

THE UNIVERSITY OF HONG KONG
LI KA SHING FACULTY OF MEDICINE

2015 Health and Medical Research Fund (HMRF) Funded Projects

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
Dr Y Cai	Anaesthesiology	Rap1 exacerbates myocardial ischemia/reperfusion injury through enhancing cellapoptosis and inflammatory response	1,185,856
Dr RCC Chang	Biomedical Sciences	Investigating the impact of periodontitis on neuroinflammation, neuropathologyand neurodegeneration in Alzheimer's disease	1,200,000
Professor KSE Cheah	Biomedical Sciences	Sox9 control of neuromesodermal progenitors	1,200,000
Dr YP Ching	Biomedical Sciences	A study of the regulation of TAX1 binding protein 2 by p21-activated proteinkinase 4 in liver cancer metastasis	1,059,576
Dr KY Kong	Biomedical Sciences	Roles of the chromatin architectural protein CTCF in hepatitis B virustranscription	990,856
Dr CW Lee	Biomedical Sciences	Investigating the pathogenic mechanisms underlying ocular and generalizedmyasthenia gravis using Xenopus cell-based assay	1,199,856
Professor GSW Tsao	Biomedical Sciences	Preclinical evaluation of therapeutic use of a selective cdk4/6 inhibitor (PD-0332991) in nasopharyngeal carcinoma (NPC).	1,199,944
Dr SL Wong	Biomedical Sciences	Massively parallel discovery of combination therapies for neurodegenerativediseases	1,199,936
Mr. TL Wong	Biomedical Sciences	Potential use of asparaginase and protein kinase R-like endoplasmic reticulumkinase (PERK) inhibitor (GSK2656157) combination in the treatment ofhepatocellular carcinoma	97,000
Dr B Yu	Biomedical Sciences	Virus-like particle (VLP)-based mucosal vaccine for inducing cross-serotypeimmunity against Streptococcus pneumoniae infection	1,191,064
Dr CH Yu	Biomedical Sciences	Induction of cancer cell apoptosis by integrin endocytosis	100,000
Dr L Zhou	Biomedical Sciences	Establishment and applications of organoid cultures from primary hepaticcarcinomas - a pilot study	99,950
Dr R Deng	Chinese Medicine	Exploring Effects of Astragaloside IV, an Active Component of Astragalus, as anAdjunct Therapy with Radiation Therapy and/or Chemotherapy to promotehaematopoiesis in Cancer treatment	1,080,856
Dr CW Sze	Chinese Medicine	Study of Target-based Chinese Herbal Medicine in Suppression of AberrantCryptic Foci: Implication of Colon Cancer Prevention	584,298

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Professor Z Zhang	Chinese Medicine	A double-blind, randomised, placebo-controlled trial of berberine as an adjuvant to treat antipsychotic-induced metabolic syndrome in patients with schizophrenia spectrum disorders	1,188,844
Professor X Guan	Clinical Oncology	Characterization of the effect of Maelstrom in cancer stemness in hepatocellular carcinoma	1,200,000
Dr KO Lam	Clinical Oncology	Optimizing the selection of patients with metastatic colorectal cancer for liver resection – An immuno-clinical scoring system incorporating circulating tumor cell enumeration and clinical factors.	946,064
Professor CLK Lam	Family Medicine and Primary Care	10-year Risk Prediction Models of Complications and Mortality of Diabetes Mellitus in Chinese Patients in Primary Care in Hong Kong	1,200,000
Professor TP Lam	Family Medicine and Primary Care	The enablers and barriers of the public to comply with infection control measures for influenza pandemic in Hong Kong	813,941
Dr EYT Yu	Family Medicine and Primary Care	In-depth exploration of a bidirectional parent-child health relationship and its mediating and moderating factors among low-income families in Hong Kong	1,200,000
Dr MPH Chan	Medicine	Prospective evaluation of the impact of Drug-Coated Balloon in the management of true coronary bifurcation disease	1,121,520
Dr PCH Lee	Medicine	Adipocyte fatty acid binding protein as a novel marker of the development of sight threatening diabetic retinopathy	770,856
Professor AYH Leung	Medicine	Targeting DNA damage and repair mechanism in FLT3-ITD acute myeloid leukaemia (AML) - a mechanistic and therapeutic study	1,200,000
Dr WWK Seto	Medicine	Diabetes mellitus and liver fibrosis regression in nucleoside analogue-treated chronic hepatitis B: a prospective matched case-control evaluation using multiparametric magnetic resonance imaging	1,197,528
Professor SCW Tang	Medicine	Efficacy, safety and response predictors of adjuvant Astragalus therapy for diabetic kidney disease – An open-label randomised controlled trial with responder regression analysis.	1,199,954
Miss L Zhong	Medicine	Deciphering the molecular mechanism of signal transducing adaptor family member 1 (STAP1) in the regulation of hepatic cholesterol metabolism	1,059,856
Professor Z Chen	Microbiology	Novel human neutralizing antibodies against AIDS and emerging infectious diseases	1,199,856

