

THE UNIVERSITY OF HONG KONG  
LI KA SHING FACULTY OF MEDICINE

2016 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>
Dr Z Xia	Anaesthesiology	Role of cardiac STAT5A in repeated non-invasive limb ischemic preconditioning-induced cardioprotection in diabetes and its interplay with STAT3	1,179,448
Professor YS Chan	Biomedical Sciences	Overcoming hurdles in bridging critical nerve gaps to improve post-traumatic nerve regeneration and rehabilitation	1,199,620
Dr RCC Chang	Biomedical Sciences	Investigating the effects of Lycium barbarum (wolfberry) on cognitive functions, neuropathology and neuroinflammation in experimental models of Parkinson's disease dementia	1,200,000
Professor KSE Cheah	Biomedical Sciences	Identification of Sox2 otic enhancers and their utility for restoring hearing and vestibular function	1,200,000
Dr Y Cheng	Biomedical Sciences	Identification and characterization of C11orf86, a novel CREBH target gene implicated in hypertriglyceridemia	1,084,048
Dr B Gao	Biomedical Sciences	Understanding the molecular basis of Carpal Tunnel Syndrome	1,195,048
Dr LJ Jia	Biomedical Sciences	To investigate the role of AMP-activated protein kinase in the regulation of EBV latent and lytic infection in nasopharyngeal carcinoma	1,177,548
Professor D Jin	Biomedical Sciences	Suppression of type I and type II interferon production and signalling by Epstein-Barr virus BGLF2 protein	1,200,000
Dr SKY Ma	Biomedical Sciences	A study of the role and therapeutic potential of targeting protein tyrosine kinase 7 (PTK7) in liver cancer	1,125,048
Dr H Sun	Biomedical Sciences	Investigating the effect of Intracellular Sigma Protein in the treatment of amyotrophic lateral sclerosis and multiple sclerosis	949,600
Dr M Tong	Biomedical Sciences	AXL receptor tyrosine kinase as a biomarker for sorafenib response and target for personalized therapy in patients with hepatocellular carcinoma	1,199,048
Dr CM Tsang	Biomedical Sciences	Development of molecular probes for surface markers on LMP1- positive nasopharyngeal cancer cells using aptamers selected by cell-SELEX	1,197,384
Dr YP Tsui	Biomedical Sciences	Cell-based therapy for congenital myelin disorders of the central nervous system	1,199,776
Professor Z Zhou	Biomedical Sciences	UHRF1 in KLF4 ubiquitination and skin dysplasia	1,189,680

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Dr N Wang	Chinese Medicine	Investigation on the effect of berberine on improvement of diabetic retinopathy in insulin-treated diabetic mellitus	821,448
Dr J Zhao	Chinese Medicine	Transcriptomic Profiling of the Gene Networks Reveals the Roles of BDNF and RragA in the Anti-Depressive and Analgesic Activities of Chinese Medicine Puerarin	100,000
Dr CL Chiang	Clinical Oncology	Cost-Effectiveness of Anti-EGFR Antibodies as First-line Treatment in RAS Wild Type (WT) Metastatic Colorectal Cancer (mCRC) in Hong Kong	99,627
Professor DLW Kwong	Clinical Oncology	Peripheral immunological response to treatment with checkpoint inhibitor in recurrent/metastatic nasopharyngeal carcinoma and correlation with clinical response and adverse effects	1,125,384
Dr VHF Lee	Clinical Oncology	Territory-wide evaluation of treatment outcomes of non-metastatic nasopharyngeal carcinoma treated with radical intensity-modulated radiation therapy in Hong Kong	1,194,778
Professor ML Lung	Clinical Oncology	Clinical application of enumeration and genomic characterization for non-invasive detection and real-time monitoring of circulating tumor cells for esophageal carcinoma	1,199,732
Dr MY Ng	Diagnostic Radiology	Cardiac Magnetic Resonance Assessment of Heart Failure with Preserved Ejection Fraction	1,193,724
Dr KH Chan	Medicine	Advanced neuroimaging modalities and clinical correlates in multiple sclerosis and neuromyelitis optica spectrum disorders	1,194,981
Professor JCS Chim	Medicine	The role of methylation-mediated silencing of HOTTIP in mantle cell lymphoma	980,048
Dr WL Ho	Medicine	Therapeutic effects of brain-penetrable kinase inhibitors to prevent accumulation of pathogenic alpha-synuclein oligomers in Parkinson's disease	1,175,760
Dr X Hui	Medicine	Lactate produced in adipose tissue as a culprit of obesity-related metabolic complications: mechanisms and clinical implications	1,155,760
Dr CSC Lam	Medicine	Pathophysiological study of synaptic vesicle protein synaptogyrin3 (SYNGR3) in Parkinson's disease	1,195,760
Dr YK Lee	Medicine	Validation of Preclinical Molecular Diagnosed Hypertrophic Cardiomyopathy (HCM) using Patient Specific Human Induced Pluripotent Stem Cell (hiPSC) Platform-New Perspectives in Personalized Drug-Screening	1,197,944
Dr JCW Mak	Medicine	Amelioration of cigarette smoke-induced mucus hypersecretion by Dendrobium officinale polysaccharides – relevant to chronic obstructive pulmonary disease	1,141,824

