

THE UNIVERSITY OF HONG KONG
LI KA SHING FACULTY OF MEDICINE

Health and Medical Research Fund (HMRF)*

2015

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 promotahaematopoiesis in Cancer treatment	1,080,856

* The Health and Medical Research Fund (HMRF) was created in December 2011 consolidating the former Health and Health Services Research Fund (HHSRF) and Research Fund for the Control of Infectious Diseases (RFCID).

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
Dr CW Sze	Chinese Medicine	Study of Target-based Chinese Herbal Medicine in Suppression of Aberrant Cryptic Foci: Implication of Colon Cancer Prevention	584,298
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

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
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
Professor IOL Ng	Pathology	A comprehensive study on the effects of antioxidant supplements in liver cancer development and treatment	1,199,900

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
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 HongKong: 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 HongKong	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
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

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
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

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Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
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

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
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
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

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
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
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

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
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 Δ 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
Dr David Chan	Obstetrics and Gynaecology	Functional characterization of MAP30 protein from bitter melon (Momordica charantia) 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

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
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
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

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
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
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

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
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

2013

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
Dr. R.C.C. Chang	Anatomy	Investigating oxyresveratrol as potential neuroprotective drug in experimental models of Parkinson's disease	1,000,000
Dr. Y.P. Ching	Anatomy	A study of the role of CDK5RAP3 in neuronal cell differentiation	966,120
Dr. G. Tipoe	Anatomy	Therapeutic effects of Wolfberry (<i>Lycium barbarum</i> polysaccharides; LBP) in non-alcoholic fatty liver disease (NAFLD) animal models	923,440
Professor W. Wu	Anatomy	Repairing neural damage after spinal cord injury with self-assembling peptide nanofiber scaffold (SAPNS)	999,000
Professor D. Jin	Biochemistry	Suppression of innate interferon production by Middle East respiratory syndrome coronavirus M protein	1,000,000
Dr. K.H. Kok	Biochemistry	Suppression of PACT-dependent antiviral response by measles virus V protein	947,500
Dr. M.H. Sy	Biochemistry	the role of DNA Damage and Repair Signaling in Hepatocarcinogenesis	958,000
Professor X. Guan	Clinical Oncology	Exploring the Mechanism for Cancer Associated Fibroblasts Recruitment and the Potential Therapeutic Value in Esophageal Squamous Cell Carcinoma	999,120
Dr. H.L. Lung	Clinical Oncology	The effects of the IKKbeta-specific inhibitor PS1145 on tumor formation and metastasis in nasopharyngeal carcinoma	966,316
Professor K.R. Boheler	LKS Faculty of Medicine	STF31 and the Selective Ablation of Tumorigenic Human Pluripotent Stem Cells from Differentiated Cells Destined for Regenerative Medicine	976,500
Dr. K.Y. Cheng	Medicine	Hypothalamic APPL2 combats against obesity by promoting adaptive thermogenesis in adipose tissues	967,736
Professor W.C.S. Lau	Medicine	Validation of a new definition of lupus low disease activity state (LLDAS): Clinical and management implications	476,120
Professor S.C.W. Tang	Medicine	Semi-structured Chinese Medicine Treatment as an Adjuvant Therapy to the Management of Diabetic Nephropathy – A pilot comparative clinical trial	1,000,000
Dr. Y.H.D. Yap	Medicine	Relationship between Mycophenolic Acid Pharmacokinetics and Pharmacogenomics with treatment response and disease activity in lupus nephritis	918,000
Dr. Z. Chen	Microbiology	Role of Δ42PD1 in HIV Infection	999,980