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Dr H Chu	Microbiology	Investigating the role of caspase-6 in the replication of the Middle East respiratory syndrome coronavirus.	1,195,856
Dr X Huang	Microbiology	Therapeutic potential of regulatory T cells in limiting HIV reservoir in the brain without triggering detrimental neuroinflammation.	1,196,064
Dr Z Tan	Microbiology	Combination of dendritic cell-based vaccination and immune checkpoint blockade for malignant mesothelioma immunotherapy	1,180,856
Dr PT Chan	Nursing	Effectiveness of a smartphone app in promoting zero time exercise and fitness in patients with coronary heart disease: a pilot randomized controlled trial	100,000
Dr PH Chau	Nursing	The Impact of Global Warming on Elderly Suicide Deaths in Hong Kong and Implications to Suicide Prevention	99,729
Dr DYT Fong	Nursing	Noise Sensitivity and Non-restorative sleep in Chinese Adults	1,200,000
Dr JYH Wong	Nursing	An Interactive Computer-based Intervention to Adopt Safer Sex Practice for Female University Students: A Multicentred Randomized Controlled Trial	638,298
Dr CYL Lee	Obstetrics and Gynaecology	Prediction of the live birth rate of in vitro fertilization using a novel human embryonic stem cells derived trophoblastic spheroid implantation model	1,007,129
Dr K Chiu	Ophthalmology	Retinal microglia as a therapeutic target of the traditional Chinese medicine Lycium barbarum in Alzheimer's disease-related vision loss	1,098,256
Dr ACY Lo	Ophthalmology	Lutein and candesartan co-treatment delays the progression of non-proliferative diabetic retinopathy in the diabetic Ins2Akita mouse model	895,020
Dr AKS Chiang	Paediatrics and Adolescent Medicine	Reactivation of Epstein-Barr virus (EBV) lytic cycle in EBV-associated epithelial malignancies by iron chelators and evaluation of its therapeutic potential	1,196,944
Professor US Khoo	Pathology	Hyperpolarization-activated cyclic nucleotide-gated channel 3 (HCN3) regulating apoptosis resistance, autophagy and cellular senescence in breast cancer: a novel potential anti-cancer target.	1,174,577
Professor CW Lam	Pathology	Clinical application of pleural fluid fatty acid synthase and pleural fluid total free fatty acids as cancer biomarkers in malignant pleural effusions	98,000

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Professor IOL Ng	Pathology	A comprehensive study on the effects of antioxidant supplements in liver cancer development and treatment	1,199,900
Dr FH Tsang	Pathology	Characterization of a novel tumor suppressive long non-coding RNA linc-ALDH1A2-1 in hepatocellular carcinoma	1,199,956
Dr CM Wong	Pathology	Therapeutic potential of targeting CDK7-dependent and super-enhancer associated oncogene addiction in liver cancer	962,856
Dr HHN Yan	Pathology	Use of whole genome sequencing to unveil new mechanisms of germline DNA mismatch repair gene alterations in Lynch Syndrome patients	1,196,192
Dr SWS Leung	Pharmacology and Pharmacy	Effects of microRNA-17-3p up-regulation on vascular inflammation and endothelial dysfunction caused by the human immunodeficiency virus proteins	1,196,800
Dr C Xu	Pharmacology and Pharmacy	Selective overexpression of SIRT1 in adipose tissue protects adiponectin deficiency induced liver injury	959,608
Dr CLM Hui	Psychiatry	Use of in-vivo Dopaminergic Activity to Predict Relapse after Medication Discontinuation in Schizophrenia	1,178,816
Professor R Bruzzone	Public Health	Regulation of dengue virus life cycle by KDEL receptor-dependent signaling pathway: a new target to interfere with viral infection and pathogenesis	1,130,112
Dr DKC Chan	Public Health	Building a Theory-Driven Smartphone Application for Monitoring and Promoting Orthopaedic Patients' Motivation and Adherence to Medical Regimen in Hong Kong: A Pilot Randomised Controlled Trial	99,840
Professor BJ Cowling	Public Health	Determinants of seasonal influenza vaccination and preferences for future vaccination programmes among hospital-based healthcare workers in Hong Kong	983,958
Dr PY Hui	Public Health	Potential therapeutic effects of farnesyltransferase inhibitor in severe human influenza disease	737,847
Professor GM Leung	Public Health	Effect of puerarin supplementation on cardiovascular disease risk factors: a randomized, double-blind, placebo-controlled, 2-way crossover trial	1,199,906

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Dr Q Liao	Public Health	Using WhatsApp reminders to improve childhood seasonal influenza vaccination: a randomized control trial to compare the effectiveness of individual-based and social networking-based interventions	618,104
Dr S Sanyal	Public Health	Targeting lipid droplet metabolism as therapeutic intervention during dengue virus infection	1,200,000
Dr YT Wong	Public Health	Real-time estimation of the impact of influenza viruses	312,987
Dr YW Chan	Surgery	The function of CD271 in the development of stem-like cell phenotype in nasopharyngeal carcinoma	1,197,100
Dr BHH Lang	Surgery	A randomized, open-label, parallel-group study to explore the efficacy of high-intensity focused ultrasound (HIFU) versus fixed-dose radioiodine-131 in the treatment of relapsed Graves' disease	882,020
Professor WL Law	Surgery	Identification and Evaluation of a Reliable, Non-invasive Diagnostic Method Using blood microRNA expression to diagnose High-Risk Colorectal Cancer Candidates	1,169,416
Dr SM Tang	Surgery	Identification and functional characterization of Hirschsprung disease susceptibility genes on chromosome 21	332,537