

科學技術發展基金項目(進行中) / FDCT Projects (In Progress)

項目編號 Project No.	項目名稱 Project Title	項目負責人 Project Leader
<u>2016 年批示項目</u>		
112/2014/A3	“電腦是怎麼看的”從計算與模型化的角度 “How does a computer see” a computational and modeling perspective	梁勇 Yong Liang
<u>2017 年批示項目</u>		
102/2016/A3	類風關腸微生態、代謝組、MHC 的相關性和干預新策略 Studies on the co-relation among gut microflora, metabonomics and MHC of Rheumatoidarthritis patients and the new intervention strategy	劉良 Liang Liu
103/2016/A3	探討絞股藍皂苷對腸微生態及宿主免疫系統的調節機制以達其預防及治療食物性（花生及堅果類）過敏癥的功能 Investigation of the functionality and mechanism of Gynostemma pentaphyllum saponins on food (peanut and tree nuts) allergy through the modulation of commensal gut bacteria and the host immune responses	蕭文鸞 Wendy Wen-Luan Hsiao
003/2017/A1	白芍總苷聯合生物利用度增效劑的自微乳化納米製劑研究以及對類風濕性關節炎的治療 Self-nanoemulsifying drug delivery system of total glucosides of paeony and its bioavailability enhancer for the treatment of rheumatoid arthritis	謝瑩 Ying Xie
009/2017/A1	解碼細胞—細胞對話：基於多維分析技術的中藥對外泌體分泌及成分的影響研究 Decoding cell-cell talk: influence study of exosomes secretion and composition for TCM using multi-dimensional analytical approaches	伍建林 Jian-Lin Wu
054/2017/A2	中藥與西藥聯合治療耐藥性前列腺癌的臨床前功效和機理研究 Determination of pre-clinical efficacy and mechanistic study of an herb-drug combination for treating resistant prostate cancer	林偉基 Christopher Wai-Kei Lam
062/2017/A2	基於基因組中抗性相關基因多態性的道地中藥材質量研究 Development of origin identification technology for geo-herb through investigating the polymorphism of resistance genes	周華 Hau Zhou
082/2017/A2	嶺南中藥材南板藍根質量標準的研究 Research on quality standard of Lingnan chinese materia medica-baphicacanthis cusiae rhizoma et radix	王靜蓉 Jing-Rong Wang
<u>2018 年批示項目</u>		
125/2017/A3	冬蟲夏草總提物及其活性成分預防慢阻肺發生和急性加重的作用機制研究 Effects and mechanisms of prophylactic Cordyceps sinensis and the active ingredients in preventing chronic obstructive pulmonary disease and its acute exacerbation	鍾南山 Nan-Shan Zhong
129/2017/A3	基於組織器官晶片的太空空間環境下器官功能衰退機制和藥物安全性評價研究	羅國安 Guo-An Luo

	Research on organ adaptation and drug safety evaluation during space flight based on organ-on-a-chip technology	
130/2017/A3	中藥攪香烯治療非小細胞肺癌的靶標發現及逆轉酪氨酸激酶抑制劑耐藥的機制研究 Targets discovery and mechanism research of reversing TKI resistance of TCM elemene in the treatment of non-small cell lung cancer	吳其標 Qi-Biao Wu
0003/2018/A1	鑒定和靶向代謝節點來重塑 T 淋巴細胞的抗腫瘤活性 Restoring anti-cancer activity of T cell by targeting metabolic checkpoint	范星星 Xing-Xing Fan
0017/2018/A1	基於 IKKbeta knock-in 小鼠研究炎症中蛋白降解的穩態調控機制及藥物作用新靶標 Study of proteostasis in inflammation and potential drug targets in IKKβ knock-in mice	李 婷 Ting Li
