

THE UNIVERSITY OF HONG KONG  
LI KA SHING FACULTY OF MEDICINE

2014 Health and Medical Research Fund (HMRF) Funded Projects

<b>Principal Applicant</b>	<b>Department/School/Centre</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Professor SK Chung	Anatomy	Targets of reactive oxygen species and oxidative stress in Type 1 diabetes complications	967,000
Professor SK Chung	Anatomy	To Determine the Role of Exchange Protein directly Activated by cAMP in the Blood-retinal Barrier and Pathogenesis of Diabetic Retinopathy	947,000
Dr SK Li	Anatomy	A Study of the Roles of Hepatitis B Virus X Protein on the Transcriptional Regulation of Tumor Suppressor TAX1BP2 in Hepatocellular Carcinoma	1,048,296
Dr CM Tsang	Anatomy	The interaction of berberine with chemodrugs for treating EBV-associated carcinomas: the concern for lytic reactivation in affecting the drug efficacy	1,143,296
Professor WT Wu	Anatomy	Enhancing axonal regeneration of spinal motoneurons after root avulsion by manipulation of chondroitin sulfate proteoglycans (CSPGs)	1,192,376
Professor DY Jin	Biochemistry	Perturbation of MAVS-dependent antiviral response by PB1-F2 protein of influenza A (H7N9) virus and implications to viral pathogenesis	1,200,000
Professor DY Jin	Biochemistry	Identification and characterization of a novel transcript isoform of STING that negatively regulates innate antiviral response	1,200,000
Dr Ray K Ng	Biochemistry	Epigenetic function of TET2 in the transcriptional regulation of MLL-rearranged leukemia	1,200,000
Dr Julian Tanner	Biochemistry	Development of an aptamer-based sensor for monitoring luteinizing hormone pulsatility	1,196,160
Professor ZJ Zhou	Biochemistry	SIRT6 in bone marrow stromal cell potency and the development of osteoporosis	1,143,608
Professor L Lao	Chinese Medicine	Acupuncture for Postoperative Pain After Abdominal Surgery for Gynecological Cancer: A Randomized Placebo-controlled Trial	761,707
Professor JG Shen	Chinese Medicine Medicine	Exploring Effects of Glycyrrhizin, an Active Compound from Glycyrrhizae Radix, on Attenuating Delayed Tissue-plasminogen Activator (t-PA) Treatment-induced Hemorrhagic Transformation in Ischemic Stroke	1,009,608

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Dr Victor Lee	Clinical Oncology	FDG and 11C-acetate PET-CT scan to assess tumour response after stereotactic body radiation therapy as bridging therapy for patients with hepatocellular carcinoma awaiting liver transplantation	1,087,376
Dr Victor Lee	Clinical Oncology	Role of individual dietary counselling on weight loss and change in quality of life in patients with nasopharyngeal carcinoma treated with intensity-modulated radiation therapy	435,308
Dr Elaine YP Lee	Diagnostic Radiology	Translating functional tumour volume and biology of peritoneal carcinomatosis to identify suitable candidate for cytoreductive surgery in ovarian carcinoma.	782,592
Dr Carlos KH Wong	Family Medicine and	Cost and Cost-effectiveness Analysis of Renal Replacement Therapy Modalities for Patients with End-stage Renal Disease in Hong Kong: Comparison between Peritoneal Dialysis and Haemodialysis Strategies	526,952
Dr Esther YT Yu	Family Medicine and	In-depth study of the cost-effectiveness of the Risk Assessment and Management Programme for Hypertension(RAMP-HT) for patients with uncontrolled hypertension in primary care in Hong Kong	1,199,964
Dr Johnny CY Chan	Medicine	Registry of Severe Cutaneous Adverse Drug Reactions and Epidemiological study in Hong Kong (RESCUE-HK)	1,075,600
Dr KH Chan	Medicine	Investigation of adiponectin gene therapy in an animal model of Alzheimer's disease	1,136,960
Professor James CS Chim	Medicine	Identification of methylated miRNAs in acute promyelocytic leukaemia and their potential clinical application	996,808
Dr Ruby LC Hoo	Medicine	Adipocyte fatty acid binding protein (A-FABP) is a pathological mediator of obesity-related renal dysfunction.	1,035,108
Professor Anskar YH Leung	Medicine	Establish a zebrafish model to study the molecular and clonal heterogeneity and develop personalized treatment in FLT3-ITD+ AML	1,169,608
Dr Alvin CH Ma	Medicine	Generating transgenic zebrafish model to study the emerging role of autophagy and mitophagy in hematopoietic diseases	1,138,440
Professor Sydney CW Tang	Medicine	Exploring the Role of Induced Pluripotent Stem Cell-Derived Mesenchymal Stem Cells in Nephropathies	1,200,000
Dr CM Wong	Medicine	Deciphering the molecular mechanism of Protein Arginine Methyltransferase (PRMT) 1 in the regulation of hepatic glucose and lipid metabolism	919,296

