>#</sup>. Suppression of PD-L1 release from small extracellular vesicles promotes systemic anti-tumor immunity by targeting ORAI1 calcium channels. *Journal of Extracellular Vesicles* 2022 Dec;11(12):e12279.
- 28. Lin Yin, Guoxin Huang, Imran Khan, Lu Su, Wenrui Xia, Betty Yuen Kwan Law, Vincent Kam Wai Wong, Qiang Wu, Jingyi Wang, Wai Kit Leong and W. L. Wendy Hsiao. *Poria cocos* polysaccharides exert prebiotic function to attenuate the adverse effects and improve the therapeutic outcome of 5-FUin ApcMin/+ mice. *Chinese Medicine* 2022 Oct 3;17(1):116.
- 29. Jiujie Yang<sup>#</sup>, Zhi Li<sup>#</sup>, Linna Wang, Xiaoyun Yun, Yaling Zeng, Jerome P.L. Ng, Hanghong Lo, Yan Wang, Kaixi Zhang, Betty Yuen Kwan Law and Vincent Kam Wai Wong\*. The role of non-coding RNAs (miRNA and lncRNA) in the clinical management of rheumatoid arthritis. *Pharmacological Research*. 2022 Dec; 186:106549.
- 30. Zonglin You, Yonglian Li, Min Chen, Vincent Kam Wai Wong, Kun Zhang, Xi Zheng, Wenfeng Liu\*. Inhibition of plant essential oils and their interaction in binary combinations against tyrosinase. *Food Nutr Res.* 2022 Dec 27:66.
- 31. Li Zhang, Yuan-Yuan Yong, Lan Deng, Jing Wang, Betty Yuen-Kwan Law, Meng-Ling Hu, Jian-Ming Wu, Lu Yu, Vincent Kam-Wai Wong, Chong-Lin Yu, Da-Lian Qin, Xiao-Gang Zhou and An-Guo Wu. Therapeutic potential of Polygala saponins in neurological diseases. *Phytomedicine*. 2023 Jan;108:154483.
- 32. Xiao-Gang Zhou, Wen-Qiao Qiu, Lu Yu, Rong Pan, Jin-Feng Teng, Zhi-Pei Sang, Betty Yuen-Kwan Law, Ya Zhao, Li Zhang, Lu Yan, Yong Tang, Xiao-Lei Sun, Vincent Kam Wai Wong, Chong-Lin Yu, Jian-Ming Wu#, Da-Lian Qin# & An-Guo Wu#. Targeting microglial autophagic degradation of the NLRP3 inflammasome for identification of thonningianin A in Alzheimer's disease. *Inflammation and Regeneration* 2022 Aug 3;42(1):25.
- 33. Zonglin You, Yonglian Li, Kun Zhang, Xi Zheng, Vincent Kam Wai Wong, Wenfeng Liu. Inhibitory effect of plant essential oils on α-glucosidase. *Food Science and Biotechnology (2022).* 2022 Aug 9;31(12):1593-1602.
- 34. 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 Uthaipibull\*, Vincent Kam Wai Wong\*, and Alexander O. Terent'ev\*. Antimalarial and Anticancer Activity Evaluation of Bridged Ozonides, Aminoperoxides, and Tetraoxanes. *ChemMedChem*, 2022 Oct 19;17(20):e202200328.
- 35. Jerome Ng, Yu Han, Li Jun Yang, Lyn-Marie Birkholtz, Dina Coertzen, Ho Ning Wong, Richard K. Haynes\*, Paolo Coghi\* and 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 Sep 2;13:988748.
- 36. 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 Pak Lam Ng, Yu-Jiao Zhou, Xin He, Ming Tan, Zhen-Zhen Zhang and Juan Chen. Pimobendan inhibits HBV transcription and replication by suppressing HBV promoters activity. *Front Pharmacol.* 2022 Jun 3;13:837115.