Dr. P.L. Ho	Microbiology	Molecular epidemiology of transferrable multidrug-resistant pump <i>oqxAB</i> in <i>Escherichia coli</i> from human and animal sources	843,464
Dr. J. Zhou	Microbiology	Characterization of the immune activation pathway in human macrophage and the macrophage-neutrophil interaction in MERS coronavirus infection	1,000,000
Dr. W.H.C. Li	Nursing	Effectiveness of a brief, self-determination intervention for smoking cessation (immediate or progressive) among people attending emergency departments: a randomised controlled trial	1,000,000
Professor K.F. So	Ophthalmology	Study of gliogenesis and neurochemistry underlying psychomotor retardation induced by chronic stress and the therapeutic approach for motor training in reversing the adverse effects	999,568
Professor Y.F. Cheung	Paediatrics & Adolescent Medicine	Circulating Transforming Growth Factor- β and Aortic Dilation in Patients with Repaired Congenital Heart Disease	493,752
Dr. B.H.Y. Chung	Paediatrics & Adolescent Medicine	Identifying the genetic causes underlying prenatally-diagnosed structural congenital anomalies (SCAs) by whole-exome sequencing (WES)	997,380
Dr. P. Ip	Paediatrics & Adolescent Medicine	Promoting alcohol-related attitudinal and behavioural change amongst adolescents through Internet intervention: A cluster randomised controlled trial	863,034
Mr. W. Ma	Pathology	Characterization of functions of RhoE/ROCK pathway in regulating chemoresistance of liver cancer	609,000
Professor J.M. Nicholls	Pathology	Modulation of MERS-CoV infection of the human ex vivo respiratory tract by the use of interferon, cyclophilin inhibitors and blocking antibody therapy	891,670
Dr. C.C.L. Wong	Pathology	Targeting the metabolic machineries of HCC by understanding the roles of transketolase in hepatocellular carcinoma development	999,780
Dr. J.W.P. Yam	Pathology	Functional role of hypoxia-induced caveolin-1 in hepatocellular carcinoma metastasis	856,120
Dr. H.H.N. Yan	Pathology	Intestinal organoid cultures of early onset colorectal cancers	998,456
Dr. C.L. Cheung	Pharmacology & Pharmacy	The role of Vitamin D and bone metabolism in cardiovascular events risk, an interaction or mediation? An 11 year follow-up study	999,736
Professor I.C.K. Wong	Pharmacology & Pharmacy	Pharmacogenomics Assessment of Serious Cutaneous Adverse drug reactions (PASCA)	910,176
Dr. M. Li	Psychiatry	Development of multivariate gene-based association analysis approaches for endophenotypes of complex diseases and their application to genetic mapping in a Chinese schizophrenia sample	989,640

Dr. S.L.R. Au Yeung	Public Health	Age at menarche and cardiovascular risk factors – a Mendelian randomization analysis	998,900
Mr. W.H. Chin	Public Health	A systematic study of influenza A viruses with PB2-701 and 702 random mutations on viral fitness, host specificity and nuclear import of PB2	996,100
Dr. S.A. Doak	Public Health	Understanding alternate immune correlates of protection in household transmission of influenza	999,828
Professor R. Fielding	Public Health	Diet after diagnosis: a qualitative study to explore the dietary choices made by newly diagnosed breast cancer patients	429,468
Dr. W.W.T. Lam	Public Health	Developing and testing a decision aid to support Chinese parents' HPV vaccination decision-making for adolescent girls: a randomised controlled trial	672,870
Dr. E.H.Y. Lau	Public Health	Optimizing avian influenza surveillance strategy in live poultry market setting	417,580
Dr. Y.Y.J. Leung	Public Health	Prediction of cardiovascular disease using the Framingham risk score in older adults in Hong Kong	355,070
Dr. Q. Liao	Public Health	Chinese adults' preference for influenza vaccination: a discrete choice experiment	669,206
Dr. K.P. Mok	Public Health	The pathogenic role of the adaptation in the polymerase basic 2 protein of the new identified duck isolated H7N9 lineage in mammalian hosts.	638,340
Dr. H.M.H. Pang	Public Health	Comparative Effectiveness Analysis of Lung Cancer Data from Randomized Clinical Trials and Observational Studies	337,432
Professor J.S.M. Peiris	Public Health	Role of influenza virus surface glycoproteins in virus-induced cell stress and inflammation	964,520
Dr. L.L.M. Poon	Public Health	Generation of a replication-incompetent NP-knockout influenza virus that allows expression of galactose-alpha-1,3-galactose (alpha-Gal) in infected cells to enhance adaptive immune response.	998,000
Dr. L.L. Hui	Public Health	The consequences of in-utero exposure to gestational diabetes on metabolic health in adolescence: does breastfeeding make a difference?	388,760
Dr. S. Sanyal	Public Health	Development of therapeutic strategies against viral infections by targeting the host ubiquitylation machinery and its modulation of the innate immune response	981,120
Dr. T.Q. Thach	Public Health	The Mortality Effects of Long-Term Traffic-Related Exposure in a Cohort of Chinese Elderly	806,370
Dr. H. Zhu	Public Health	Molecular determinants for the interspecies transmission of an avian H6N1 virus that caused the human infection in Taiwan	1,000,000

