

THE UNIVERSITY OF HONG KONG
LI KA SHING FACULTY OF MEDICINE

2018 Health and Medical Research Fund (HMRF) Funded Projects

Principal Applicant	Department/School/Centre	Project Title	Awarded Amount (HK\$)
Professor KSE Cheah	Biomedical Sciences	Mechanism of MMP14 control of bone mass via chondrocyte to osteoblast conversion	1,500,000
Dr B Gao	Biomedical Sciences	Genetic Diagnosis and Research of Osteogenesis Imperfecta	1,499,870
Dr CP Chan	Biomedical Sciences	Roles of double-stranded RNA binding protein PACT in sensing of influenza short immunostimulatory RNAs	1,500,000
Dr MCH Cheung	Biomedical Sciences	Investigating the role of SOX10-FOKK1-FSTL1 regulatory axis and the therapeutic potential of targeting FSTL1 in melanoma	1,348,112
Dr WTL Cheung	Biomedical Sciences	Role of BTRC mediated-ubiquitination in DNA damage response and associated drug sensitivity	1,489,244
Dr PHH Cheung	Biomedical Sciences	Activation of cGAS-STING-mediated cytokine production by influenza A virus (H7N9) PB1-F2 protein and implications to viral pathogenesis	1,479,244
Dr YP Ching	Biomedical Sciences	A study of the role of salt-inducible kinase 2 in regulating chemo-resistance of liver cancer cells	1,499,968
Dr SKY Ma	Biomedical Sciences	Functional characterization of fucosyltransferase 1 (FUT1) in promoting cancer stemness properties in hepatocellular carcinoma	1,499,557
Dr H Chen	Chinese Medicine	The adjunctive effect of acupuncture for advanced cancer patients in a collaborative model of palliative care: a three-arm pragmatic randomized trial	1,183,781
Dr S Li	Chinese Medicine	Heat-cooling Chinese herbs in treating chronic hepatitis B patients comparing with antiviral therapy: A systematic review and network meta-analysis	95,525
Professor J Shen	Chinese Medicine	Artificial intelligence recognitions for traditional Chinese medicine pulse patterns and its correlation study with body constitution types in healthy human subjects	1,491,344
Dr HYH Tan	Chinese Medicine	Investigation on postoperative adjuvant therapy with genipin in delaying hepatocellular carcinoma recurrence	303,000
Professor Z Zhang	Chinese Medicine	Combining acupuncture and acupressure for community-dwelling elderly with dementia: an assessor-blinded, randomized controlled trial	1,459,972

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Dr J Zhao	Chinese Medicine	RNA-Seq transcriptome profiling of Rrag knock-in mouse brains for the mechanisms underlying the anti-depressive activity of Chinese medicine puerarin	100,000
Dr W Dai	Clinical Oncology	A Computational Framework Using Genomic and Transcriptomic Features for Predicting Resistance to PD-1/PDL-1 Checkpoint Inhibition in Gastrointestinal Tract (GIT) Cancer	843,912
Dr JMY Ko	Clinical Oncology	Molecular classification based on microsatellite instability and RAS pathway status as prognostic biomarkers for risk stratification of metastatic relapse in colon carcinoma patients	1,499,750
Dr TC Lam	Clinical Oncology	Survival Estimate Models of Cancer Patients with Spinal Metastases: Big Data Analytics to Aid Daily Clinical Practice	769,000
Dr P Cao	Diagnostic Radiology	Artificial Intelligence for Prostate Cancer Detection and Grading in Magnetic Resonance Imaging	1,397,440
Dr WHK Chiu	Diagnostic Radiology	Prediction of recurrence and survival using big data analytics and machine learning in patients with hepatocellular carcinoma after curative surgery	1,062,618
Professor CLK Lam	Family Medicine and Primary Care	The development and validation of a DM and Pre-DM risk prediction function for case finding in primary care in Hong Kong	1,499,908
Dr CKH Wong	Family Medicine and Primary Care	Long-term impact of thyroidectomy on effectiveness and cost-effectiveness for relapsed Graves' disease	1,186,959
Dr KYC Cheung	Medicine	Implementation of multi-biomarkers algorithm for detection in Chinese obese individuals with non-alcoholic fatty liver disease	1,497,244
Dr JCM Ho	Medicine	Anti-inflammatory effects of roflumilast treatment for 12 weeks in stable-state non-cystic fibrosis bronchiectasis	1,015,872
Professor SL Ho	Medicine	Glucocerebrosidase (GBA1) mutations and reduced enzymatic activity in Parkinson's disease: a potential therapeutic target	1,041,496
Dr X Hui	Medicine	ANNEXIN A8 as a novel adipokine mediating visceral obesity-associated metabolic complications	1,484,540
Dr B Wang	Medicine	Role of the mechano-sensitive ion channel Piezo1 in the regulation of obesity and adaptive thermogenesis: molecular mechanisms and clinical implications	1,482,400