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Dr KM Ng	Medicine	Patient-specific isogenic iPSCs-derived cardiomyocytes as a clinically relevant platform for the identification of therapeutic targets for Rett syndrome	954,024
Dr VPY Tan	Medicine	Factors driving a response in functional dyspepsia subjects treated with Rifaximin: Effect on upper gastrointestinal gas production, pH, transit time, mucosal histopathology.	1,006,315
Professor SCW Tang	Medicine	Protease-activated receptor-1 (PAR-1)-targeted therapy: potential for preventing renal fibrosis	1,041,848
Professor A Xu	Medicine	Targeting Neutrophil Serine Proteases for Treatment of Vascular Inflammation and Atherosclerosis	1,193,424
Dr YHD Yap	Medicine	Investigating the B cell signatures for disease flare and response to pre-emptive immunosuppressive therapy in patients with lupus nephritis	1,199,136
Dr KH Kok	Microbiology	Modulation of type-I interferon signaling by Non-Structural proteins of Zika virus	1,200,000
Dr Z Tan	Microbiology	Augmenting antitumor T responses of viral cancer therapy by targeting myeloid-derived suppressor cells with an armed recombinant vaccinia virus	1,185,048
Dr YC Wong	Microbiology	Immune control of SHIV infection in rhesus macaques by PD-1 based vaccine	1,199,548
Dr J Zhou	Microbiology	Establishing Functional Human Lung Organoids to Recapitulate and Study Viral Growth and Virus-Host Interaction of Avian Influenza A Viruses	1,200,000
Dr YTD Cheung	Nursing	Effectiveness of WhatsApp online group discussion for smoking relapse prevention: a pragmatic randomized controlled trial	967,620
Dr OKJ Chung	Nursing	Psychometric Evaluation of the Chinese Version of the Resilience Scale for Children	100,000
Dr YWK Lok	Nursing	The effect of feeding methods on intestinal microbiota of healthy Chinese infants.	1,089,052
Dr MP Wang	Nursing	A combined cessation intervention with brief advice, nicotine replacement therapy sampling and active referral (BANSAR) for smoking fathers: a multicenter, single-blinded, pragmatic randomised controlled trial	999,870
Dr KKL Chan	Obstetrics and Gynaecology	The use of a new biomarker, HE4, in combination with simple ultrasound rules in the prediction of malignancy in a pelvic mass detected on ultrasound	818,344
Dr KW Cheung	Obstetrics and Gynaecology	A randomized double blinded controlled trial of early use of oral progesterone in all women for prevention of preterm	1,200,000
Dr CKF Lee	Obstetrics and Gynaecology	The use of endometrial surface proteins for human endometrial receptivity prediction	1,013,716

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Dr ACY Lo	Ophthalmology	Beneficial effects of lutein in maternal diabetes-related retinopathy of prematurity using the diabetic Ins2Akita mouse model	1,197,580
Dr JWH Shum	Ophthalmology	Evaluation of the impact of a patient decision aid (PDA) developed for Chinese primary open angle glaucoma patients	702,384
Dr JPY Cheung	Orthopaedics and Traumatology	A randomized controlled trial comparing gradual and immediate brace weaning for clinical management of adolescent idiopathic scoliosis patients	947,024
Professor KMC Cheung	Orthopaedics and Traumatology	The role of hypoxia inducible gene function in deformity progression in Adolescent Idiopathic Scoliosis	1,061,660
Dr KYH Kwan	Orthopaedics and Traumatology	Effectiveness of Schroth scoliosis-specific exercises during bracing in adolescent idiopathic scoliosis: a randomised controlled trial	868,164
Professor FKL Leung	Orthopaedics and Traumatology	The effectiveness of an orthogeriatric multidisciplinary care model in improving clinical outcomes and cost-effectiveness for fragility hip fractures	585,048
Dr GKH Shea	Orthopaedics and Traumatology	The clinical safety and efficacy of Zoledronic acid for treatment of chronic low back pain due to Modic changes: a parallel, double-blinded, randomized controlled trial	1,195,092
Professor YF Cheung	Paediatrics and Adolescent Medicine	Remote Ischaemic Preconditioning in Paediatric Cancer Patients Receiving Anthracycline Therapy	1,164,020
Dr BHY Chung	Paediatrics and Adolescent Medicine	Evaluating the analytical validity and clinical utility of whole-genome sequencing for cytogenetically balanced chromosomal abnormalities in prenatal diagnosis	100,000
Dr KF Hui	Paediatrics and Adolescent Medicine	Effects on induction of viral lytic cycle in Epstein-Barr virus-associated epithelial malignancies by combining histone deacetylase inhibitor and a novel organic compound	1,195,048
Dr CLR Lo	Pathology	Study of the efficacy of PIM inhibitors in hepatocellular carcinoma	1,198,424
Dr X Mao	Pathology	Inhibition of reactive oxygen species upregulation of caveolin-1 by propofol contributes to the suppression of hepatocellular growth and aggressiveness	970,856
Dr FH Tsang	Pathology	Pathological roles of Bromodomain and Extra-Terminal (BET) proteins and their therapeutic implications in liver cancer	1,198,048
Dr X Wang	Pathology	IL-17-producing $\gamma\delta$ T cell response and its regulation during influenza virus infection	1,200,000
Dr CM Wong	Pathology	Pathological significances and therapeutic potential of targeting FACT complex in liver cancer	1,130,048
Dr GW Wong	Pathology	Targeting human papillomavirus (HPV) negative cervical cancer	1,199,384