0022/2018/A1	臨床發現類風濕性關節炎病人 TP53 基因突變導致耐藥的可能性研究 To study the potential development of drug-resistance in rheumatoid arthritis patients identified with TP53 mutations	黃錦偉 Vincent Kam-Wai Wong
0030/2018/A1	基於 alpha-氨基酸硼類似衍生物的新型治療類風濕關節炎藥物的合成及測試 Synthesis and bioassessment of novel boron analogues of alpha-amino acid-based anti-rheumatoid Arthritis drugs	朱應懷 Ying-Huai Zhu
0048/2018/A2	SIRT5 基因的免疫調控作用及其與類風濕關節炎發病的關係研究 Study on the immunomodulatory role of SIRT5 and its co-relation with the pathogenesis of rheumatoid arthritis	黃錦偉 Vincent Kam-Wai Wong
0052/2018/A2	基於 Wnt/β-Catenin 信號通路的蘆薈整體藥效組分辨識研究 Integrative patterns of efficient components recognition of Aloe based on Wnt/-Catenin signaling pathway	張 偉 Wei Zhang
0054/2018/A2	利用結腸類器官移植入系統剖析腸微生物態在腸癌逐步發展過程中的因果關係及其機理 Investigate the role of gut microbiota in the stepwise colorectal cancer development using a stage-defined colon organoid engraftment system	蕭文鸞 Wendy Wen-Luan Hsiao
0055/2018/A2	集成不同源生物數據集的大數據分析智能學習方法研究 Research on intelligent learning algorithms integrating different source of biological data	梁 勇 Yong Laing
0060/2018/A2	中藥自噬活性成分靶向調節補體系統防治神經退行性疾病的機制研究 Targeting the complement system by autophagic active herbal fraction for modulating neurodegenerative diseases	羅婉君 Betty Yuen-Kwan Law
0067/2018/A2	組蛋白甲基化酶 SMYD3 抑制劑的設計合成、抑制血管衰老作用及其分子機制研究 Design, synthesis and the molecular mechanisms of vascular senescence via inhibition of the novel histone methyltransferase SMYD3	朱依諄 Yi-Zhun Zhu
0090/2018/A3	共價鍵藥物的雙刃劍：基於 3D nanoLC-MS 的低豐度蛋白檢測、機理研究和中藥活性物質的發現 Dual role of drug-protein conjugation: low-abundance protein detection, mechanism and bioactive components hunting using 3D nano LC-MS	李娜 Na Li

0093/2018/A3	高表達 Caveolin-1 的間充質幹細胞來源 Exosomes 負載中藥活性成份 調控缺血性中風血腦屏障通透性的研究 Overexpressing Caveolin-1 and active compounds of chinese medicines loaded exosomes derived from mesenchymal stem cells modulate blood- brain barrier permeability after ischemic stroke	徐友華 You-Hua Xu
0096/2018/A3	調整腸道微生物生態增強 PD1 抗體治療非小細胞肺癌效果的新策略 Modulation of gut microbiota to enhance efficacy of anti-PD1 immunotherapy in non-small cell lung cancer	梁麗嫻 Elaine Lai-Han Leung
0099/2018/A3	細胞自噬在非小細胞肺癌 TKIs 耐藥中的角色及攬香烯的干預作用與 機制研究 The role of autophagy in TKIs-resistant NSCLC and the effects and mechanisms of Elemene in overcoming resistance	吳其標 Qi-Biao Wu
<u>2019 年批示項目</u>		
0094/2018/A3	類風濕關節炎精準診療的生物標誌物及分子診斷研究 Biomarkers screening and molecular classification method for precise diagnosis and treatment in rheumatoid arthritis	栗占國 Zhan-Guo Li
0004/2019/A1	鹼性鞘磷脂質體的構建及其用於 siRNA 和化療藥物的聯合遞送研究 Construction of alkaline sphingomyelin-based cationic liposome and its application in co-delivery of siRNA and chemotherapy drug	白麗萍 Li-Ping Bai