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Dr YHD Yap	Medicine	Alterations in classical and exhausted memory B cells in lupus nephritis - role in disease stability and effect of immunosuppressive treatments	1,499,244
Dr JKY Yuen	Medicine	Impact of feeding mode on survival, aspiration pneumonia, health care utilization and institutionalization of advanced dementia patients with feeding problems	432,345
Dr SSY Yung	Medicine	Role of Hyaluronan in Kidney injury and Fibrosis in Chronic Kidney Disease	1,499,744
Dr JFW Chan	Microbiology	Development and mechanistic evaluation of novel nanobodies for Zika virus infection: implications on prophylactic and therapeutic options	1,497,244
Dr P Gao	Microbiology	Decrypting the mechanism of anti-virulence compound HR3744 against MRSA by targeting the response regulator SaeR	1,349,656
Dr L Liu	Microbiology	Δ 42PD1 regulate metabolic alterations to compromise the B cell immunity in HIV-infected viremic individuals	1,500,000
Dr S Sridhar	Microbiology	Investigation of rat hepatitis E virus and genotype 4 hepatitis E virus infections among immunocompromised persons, patients with hepatitis and rats in Hong Kong	699,834
Dr P Wang	Microbiology	Development of novel DeINS1 bivalent live attenuated vaccines for influenza and other respiratory diseases	1,396,496
Dr YC Wong	Microbiology	Optimisation of adeno-associated viral vectors for prolonged in vivo expression of a highly potent bi-specific neutralising antibody against HIV	1,499,832
Dr LYA Yim	Microbiology	The role of transforming growth factor-beta (TGF- β) on human immunodeficiency virus (HIV) infection and latency	1,455,412
Dr S Yuan	Microbiology	Increasing the viral RNA-dependent RNA polymerase fidelity as a broad-spectrum antiviral strategy	1,467,250
Dr J Zhou	Microbiology	Identification and characterization of SPINK6 as a novel host factor to restrict influenza A virus activation	1,500,000

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Dr R Zhou	Microbiology	The role of newly defined blood dendritic cells on HIV infection	1,499,244
Dr MM Ho	Nursing	A smartphone-based intervention for diabetes prevention in overweight Chinese adults with pre-diabetes	1,497,700
Dr MP Wang	Nursing	Alcohol brief intervention integrated with mobile chat-based support for risky drinkers in emergency departments: a pragmatic randomised controlled trial	981,995
Dr KKL Chan	Obstetrics and Gynaecology	Clinical performance of Human Papillomavirus (HPV) genotyping versus PAX1/SOX1 methylation as a triage for high-risk HPV positive women in cervical cancer screening in Hong Kong	953,765
Dr CN Chiu	Obstetrics and Gynaecology	The role of sialyl-Lewis(x) interaction on the selection of fertilization competent sperm and its potential application in assisted reproduction treatment	976,320
Dr RHW Li	Obstetrics and Gynaecology	A randomised double-blind controlled trial on the effect of vitamin D on the ovulation rate of women with polycystic ovary syndrome	1,482,776
Dr KWJ Wong	Ophthalmology	XEN gel implant vs trabeculectomy in patients with primary open angle glaucoma (XVT Study)	1,264,270
Professor KMC Cheung	Orthopaedics and Traumatology	Use of SpineScan3D in scoliosis clinics to enhance clinic efficiency, reduce radiation risks and health care costs	1,253,712
Dr SCK Cheung	Orthopaedics and Traumatology	Therapeutic strategies targeting ER stress in chondrosarcoma based on tumor progression in single-cell resolution	1,281,506
Dr J Shen	Orthopaedics and Traumatology	Investigation of a Double-Coated Titanium Implant with Near-Infrared Controlled Antimicrobial Capabilities for Photodynamic and Photothermic Therapy	1,070,000
Dr AKS Chiang	Paediatrics and Adolescent Medicine	Analysis of Epstein-Barr virus (EBV) genomic variations in EBV-associated lymphoproliferative diseases	1,487,668
Dr SSS Chiu	Paediatrics and Adolescent Medicine	Nasopharyngeal Carriage of Streptococcus pneumoniae among young children attending kindergarten and day care centres in Hong Kong 10 years after universal pneumococcal conjugate vaccination	1,466,160