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Professor A Xu	Medicine	FGF21 as a potential mediator for the anti-depressant effects of physical exercise	1,197,608
Professor A Xu	Medicine	Activation of Uncoupling Protein-1 as a Potential Therapeutic Strategy for Obesity-induced Endothelial Dysfunction and Atherosclerosis	1,159,010
Dr Desmond YH Yap	Medicine	Lymphocyte subset profile and clinical phenotype in lupus nephritis	1,178,412
Dr Thomas CC Yau	Medicine	A Combination of Sorafenib, Oxaliplatin and Capecitabine as Neoadjuvant Therapy for Patients with Locally Advanced Hepatocellular Carcinoma: A Phase II Study	1,196,896
Dr KH Yiu	Medicine	Reversibility of liver stiffness after tricuspid annuloplasty: A case-control study.	964,216
Dr Chloe YY Cheung	Medicine Primary	Impact of genetic variants identified in genome-wide association studies and their possible interaction with hypertension on the risk of diabetic retinopathy	940,504
Dr CL Ng	Medicine Primary	Small molecule of Adiponectin receptor agonist, AdipoRon - a potential therapeutic medication for Alzheimer's disease	956,608
Dr Jasper FW Chan	Microbiology	Efficacy and mechanistic evaluation of banana lectin (BanLec) as a novel pan-coronavirus antiviral agent: in-vitro and ex-vivo evidence	731,296
Dr Allen KL Cheung	Microbiology	Characterising the role of a novel PD1 isoform expressed on gamma-delta T cells in HIV-1 infection	1,199,908
Dr PL Ho	Microbiology	Unveiling the characteristics of emerging Staphylococcus lugdunensis sequence type 3 clone by genomics analysis	1,127,608
Dr Z Tan	Microbiology	Role of $\Delta$ 42PD1/TLR4 interaction in human hepatocellular carcinoma and its blockade as a novel immunotherapy strategy	1,194,608
Dr JX Zhang	Microbiology	Modulation of prostaglandin E2 and lipoxins to ameliorate the severe lung inflammation induced by A(H1N1)pdm09 influenza virus in diet induced obese mice	1,045,808
Ms OK Chung	Nursing	Psychometric Evaluation of the Chinese Version of the Fatigue Scale-Child	100,000
Dr William HC Li	Nursing	Helping in-patients to quit smoking by understanding their risk perception, behavior, and attitudes related to smoking	100,000
Professor Agnes FY Tiwari	Nursing	A Randomized, Wait-list Controlled Trial of Self-administered Acupressure for Symptom Management Among Chinese Family Caregivers with Caregiver Stress	1,000,000

<b>Principal Applicant</b>	<b>Department/School/Centre</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Dr David Chan	Obstetrics and Gynaecology	Functional characterization of MAP30 protein from bitter melon ( <i>Momordica chrantia</i> ) in combating ovarian cancer oncogenesis and chemoresistance	1,197,160
Dr Amy CY Lo	Ophthalmology	Alleviation of early high mortality and aggravated brain pathology by lutein in a genetic type I diabetic mouse model after experimental stroke	1,197,160
Dr Alex LK Ng	Ophthalmology	Relationship among dietary habits, omega-3 fatty acids levels and age-related macular degeneration in the Hong Kong Chinese	733,394
Dr Jason PY Cheung	Orthopaedics and Traumatology	Are rigid cervical collars necessary for patients undergoing open-door laminoplasty and titanium arch plates for cervical myelopathy? - A Randomized Clinical Trial	100,000
Dr Jason PY Cheung	Orthopaedics and Traumatology	Prediction Classifier Model for Management of Adolescent Idiopathic Scoliosis	100,000
Dr Kelvin Yeung	Orthopaedics and Traumatology	The Application of Newly Developed Biodegradable K-wire in Upper-limb Fracture Fixations	1,043,258
Dr CB Chow	Paediatrics and Adolescent	Developing indicators to monitor injury trend and burden in Hong Kong	627,996
Professor Annie NY Cheung	Pathology	p21 activated kinase 4 and ovarian cancer chemoresistance	1,179,608
Dr Daniel WH Ho	Pathology	Investigation of functional synergism of CENPF and FOXM1 in hepatocellular carcinoma	1,198,376
Dr Alan KL Kai	Pathology	Characterization of anti-CCL28 as a novel therapy to overcome sorafenib resistance in HCC	1,173,296
Dr Carmen CL Wong	Pathology	Targeting hypoxia-induced ectonucleoside triphosphate diphosphohydrolase 2 (ENTPD2) in hepatocellular carcinoma (HCC) development	1,199,952
Dr Carmen CL Wong	Pathology	The molecular mechanisms elicited by Sorafenib withdrawal in hepatocellular carcinoma treatment	1,199,952
Dr CM Wong	Pathology	Deregulation and somatic mutations of histone methyltransferase ASH1L in liver cancer.	1,169,608
Dr CM Wong	Pathology	Pathological implications and functional characterizations of novel long non-coding RNA linc-CHD1L-1 in hepatocellular carcinoma	1,117,608
Dr Maria P Wong	Pathology	Translating intra-tumoural genetic heterogeneity to identify cancer progression genes in lung adenocarcinoma	1,196,608
Dr Regina CL Lo	Pathology Medicine	Study of the clinical relevance and functional role of Stanniocalcin 1 in hepatocellular carcinoma	1,141,504