0013/2019/A1	新型 IDH1 突變體抑制劑 WM17 和 APTM 靶向治療腦膠質瘤的作用與 機制研究 Antiglioma effects and mechanisms of action of novel mutant IDH1 inhibitors WM17 and APTM	馬文哲 Wen-Zhe Ma
0020/2019/A1	鈣通道蛋白對肺癌 PD-L1 外泌體分泌的作用以及對 PD-1 免疫療法耐 藥機制的研究 The role of calcium channels on secretion of PD-L1 containing exosomes and drug resistance of PD-1 immunotherapy in lung cancer	于海杰 Hai-Jie Yu
0006/2019/A	黃芪總黃酮對糖尿病代謝記憶預防作用和機理研究 Preventive effects of flavonoids from Astragali radix against metabolic memory in diabetes based on co-metabolism between Chinese medicines and gut microbiota	徐友華 You-Hua Xu
0008/2019/A	烏藥中具 TGF- β 抑制作用的活性成分發現及作用機理研究 TGF- β inhibitors from Lindera aggregata and their molecular mechanism	朱國元 Guo-Yuan Zhu
0010/2019/A	生薑對結腸癌細胞增殖凋亡遷移的影響及作用機制 The effect of ginger on the proliferation apoptosis and migration of colon cancer cells and its mechanism	陳敏 Min Chen
0067/2019/A2	肝 X 受體 (LXR) 拮抗劑調控 MDSC 細胞治療類風濕性關節炎的免疫 代謝機制研究 Mechanism investigation of the rheumatoid arthritis suppression effect by the liver X receptors antagonist: Targeting MDSC immunometabolism	謝瑩 Ying Xie

0072/2019/A2	<p>鋅指蛋白 PATZ1 調控人類胚胎幹細胞多能性和抑制腫瘤細胞生長的分子機制研究</p> <p>Investigating the molecular mechanism of regulation of hESC pluripotency and inhibition of cancer cell proliferation by PATZ1</p>	<p>吳強</p> <p>Qian Wu</p>
0077/2019/A2	<p>靶向調節核苷酸代謝節點增效氟尿嘧啶治療結直腸癌研究</p> <p>Synergistic antitumor activity of 5-fluorouracil in colorectal cancer based on the targeted-regulation of nucleotide metabolism</p>	<p>張偉</p> <p>Wei Zhang</p>
0082/2019/A2	<p>應用靶向定量蛋白質組學精準分析不同疾病相關的 chemerin 蛋白亞型及篩選驗證治療多囊卵巢綜合症的中藥活性成分</p> <p>Application of targeted quantitative proteomics strategy in accurate analysis of chemerin isoforms in different diseases as well as in screening and validating of active components from TCM in treating polycystic ovarian syndrome rats</p>	<p>姜志宏</p> <p>Zhi-Hong Jiang</p>
0083/2019/A2	<p>中性粒細胞膜包圍仿生納米平臺用於靶向治療缺血性腦卒中的研究</p> <p>Neutrophil membrane-coated biomimetic nanoplatform for targeted treatment of ischemic stroke</p>	<p>王曉琳</p> <p>Xiao-Lin Wang</p>
2020 年批示項目		
0052/2020/A	<p>硫化氫在冠狀肺炎及其抗炎和免疫調節研究</p> <p>Hydrogen sulfide in coronary pneumonia and its anti-inflammatory and immunomodulatory effects</p>	<p>朱依諄</p> <p>Yi-Zhun Zhu</p>
0066/2020/A	<p>基於有效部位組合的中藥抗病毒鼻腔保護劑研究</p> <p>Research on the antiviral nasal agent based on the combination of effective fractions of traditional Chinese medicines</p>	<p>王靜蓉</p> <p>Jing-Rong Wang</p>
0157/2019/A3	<p>小分子串聯親和技術靶向獲取天然別構劑治療冠心病的研究</p> <p>Research of natural allosteric modulators for coronary heart disease treatment based on a novel tandem affinity screening strategy</p>	<p>羅培</p> <p>Pei Luo</p>