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Dr BHY Chung	Paediatrics and Adolescent Medicine	Translation and Validation of Client Service Receipt Inventory (CSRI) in Patients with Rare Genetic Diseases in Hong Kong	100,000
Dr LK Chan	Pathology	Targeting the glycolytic enzyme PFKFB4 in liver cancer underlying p53 mutation: mechanistic insight and therapeutic implication	1,497,150
Professor US Khoo	Pathology	The synergistic effect of Ivabradine and Olaparib on triple negative breast cancer	1,492,110
Dr X Mao	Pathology	Targeting exosome Nidogen-1 as a potential treatment of liver cancer	1,497,744
Dr CF Sin	Pathology	The Role of Homoharringtonine (HHT) and Combined Therapy of Homoharringtonine with Everolimus in the Treatment of Acute Lymphoblastic Leukaemia	1,500,000
Dr H Tsoi	Pathology	Targeting CHK2 to reduce the expression of BQ323636.1 in ER+ breast cancer to reverse tamoxifen resistance	1,227,363
Dr CM Wong	Pathology	Pathological roles of BRPF1 deregulation and its therapeutic implications in liver cancer	1,499,744
Dr HY Li	Pharmacology and Pharmacy	Development and Validation of Hip Fracture Risk Prediction Model using Electronic Medical Records in Hong Kong: A Machine Learning Approach	526,400
Dr W Wang	Pharmacology and Pharmacy	Development of photo-targeted nanocarriers for esophageal cancer therapy	1,405,630
Dr SLR Au Yeung	Public Health	Assessing the safety of statin use among adolescents using genetic variations of 3-Hydroxy-3-Methylglutaryl-CoA Reductase (HMGCR): A Mendelian randomization study	812,440
Dr EHY Lau	Public Health	Risk assessment of dengue epidemic in Hong Kong and implications for local transmission	445,240
Dr KP Mok	Public Health	Preclusion of an antigenically disruptive mutation in egg-based H3N2 seasonal influenza vaccines by mutational incompatibility	1,488,520

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Professor JSM Peiris	Public Health	Evaluation of the role of a single amino acid substitution associated with inter-species transmission of MERS-coronavirus from camels to humans	1,449,502
Dr CM Schooling	Public Health	Breastfeeding and late adolescent lipid sub-fraction: a Hong Kong birth cohort study	985,061
Dr MFP Siu	Public Health	Tai chi versus conventional exercise to alleviate depressive symptoms in older insomniacs: a comparative efficacy randomized controlled trial	1,500,000
Professor JTK Wu	Public Health	Developing risk prediction analytics for the Hong Kong Colorectal Cancer Screening Program	1,090,456
Dr WC Chang	Psychiatry	Probing brain abnormalities for youths with subclinical psychotic symptoms: a population-based multimodal MRI study in Hong Kong	1,499,090
Dr CLM Hui	Psychiatry	Long-term clinical and functional outcome of adult-onset patients with delusional disorder and schizophrenia: a 10-year follow-up study	685,916
Dr PWC Cheng	Psychiatry	High-definition transcranial direct current stimulation (HD-tDCS) as augmentation therapy in late-life depression (LLD) with suboptimal response to treatment - double-blinded randomized sham-controlled trial	872,540
Professor ESW Ngan	Surgery	Understanding the selective vulnerability of human neurons to PHOX2B polyalanine repeat expansion mutations associated with the congenital central hypoventilation syndrome and Hirschsprung disease	1,500,000