- 37. Zhenxiong Gao, Tingting Fan, Linbo Chen, Mengchu Yang, Vincent Kam Wai Wong, Dawei Chen, Zijian Liu, Yaoyao Zhou, Weibin Wu, Zixuan Qiu, Cunlong Zhang, Yuan Li, Yuyang Jiang. Design, Synthesis and Antitumor Evaluation of Novel 1H-indole-2-carboxylic Acid Derivatives Targeting 14-3-3η Protein. *European Journal of Medicinal Chemistry*. Volume 238, 5 August 2022, 114402
- 38. Paolo Coghi<sup>a1</sup>, Xiao Yun Yun<sup>b1</sup>, Jerome P. L. Ng<sup>b</sup>, Maurizio Memo<sup>c</sup>, Alessandra Gianoncelli<sup>c</sup> Vincent Kam Wai Wong<sup>b\*</sup> and Giovanni Ribaudo<sup>c\*</sup>. Exploring SARS-CoV-2 Delta Variant Spike Protein Receptor-Binding Domain (RBD) as a Target for Tanshinones and Antimalarials. *Natural Product Research*. 2022 Mar 25;1-6.
- 39. Jerome P. L. Ng, Mohit K. Tiwari, Ali Adnan Nasim, Rui Long Zhang, Yuanqing Qu, Richa Sharma, Betty Yuen Kwan Law, Dharmendra Kumar 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(3), 360
- 40. Xiaoyun Yun, Yuhan Xie, Jerome P. L. Ng, Betty Yuen Kwan Law, Vincent Kam Wai Wong\*, and Paolo Coghi\*. 2-Bromo-3-((1-(7-chloroquinolin-4-yl)-1H-1,2,3-triazol-4-yl)-methoxy)-benzalde hyde. *Molbank* 2022(1), M1351; https://doi.org/10.3390/M1351
- 41. Waikit Leong, Guoxin Huang, Weilin Liao, Wenrui Xia, Xiaoang Li, Ziren Su, Liang Liu, Qiang Wu, Vincent Kam Wai Wong, Betty Yuen Kwan Law, Chenglai Xia, Xiaoling Guo, Imran Khan#, W.L.Wendy Hsiao#. Traditional Patchouli essential oil modulates the host's immune responses and gut microbiota and exhibits potent anti-cancer effects in ApcMin /+ mice. *Pharmacological Research* 2022 Jan 12;106082.
- 42. 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 Jan 19;98:153941.
- 43. Bin Tang, Wu Zeng, Lin Lin Song, Hui Miao Wang, Li Qun Qu, Hang Hong Lo, Lu Yu, An Guo Wu, Vincent Kam Wai Wong \*, Betty Yuen Kwan Law \*. Exosomal delivery of neferine for attenuation of neurodegenerative disease proteins and motor deficit in Alzheimer's disease mice via enhancement of blood brain barrier permeability. *Pharmaceuticals*. 2022, 15, 83. https://doi.org/10.3390/ph15010083
- 44. Wen-Qiao Qiu; Wei Ai; Feng-Dan Zhu; Yue Zhang; Min-Song Guo; Betty Yuen-Kwan Law; Jian-Ming Wu; Vincent Kam-Wai Wong; Yong Tang; Lu Yu; Qi Chen; Chong-Lin Yu; Xiao-Gang Zhou; Da-Lian Qin, Anguo Wu. Polygala saponins inhibit NLRP3 inflammasome-mediated neuroinflammation via SHP2-Mediated mitophagy. *Free Redical Biology & Medicine*. 2021 Dec 20;179:76-94.
- 45. Yoke Mooi Ng, Paolo Coghi, 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 Cyclotriveratrilene. *Polymers(Basel)*. 2021 Nov 26;13(23), 4133.
- 46. Cai-Ren Wang, Hong-Wei Chen, Yan Li, Ming-Yue Zhou, Vincent Kam-Wai Wong, Zhi-Hong Jiang\*, Wei Zhang\*. Network pharmacology exploration reveals anti-apoptosis as a common therapeutic mechanism for non-alcoholic fatty liver disease treated with blueberry leaf polyphenols. *Nutrients.* 2021 Nov 13;13(11):4060.