Dr. D.K.M. Ip	Public Health	Age specific and temporal variability in the effectiveness of seasonal influenza vaccine in Hong Kong	998,484
Dr. X. Liu	Surgery	Autophagy in hypoxia-induced chemo-resistance in hepatocellular carcinoma and its potential as a novel therapeutic target	80,000
Professor C.M. Lo	Surgery	Mechanisms of antiviral drug-resistant in liver transplant recipients with HBV and HCC recurrence	960,820
Dr. S.T.S. Wong	Surgery	The use of curcumin to circumvent cisplatin resistance in nasopharyngeal carcinoma	41,390

2012

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
Dr VMY Yuen	Anaesthesiology	Comparison of oral chloral hydrate and intranasal dexmedetomidine for sedation in children undergoing computerised tomography in Queen Mary Hospital	792,840
Dr CWY Chan	Anatomy	Human embryonic stem cell-derived cardiomyocyte as a model to study the role of autophagy in cardiac inflammation.	981,360
Dr B Lin	Anatomy	Modulation of the PTEN/mTOR pathway enhances the survival of cone photoreceptors in retinal degeneration disorders.	990,360
Professor KF So	Anatomy	Minimizing neuropsychiatric side-effects of glucocorticoid therapy by antipsychotics and Chinese medicine	997,848
Dr CM Tsang	Anatomy	The protective role of Epstein-Barr virus infection towards starvation-induced apoptosis.	991,992
Professor D Jin	Biochemistry	Mechanism of inflammasome activation by SARS coronavirus 3a protein	1,000,000
Professor D Jin	Biochemistry	Regulatory roles of SIRT1 deacetylase in hepatitis B virus transcription	1,000,000
Dr. Y. Song	Biochemistry	Study of Population Specific Linkage Disequilibrium (LD) Patterns of Human Major Histocompatibility Complex (MHC) Region for Cancers, Infectious and Autoimmunity Diseases in Southern Chinese	956,800
Dr J Chen	Chinese Medicine	A randomized, controlled trial of Guolin-Qigong in improving body-mind health of Chinese women with breast cancer	786,016
Dr W Meng	Chinese Medicine	Clinical study of Chinese herbal compound Hualiu Recipe (HLR) for the treatment of uterus fibroids (UFs): Results from a randomized, double-blinded, two-dose, and crossover trial	994,600
Dr Z Wang	Chinese Medicine	Exploration of dietary compound isoliquiritigenin in chemosensitizing breast cancer stem cells by targeting aberrant β -catenin signaling	758,360
Professor X Guan	Clinical Oncology	Characterization of the effect of Epstein-Barr Virus encoded BART microRNAs on enhancing tumor-initiating properties and potentially serve as biomarkers in Nasopharyngeal Carcinoma	919,300
Dr. H.L. Lung	Clinical Oncology	The serum amyloid A1 (SAA1) Polymorphisms as Risk Factors in Esophageal Squamous Cell Carcinoma	785,624