0158/2019/A3	<p>基於生物多組學大數據分析的加權映射深度學習方法診斷複雜疾病亞型研究</p> <p>Analysis of mult-omics big data based on weighted mapping deep learning methods for diagnosis of complex disease subtypes</p>	<p>梁勇</p> <p>Yong Liang</p>
0168/2019/A3	<p>組織蛋白酶 B 抑制劑用作蛋白酶體抑制劑增敏劑的研究</p> <p>Cathepsin B inhibitors for chemosensitization of proteasome inhibitors</p>	<p>竺曉鳴</p> <p>Xiao-Ming Zhu</p>
0172/2019/A3	<p>基於細胞膜固相垂釣技術探討六神丸調節 SM-Cer/Sph-S1P 代謝通路抑制流感病毒性炎症的藥效成分及作用機制</p> <p>To investigate the mechanism of the inhibition of influenza virus and inflammation induced by virus via regulating SM-Cer/Sph-S1P pathway by Liu Sheng Wan and its active ingredients based on membrane solid phase chromatography</p>	<p>楊子峰</p> <p>Zi-Feng Yang</p>
0010/2020/A1	<p>中醫“病-證-方”結合診治類風濕關節炎寒濕痺阻證的臨床與基礎研究</p> <p>Clinical and basic research on the diagnosis and treatment of cold-dampness syndrome in rheumatoid arthritis by TCM "disease - syndrome formula" combination approach</p>	<p>潘胡丹</p> <p>Hu-Dan Pan</p>

0011/2020/A1	益母草鹼對血液粘滯度、血小板粘附和炎症的改善作用以及分子機制的研究 Effects and molecular mechanisms of Leonurine on reducing blood viscosity, thrombocyte adhesion and inflammation in hyperlipidemia	曾凡一 Fan-Yi Zeng
0036/2020/A1	他汀類藥物預防 Li-Fraumeni 綜合症腫瘤生成的作用與機制研究 The role and mechanism of action of statins in cancer prevention of Li-Fraumeni syndrome	馬文哲 Wen-Zhe Ma
0096/2020/A	1,2,3-三唑類抗瘧衍生物的合成及其對新型冠狀病毒肺炎 (NCP, Covid-19) 的潛活性 Synthesis of novel 1,2,3-triazole based antimalarial derivatives for their potential activity against Novel Coronavirus Pneumonia (NCP, Covid-19)	保羅高爾 Paolo-Saul Coghi
<u>2021 年批示項目</u>		
0058/2020/A2	治療類風濕關節炎的新策略：靶向 PKC δ 激活調節性 T 細胞來重塑免疫穩態 A new strategy for treating rheumatoid arthritis: Targeting PKC to stimulate regulatory T cells and restore immune homeostasis	范星星 Xing-Xing Fan
0065/2020/A2	新型冠狀病毒氣溶膠現場快速檢測儀的研發與應用研究 Development of an on-site rapid detector for coronavirus aerosol and its application	姜志宏 Zhi-Hong Jiang
0067/2020/A2	普洱生茶自然發酵有機成分變化及功能多樣性影響研究 Study on organic components changes in Pu-erh raw tea fermentation and bioactive diversity	肖穎 Ying Xiao
0111/2020/A3	新型人參多糖與抗 PD1/PDL1 免疫療法聯合治療肺癌的療效研究 Investigation of the combinational treatment effect of new form of ginseng polysaccharides with anti-PD1/PDL1 immunotherapy for treatment of lung cancer	梁麗嫻 Elaine Lai-Han Leung
0114/2020/A3	以 3CL 蛋白酶為靶點的抗新冠病毒候選新藥研發 Development of new drug candidates targeting 3CL protease of COVID-19	姚小軍 Xiao-Jun Yao
0122/2020/A	構建抗體晶片快速篩尋土茯苓鮮藥材的抗炎活性成分 Construction of antibody microarrays for rapid screening of anti-inflammatory active ingredients of fresh Smilax Glabra	張志鋒 Zhi-Feng Zhang
0123/2020/A	自由脂肪酸受體 4 抗血管外周組織炎症反應研究 Anti-inflammatory effects of free fatty acid receptor 4 during inflammation in the perivascular adipose tissue	李欣志 Xin-Zhi Li