<b>Principal Applicant</b>	<b>Department/School/Centre</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Dr Jenny KW Lam	Pharmacology and Pharmacy	Inhalable dry powder formulation of naked siRNA using spray-drying and spray freeze-drying technologies for the treatment of respiratory infections	1,189,608
Dr George PH Leung	Pharmacology and Pharmacy	Protective effects of Pleurotus ostreatus (Oyster mushroom) and ergothioneine against doxorubicin-induced cardiotoxicity	1,023,296
Professor Paul M Vanhoutte	Pharmacology and Pharmacy	Human Prostacyclin Receptors and Endothelial Dysfunction	1,192,736
Dr Y Wang	Pharmacology and Pharmacy	Role of Endothelial SIRT1 in the Prevention of Vascular Ageing - focusing on arterial remodeling and circadian rhythmicity	1,196,568
Professor Q Hao	Physiology	Structural Study of NDM-1: Towards Rational Inhibitor Design Against the Antibiotic Resistant "Superbug"	1,198,296
Dr Cora SW Lai	Physiology	Mechanisms underlying the antidepressant effects of ketamine in an animal model of depression: the role of dendritic spines and interneurons	1,192,328
Dr Ellen NY Poon	Physiology	Identification of the optimal source of human mesenchymal stromal cells for the treatment of acute graft-versus-host disease under a clinical-grade ex-vivo culture system	1,183,837
Professor Eric YH Chen	Psychiatry	The relative roles of dopamine dysregulation and psychosocial stressors in later-onset psychosis	1,199,084
Dr Michael CW Chan	Public Health	Interactions between lung microvascular endothelial cells and alveolar epithelial cells in severe influenza virus infection associated acute lung injury	1,059,796
Dr LL Hui	Public Health	Cardiovascular disease risk factors in late adolescence of late preterm and early term births: a prospective observation from the "Children of 1997" birth cohort	580,546
Dr LL Hui	Public Health	Serum interleukin 6 and insulin resistance – a Mendelian randomization study	1,186,448
Dr Dennis KM Ip	Public Health	A Randomized Controlled Trial on the Effect of Fever Suppression by Antipyretics on Influenza	1,199,902
Dr Dennis KM Ip	Public Health	Development and evaluation of a smartphone apps-based school absenteeism reporting system for infectious disease surveillance among local schools in Hong Kong	608,018
Dr Michael Y Ni	Public Health	A prospective cohort study of road traffic noise, depressive symptoms and mental well-being.	588,683
Dr Ranawaka APM Perera	Public Health	Kinetics of hemagglutinin stalk binding neutralizing antibody responses during natural influenza infection	847,340

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Dr Leo LM Poon	Public Health	Detection and characterization of antibody-dependent cell-mediated cytotoxicity (ADCC) responses against human H7N9 virus in humans and mice	1,199,608
Dr TQ Thach	Public Health	Impacts of maternal exposure to particulate matter on birth weight and preterm birth using high resolution spatio-temporal exposure modelling in Hong Kong, 2001-2011	825,448
Dr L Xu	Public Health	A prospective study of Southern Chinese dietary pattern, foods and nutrients with cardiovascular disease mortality	529,608
Professor Kenneth Boheler	Shing Faculty of	Eliminating Clinical Barriers to the use of GMP-qualified human pluripotent stem cell-derived midbrain dopaminergic neurons for cell based therapies of Parkinson's Disease	1,199,049
Dr Ava Kwong	Surgery	Risk assessment of hereditary breast and ovarian cancer syndrome in Chinese population by multiple-gene sequencing	1,196,160
Dr Vincent CH Lui	Surgery	Functional genetic study to unravel the genetic backgrounds of biliary atresia	1,020,016
Professor M Man	Surgery	The role of regulatory B cells (Bregs) in tumor recurrence after liver transplantation for liver cancer patients	1,192,960
Dr Elly SW Ngan	Surgery	Reading Hedgehog signaling in enteric neural crest cells: implications in Hirschsprung disease	1,200,000
Professor Paul KH Tam	Surgery	Decoding Biliary Atresia at the transcriptome and tissue architecture level	1,181,160
Dr XQ Wang	Surgery	Cyclin D1-Smad-mediated liver cancer stem cells (CSCs) self-renewal and therapeutic potential of Smad inhibitor-induced CSC differentiation and chemo-sensitization	872,376
Dr TS Wong	Surgery	Effects of NADPH oxidase 5 in modulating hypoxic response in oral tongue cancer	1,198,830