Professor M.L. Lung	Clinical Oncology	Elucidating the genetic basis for early-age onset nasopharyngeal carcinoma in Hong Kong	1,000,000
Professor TP Lam	Family Medicine & Primary Care	The barriers and facilitators to undertaking continuing professional education among the private non-specialist primary care physicians in Hong Kong	530,108
Dr.W. Wong	Family Medicine & Primary Care	Development of the brief version of the Chinese Quality of Life (ChQOL) Instrument	410,760
Dr. W.C.W. Wong	Family Medicine & Primary Care	To Determine Prevalence and Contextual Risk Factors of Sexually Transmitted Infections in Hong Kong	1,280,580
Professor PC Sham	Centre for Genomic Sciences	Mutational spectrum for dilated cardiomyopathy in Hong Kong	917,270
Professor D.T.M. Chan	Medicine	Gut Microbiota in the Pathogenesis of Lupus Nephritis	958,992
Professor S.L. Ho	Medicine	Pathophysiological study of Parkinson's disease associated with leucine-rich repeat kinase 2 (LRRK2) gene mutation	928,040
Dr. C.L.D. Lam	Medicine	Application of an EGFR array for the detection of Epidermal Growth Factor Receptor (EGFR) gene mutation in patients with Non-Small Cell Lung Cancer (NSCLC)	609,000
Professor W.K. Leung	Medicine	Detection of methylated Septin 9 DNA in blood for diagnosis, prognosis and surveillance of patients with colorectal cancer	979,032
Professor K.C.B. Tan	Medicine	Genetic Screening of Familial Hypercholesterolemia in Hong Kong	996,576
Dr DKH Wong	Medicine	Hepatitis B X protein primary structure and epigenetic regulation of HBV replication	967,880
Dr JFW Chan	Microbiology	Epidemiology, seroprevalence, and clinical manifestations of immunodeficiency due to autoantibody against interferon gamma in Hong Kong.	80,000
Dr KLA Cheung	Microbiology	Virus dissemination from HIV-1 latently infected CD34+ hematopoietic progenitors	980,120
Dr. S.K.P. Lau	Microbiology	Molecular diversity and evolution of bat group C betacoronaviruses: implications on the origin of the novel human group C betacoronavirus	815,412
Dr. L. Liu	Microbiology	Molecular mechanisms of Nef mediated regulation of PD-1 expression during HIV/SIV infection	997,992
Dr KH Sze	Microbiology	Characterization of Staphylococcus aureus virulence factor EsxA and structure-based screening of EsxA's inhibitors for combating methicillin-resistant Staphylococcus aureus (MRSA)	838,184
Dr. K.K.W. To	Microbiology	Identification of innate immune defect predisposing to severe influenza in a Chinese population	494,892

Dr H Tse	Microbiology	Molecular characterization of antibiotic resistance in Staphylococcus lugdunensis isolates	335,520
Dr. H. Wang	Microbiology	Further optimization of live viral vector for HIV vaccine research.	947,120
Dr WHC Li	Nursing	Effectiveness of an Integrated Adventure-Based Training and Health Education Programme in Promoting the Adoption and Maintenance of Regular Physical Activity Among Childhood Cancer Survivors	726,383
Professor AFY Tiwari	Nursing	A Randomized, Wait-list Controlled Trial of a Qigong Intervention Program on Telomerase Activity and Psychological Stress in Abused Chinese Women	995,224
Dr. K.W. Cheung	Obstetrics & Gynaecology	A multi-center prospective study on the evaluation of paternal, maternal and obstetric factors leading to the hepatitis B immunization failure in Hong Kong	973,746
Professor JSM Lai	Ophthalmology	Randomized control trial on the neuroprotective effects of oral Wolfberry supplement in the treatment of normal tension glaucoma	937,976
Professor DSH Wong	Ophthalmology	Diabetic retinopathy screening for specialist care	683,960
Dr YHI Wong	Ophthalmology	To improve the current screening programme for diabetic macular oedema	705,644
Dr. F.K.L. Leung	Orthopaedics & Traumatology	The effectiveness of a multidisciplinary approach to geriatric hip fractures on improving clinical outcomes and cost of care	72,475
Professor Y.F. Cheung	Paediatrics & Adolescent Med	Circulating MicroRNAs and Myocardial Damage in Paediatric Cancer Patients Receiving Anthracycline Therapy	832,754
Dr CB Chow	Paediatrics & Adolescent Med	Measuring the burden of fatal and nonfatal injury in Hong Kong	885,172
Dr CB Li	Paediatric & Adolescent Medicine	The role of c-Myc in anti-mycobacterial responses: from bacterial killing to T cell activation	999,880
Dr. W. Tu	Paediatrics & Adolescent Med	Antiviral Activity of Human $\gamma\delta$ -T cells against Enterovirus 71	1,000,000
Dr W Yang	Paediatrics & Adolescent Med	Molecular diagnosis for severe combined immunodeficiencies (SCID) using whole exome sequencing	980,868
Dr KK Chan	Pathology	iASPP and autophagy - novel molecular targets for ovarian clear cell carcinoma.	996,568
Professor ANY Cheung	Pathology	p53 related proteins and gestational trophoblastic disease	998,360
Professor ANY Cheung	Pathology	Placental biology of Down Syndrome in relation to increased gene dosage	998,544