- 47. Nuha Mahmoud <sup>a</sup>, Mona Dawood <sup>a</sup>, Qi Huang <sup>b</sup>, Jerome P. L. Ng <sup>b</sup>, Fang Ren <sup>b</sup>, Vincent K. W. Wong <sup>b,c\*</sup>, Thomas Efferth <sup>a\*</sup>. 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*. https://doi.org/10.1016/j.phymed.2021.153826.
- 48. Sha-Sha Cheng, Yuan-Qing Qu, Jia Wu, Guan-Jun Yang, Hao Liu, Wanhe Wang, Qi Huang, Feng Chen, Guodong Li, Chun-Yuen Wong, Vincent Kam Wai Wong\*, Dik-Lung Ma\*, Chung-Hang Leung\*. Inhibition of the CDK9–cyclin T1 protein–protein interaction as a new approach against triple-negative breast cancer. *Acta Pharmaceutica Sinica B.* Accepted
- 49. Hu-Qiang He, Yuan-Qing Qu, Cong-ling Qiu, Yu Han, Ivo Ricardo de Seabra Rodrigues Dias, Yong Liu, Jie Zhang, An-Guo Wu, Cheng-Wen Wu, Simon Wing Fai Mok, Yan-Zheng He\* and Vincent Kam Wai Wong\*. Suppression of Autophagy and Apoptosis Rescue Human Vascular Smooth Muscle Cells from AGEs-induced Calcification. *Frontiers in Pharmacology.* Accepted

- 50. Paolo Coghi, Li Jun Yang, Jerome P. L. Ng, Richard K. Haynes, Maurizio Memo, Alessandra Gianoncelli, Vincent Kam Wai Wong\* and Giovanni Ribaudo\*. 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(10), 954; https://doi.org/10.3390/ph14100954
- 51. 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 in inflammatory response and autoimmunity. *Journal of Advanced Research*. 2021 Sept 1; https://doi.org/10.1016/j.jare.2021.08.015
- 52. Dingqi Zhang\*, Sami Hamdoun\*, Ruihong Chen\*, Lijun Yang\*, Chi Kio Ip, Yuanqing Qu, Runfeng Li, Haiming Jiang, Zifeng Yang#, Sookja Kim Chung#, Liang Liu# and Vincent Kam Wai Wong#. Identification of natural compounds as SARS-CoV-2 entry inhibitors by molecular docking-based virtual screening with bio-layer interferometry. *Pharmacological Research.* 2021 Aug 14;172:105820. doi: 10.1016/j.phrs.2021.105820.
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- 54. 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. *Eur J Med Chem. 2021 Jul 10;224:113685. doi: 10.1016/j.ejmech.2021.113685*.
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- 56. 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,

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#### ACADEMIC AWARDS

- 1. 2013 Bank of China Excellent Research Award Winner
- 2014 Science and Technology Award of Macao Special Administrative Region-Second-class Natural Science Award
- 3. 2015 高等學校科學研究優秀成果獎自然科學獎一等獎
- 4. 2016 Science and Technology Award of Macao Special Administrative Region-First-class Natural Science Award

- 5. 2016 Zhongzhu Awards for Life Science Recognizing First Prize in Research
- 6. 2017 Zhongzhu Awards for Life Science Recognizing First Prize in Service
- 7. 2018 高等學校科學研究優秀成果獎自然科學獎一等獎
- 8. Zhongzhu Awards for Life Science Recognizing First Prize in Service 中珠醫療 生命科學科研 二等獎 2018
- 9. 澳門科技大學防疫抗疫應急優秀團隊個人評選及表彰獎勵計劃 (2020) 雲課堂教學傑出獎 (Outstanding Performance Award in Online Teaching)
- 10. 科學中國人雜誌訪問(2021年6月): 找准人生"靶点"实现科研梦想