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Dr MP Wong	Pathology	Harnessing tyrosine kinase inhibitor resistance of EGFR- mutated lung adenocarcinomas through candidate resistant genes screening	1,200,000
Dr CL Cheung	Pharmacology and Pharmacy	AKAP11 as a positive regulator of osteogenesis	1,198,862
Dr SWS Leung	Pharmacology and Pharmacy	Paradoxical vasoconstrictor effect of thymoquinone, a natural product known to induce vasodilatation and used in humans	1,172,600
Dr WHC Woo	Pharmacology and Pharmacy	Gut-derived flagellin ameliorates diet-induced dyslipidemia by upregulating apolipoprotein-A1	1,052,696
Professor EYH Chen	Psychiatry	Visual Stress (VS)-related cortical excitability in schizophrenia: a potential biomarker for clozapine response	1,190,640
Professor R Bruzzone	Public Health	Host lipid metabolism as potential target for Zika antiviral therapy	1,184,712
Dr SA Doak	Public Health	Influenza ADCC-antibody responses in vaccination and infection of children as a correlate of protection.	1,187,554
Professor K Fukuda	Public Health	Surveillance of environmental contamination by antibiotics and antibiotic resistant pathogens	1,198,562
Dr WWT Lam	Public Health	Return to work and work productivity in breast cancer: a longitudinal study	1,104,800
Dr YYJ Leung	Public Health	Prediction of mortality in a cohort of older adults in Hong Kong	381,592
Dr KP Mok	Public Health	Investigation on a pinanamine derivative as an antiviral agent against influenza A virus infection	996,379
Dr HMH Pang	Public Health	Modelling chemotherapy-induced neutropenia and other hematologic toxicities in elderly patients	494,042
Dr RAPM Perera	Public Health	Maternal antibody to influenza neuraminidase and the impact on protecting against influenza in the newborn.	880,765
Dr S Sanyal	Public Health	A chemical-proteomics based approach for target discovery in Zika virus infection	1,199,424
Dr W Su	Public Health	Genetic reassortment between H9N2 and H7N9 avian influenza viruses: implication on genetic compatibility and transmission	1,038,508
Dr WLT Wong	Public Health	Feasibility and Preliminary Efficacy of Ai Chi Aquatic Exercise Training in Hong Kong's Older Adults with Risk of Falling	436,724
Dr OL Wong	Public Health	Incident breast cancer burden attributable to modifiable risk factors: evaluating current evidence and projecting the future trends in Hong Kong	677,875
Dr J Zhang	Public Health	Regulation of the intracellular life cycle of Influenza A virus by targeting the cellular E3 ubiquitin-protein ligase MGRN1	1,179,424
Dr J Zhao	Public Health	Effect of berberine on cardiovascular disease risk factors: a mechanistic randomized controlled trial	506,824

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Dr YW Chan	Surgery	Functions of LTBP2 in regulating nasopharyngeal carcinoma chemosensitivity	1,199,118
Dr YTC Chan	Surgery	Deciphering the role of homocysteine dysregulation in the pathogenesis of abdominal aortic aneurysm and the potential remedy.	100,000
Dr THM Co	Surgery	Prospective study on cryosurgery for treatment of early breast cancers	1,175,675
Professor PKH Tam	Surgery	Functional genetic study to unravel the genetic background of choledochal cysts	1,183,768
Dr WH Yeung	Surgery	The Anti-Tumor Effects of M1 Macrophage-Loaded Poly(ethylene) Glycol and Gelatin-Based Hydrogels on Hepatocellular Carcinoma	100,000