Dr. Y.T. Chiu	Pathology	Analysis of hepatitis B virus genomic integration and characterization of its role in hepatocarcinogenesis	1,000,000
Dr. K.W. Lee	Pathology	Hepatitis B virus promotes hepatocarcinogenesis and stemness through Nanog regulation	804,280
Professor L. Lu	Pathology	B-1 cell response and its regulation during influenza virus infection	980,000
Professor J.M. Nicholls	Pathology	Molecular determinants of H9N2 virus haemagglutinin and neuraminidase affecting virus tropism for the human and swine respiratory tract	754,568
Dr CCL Wong	Pathology	Hepatitis B virus infection promotes hepatocellular carcinoma through HIF-1 α /LOXL2 pathway	939,280
Dr. G.W. Wong	Pathology	Cellular functions and potential clinical application of miR-143 in cervical cancer	991,568
Dr MP Wong	Pathology	Identification of cancer metastasis and drug resistance pathways through comparison of primary and metastatic lung adenocarcinomas by next generation sequencing analysis	1,000,000
Dr. J.W.P. Yam	Pathology	Role of caveolin-1 in hepatitis B virus-induced hepatocarcinogenesis	977,452
Dr PCL Kwok	Pharmacology & Pharmacy	Inhalable macromolecule dry powder for asthma treatment in children	80,000
Dr. J.K.W. Lam	Pharmacology & Pharmacy	Intranasal Delivery of DNA Vaccine using Oligochitosan/PLGA Nanoparticles	322,000
Dr. S.W.S. Leung	Pharmacology & Pharmacy	Therapeutic potential of herbal flavonoids in the management of chronic obstructive pulmonary disease	938,360
Professor ICK Wong	Pharmacology & Pharmacy	Mother's preferences and willingness to pay for human papillomavirus vaccination for their daughters: a discrete choice experiment in Hong Kong	378,040
Dr D Ye	Pharmacology & Pharmacy	Lipocalin-2 in acute and chronic liver diseases: focusing on neutrophil-mediated innate immune responses	765,624
Dr KW Chan	Psychiatry	Treatment resistant following the first-episode schizophrenia-spectrum disorder: a retrospective case-control study	799,952
Dr KW Chan	Psychiatry	Psychotic-like experiences (PLEs) in the general population of Hong Kong: a two-year prospective follow up study	877,352
Dr WC Chan	Psychiatry	A randomised controlled trial of home-based exercise intervention for caregivers of persons with dementia	998,160
Professor EYH Chen	Psychiatry	Five-year follow-up of a randomized controlled trial of the duration of early intervention for psychosis: 2 years vs. 3 years	518,400
Professor EYH Chen	Psychiatry	Predicting treatment response in first-episode psychosis	999,680