0011/2021/A	中醫經典名方“葦莖湯”中蘆根有效提取物麥黃酮 (Tricin) 作用于 KRAS 基因突變型肺癌的作用機制和臨床應用研究 The mechanism study of Tricin which is the effective extract of "Wei Jing Decoction" on lung cancer with KRAS gene mutant	顏培宇 Pei-Yu Yan
0020/2021/A	基於免疫浸潤及腫瘤轉移表達特征構建風險預測模型用於乳腺癌預後及治療指導 Development of an immunogenomic and metastatic risk score model for predicting prognosis and therapy of breast cancer	黃琛 Chen Huang

0031/2021/A	MYPT1 磷酸化糖脂代謝和細胞骨架的時空網絡調控前列腺癌的機制研究 Spatiotemporal network regulation of MYPT1 phosphorylate glycolipid metabolism and cytoskeleton in prostate cancer	鍾惟德 Wei-De Zhong
0022/2021/A1	靶向新冠病毒靶點的連翹苷抗病毒機制研究及開發應用探索 Antiviral mechanism and application of forsythin targeting new coronavirus	鍾南山 Nan-Shan Zhong
0025/2021/A1	基於體內外效應物質全成分分析技術的中藥淡豆豉“質-效”相關性多維度功能評價 Study on the “quality-effect” correlation of Multi-dimensional functional evaluation and Dandouchi total components analysis in vivo and in vitro	伍建林 Jian-Lin Wu
0048/2021/A1	FTO 介導 FOXO1mRNA 去甲基化修飾上調 ApoC3 促進 PCOS 卵巢局部胰島素抵抗的作用及機制研究 Research on the effects and mechanism of FTO mediated FOXO1 mRNA demethylation and up-regulation of ApoC3 on ovarian insulin resistance in PCOS	莫蕙 Hui Mo
0053/2021/A1	血管外周脂肪組織異質性、褐色化以及益母草鹼降脂作用新機制研究 Heterogeneity and browning of the perivascular adipose tissue and new mechanisms for the lipid-lowering effects of Leonurine	李欣志 Xin-Zhi Li
0062/2021/A2	鈣通道蛋白相變對肺癌發生機制的研究 Investigation of phase separation of calcium channel on oncogenic mechanisms of lung cancer	于海杰 Hai-Jie Yu
0098/2021/A2	溫鬱金活性成分莜苳烯醇誘導肺癌細胞發生鈣死亡的分子機制及莜苳烯醇納米製劑研發 The molecular mechanism of curcumenol, an active ingredient of Wenyujin, inducing ferroptosis of lung cancer cells and the development of curcumenol nano-formulations	吳其標 Qi-Biao Wu
0108/2021/A2	新冠病毒及其變異株 S 蛋白糖基化深度分析及糖基結構與抗體識別相關性研究 In-depth profiling of the glycosylation of S protein of SARS-CoV-2 and its variant strains to clarify the correlation between the glycosylation structure and antibody recognizes virus function	王靜蓉 Jing-Rong Wang
0088/2021/A	大蒜來源的 ZYZ-802 治療甲狀腺乳頭狀癌及其作用機理的研究 The role and mechanism of action of the novel compound ZYZ-802 discovered from garlic in papillary thyroid cancer	張欣 Zhang, Xin
0089/2021/A	S-炔丙基半胱氨酸治療精神分裂症作用及其分子機制研究 The effect of S-propargyl-cysteine (SPRC) in the treatment of schizophrenia and its molecular mechanism	周娜 Zhou, Na
0093/2021/A	一種應用到烏髮產品的草本植物研究 Study on a herbal compound applied to hair darkening products	羅婉君 Law, Yuen Kwan
2022 年批示項目		
0035/2022/A1	基於肝癌微環境的新型化療栓塞劑的設計與開發 Development of a new transcatheter arterial chemoembolization agent targeting the microenvironment for hepatocellular carcinoma therapy	竺曉鳴 Xiao-Ming Zhu