Dr M Li	Psychiatry	Statistical method to identify risk genes of complex diseases based on functional gene sets and networks, with a genetic data mining application to hepatocellular carcinoma	999,990
Dr SM Tang	Psychiatry	A transethnic meta-analysis of genome-wide association studies for Hirschsprung disease	78,800
Dr. M.C.W. Chan	Public Health	Tropism of the novel human betacoronavirus lineage C virus in human ex vivo and in vitro cultures, as an assessment of its potential transmissibility and pathogenesis in humans	999,860
Dr. W.Y. Chan	Public Health	Influenza B viruses in swine: Virus tropism in swine respiratory organ explant cultures and sero-epidemiology.	999,630
Dr BJ Cowling	Public Health	Influenza virus epidemiology in households of school-age children, 2013-14	999,000
Dr BJ Cowling	Public Health	A community-based longitudinal seroepidemiological study of influenza virus infections in Hong Kong in 2013-14	999,804
Dr BJ Cowling	Public Health	Efficacy of Face Masks to Prevent Respiratory Virus Transmission	1,000,000
Dr. S.A. Doak	Public Health	Understanding vaccine induced T cell protection from influenza viruses	997,164
Professor R Fielding	Public Health	A Longitudinal Study of Chinese Parental Decision Making on HPV Vaccination for Adolescent Girls	927,546
Dr MK Kwok	Public Health	Unravelling secular trends of blood pressure in children and adolescents in Hong Kong: information for action	614,350
Dr. W.W.T. Lam	Public Health	Comparison the meanings of living with advanced breast cancer between women resilient to distress and women with persistent distress: A qualitative study	320,252
Dr EHY Lau	Public Health	Symptom-specific health-seeking behavior of common infectious diseases in Hong Kong and implications in disease control and surveillance	921,680
Dr Q Liao	Public Health	Parents' risk perceptions and protective responses regarding varicella, scarlet fever and hand, foot and mouth disease in Hong Kong: a multi-group longitudinal survey	598,348
Professor JSM Peiris	Public Health	Host responses that correlate with respiratory droplet transmission of swine-origin influenza viruses in ferrets	970,496
Dr. C.M. Wong	Public Health	Impact of increased influenza and pneumococcal vaccine coverage on the burden of influenza in the elderly: a comparison between Hong Kong and Brisbane.	760,060
Dr P Wu	Public Health	Impact and severity profiles of respiratory viruses in children in Hong Kong	771,396

Dr YW Chan	Surgery	The use of Epstein-Barr virus (EBV) encoded microRNA in supplement with EBV DNA as serological marker in screening undifferentiated nasopharyngeal carcinoma patients	979,443
Dr W.C. Cheng	Surgery	Role of adducin3 in the pathogenesis of biliary atresia and in the development of the hepatobiliary system	68,260
Dr PFY Cheung	Surgery	The role of NKG2D-MICA on NK cell immunosurveillance of hepatocellular carcinoma	80,000
Dr ST Cheung	Surgery	The roles of drug transporters on chemo-resistance and stem-like cell properties in liver cancer	938,360
Dr. M.M. Garcia-Barcelo	Surgery	Uncovering the genetic lesions underlying the most severe form of Hirschsprung (HSCR) disease by whole genome sequencing (WGS): a pilot study in 10 family trios	1,000,000
Dr A Kwong	Surgery	Screening of founder and recurrent BRCA mutations in Hong Kong and US Chinese populations	828,360
Dr. V.C.H. Lui	Surgery	Functional genetics study to unravel the genetic background of a complex neurodevelopmental disorder namely Hirschsprung Disease	900,775
Dr K Man	Surgery	The role of alternative-activated macrophages (M2 macrophages) on tumor growth and metastasis in hepatocellular carcinoma	983,500
Dr K Man	Surgery	Role of human cytomegalovirus-triggered immune response in graft injury after living donor liver transplantation	999,860
Dr. E.S.W. Ngan	Surgery	Potential use of patient specific induced-pluriopotent stem cell (iPSC) to define genetic lesions contributing to the disease phenotypes of syndromic Hirschsprung (HSCR)	989,760
Professor P.K.H. Tam	Surgery	Whole exome sequencing to uncover genetics variants underlying Congenital Cystic Adenomatoid Malformations	881,425
Dr X Wang	Surgery	Potential anti-tumor and anti-metastasis efficacy of novel Notch inhibitor (PF-03084014) in liver cancer models	850,016
Dr. C.W. Yip	Surgery	Interaction of granulin-epithelin precursor with heparan sulfate on activation of signaling pathways in hepatocellular carcinoma	80,000