

THE UNIVERSITY OF HONG KONG  
LI KA SHING FACULTY OF MEDICINE

**Awarded Projects under NSFC/RGC Joint Research Scheme**

**2020/2021**

<b>Principal Investigator</b>	<b>Department/ School</b>	<b>Project Title</b>	<b>Amount Awarded (HK\$) (exclusive of on-costs)</b>
Professor CM Lo	Surgery	Organizational Reform and Innovation in Management of Public Hospitals basing on integration of systems through Shenzhen-Hong Kong Collaboration	1,171,828
Professor EHY Ng	Obstetrics & Gynaecology	Reconstruction of Endometrium-like Tissue from Human Endometrial Stem Cells	1,124,955

**2019/2020**

<b>Principal Investigator</b>	<b>Department/ School</b>	<b>Project Title</b>	<b>Amount Awarded (HK\$) (exclusive of on-costs)</b>
Professor MSY Huen	Biomedical Sciences	The role of RNF169 in DNA double-strand break repair pathway choice and genome stability maintenance	1,130,560
Professor DY Jin	Biomedical Sciences	Perturbation of mammalian and mosquito adaptive immunity by flaviviruses	1,177,667
Professor ML Lung	Clinical Oncology	Proteomics-based identification of tumor metastasis-associated proteins and functional and mechanistic study of MEST in esophageal cancer	1,177,667
Professor K. Fukuda	Public Health	Stakeholders and Policy-Makers Meeting: Antimicrobial Resistance and One Health	249,500

**2018/2019**

<b>Principal Investigator</b>	<b>Department/ School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Professor GSW Tsao	Biomedical Sciences	A mechanistic and clinicopathological study on the impact of invadosomes in promoting nasopharyngeal carcinoma (NPC) metastasis under the interplay of stromal macrophages and EBV infection	1,164,858
Professor JSM Peiris	Public Health	Investigation on the immunological cross-protection between different human coronaviruses	1,050,053

**2016/2017**

<b>Principal Investigator</b>	<b>Department/ School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Dr CL Cheung	Pharmacology and Pharmacy	Identification of susceptibility genes involved in the pathogenesis and prediction of thyrotoxic periodic paralysis	956,480
Professor KMC Cheung	Orthopaedics and Traumatology	Study of the degradation behaviors and osteogenic effects of Mg-Si based biomaterials	1,200,000

**2015/2016**

<b>Principal Investigator</b>	<b>Department/ School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Professor EYH Chen	Psychiatry	Neurodevelopmental effect of gene-environment interaction among early-onset schizophrenia patients: a combined genetic and neuroimaging approach	1,195,955

**2014/2015**

<b>Principal Investigator</b>	<b>Department/ School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Professor YS Chan	Physiology	Orexin-induced modulation of activity-dependent synaptic plasticity is critical for the maturation of vestibular circuitry and functions	1,098,872
Professor PC Sham	Genomic Sciences	Schizophrenia-related de novo and compound heterozygous mutations	1,098,618
Professor KY Yuen	Microbiology	Understanding the evolution and interspecies transmission of betacoronaviruses by structural and biophysical approaches	1,098,911
Professor Aimin Xu	Medicine	Fatty acid binding protein-4 as a mediator of autoimmune diabetes: from molecular mechanism to clinical significance	1,098,911

**2013/2014**

<b>Principal Investigator</b>	<b>Department/ School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Professor KSE Cheah	Biochemistry	Identifying critical transitions and gene regulatory networks controlling phases of chondrocyte differentiation in the growth plate	1,125,000
Dr MSY Huen	Anatomy	Study Role of PCNA-binding protein TRAP in Replicative Stress Responses and Tumor Suppression	1,123,616

**2012/2013**

<b>Principal Investigator</b>	<b>Department/School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Professor XY Guan	Clinical Oncology	Analysis of the role of ATOH8 and HCC cancer stem cell and somatic cell reprogramming	1,022,212
Professor D Jin	Biochemistry	Molecular dissection of NSs virulence factor in severe fever with thrombocytopenia syndrome virus (SFTSV), a novel bunyavirus identified in China	1,027,619
Professor HF Tse	Medicine	Targeted gene correction and disease modeling using Wilson's disease induced pluripotent stem cells	1,027,619

**2011/2012**

<b>Principal Investigator</b>	<b>Department/School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Dr Z Chen	Microbiology	Blocking HIV infection by gene-encoding neutralizing antibodies	892,290
Professor DKY Shum	Biochemistry	From bone marrow cells to Schwann cells – in vitro route to specification and utility in re-myelination therapy	700,000
Dr W Tu	Paediatrics & Adolescent Medicine	Induction of tolerance by alloantigen-specific regulatory T cells in humanized mice and non-human primates	712,492
Dr KM Yao	Biochemistry	Investigating the role of FOXM1 in the maintenance of human embryonic stem cell pluripotency and genome stability	900,000

**2010/2011**

<b>Principal Investigator</b>	<b>Department/School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Professor WW Lu	Orthopaedics & Traumatology	Role of Strontium-calcium Silicate - A Novel Biomaterial in the Regeneration of Osteoporotic Bone - An In-vivo/vitro study	799,940
Dr JJ Wang	Biochemistry	Understanding genetic and epigenetic features of active promoters in human/mouse embryonic stem cells	756,000
Dr MP Wong	Pathology	p38 MAPK in human lung cancers and its potential involvement in treatment resistance to tyrosine kinase inhibitors	500,000

**2009/2010**

<b>Principal Investigator</b>	<b>Department/School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Dr Q Lian	Medicine	Generation of corneal epithelial stem cells from human induced pluripotent stem cells (iPSC) and application for corneal epithelial tissue engineering	744,000
Dr J Yue	Physiology	Identifying novel regulators in cADPR-mediated calcium signaling by combining approaches of synthetic organic chemistry and RNAi screen	744,000

**2008/2009**

<b>Principal Investigator</b>	<b>Department/School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Dr YP Ching	Anatomy	The roles of CDK5 activator binding protein, LZAP, in the pathogenesis of neurodegenerative disease	628,400
Dr J Huang	Biochemistry	Toward the treatment of breast cancer by targeting breast tumor initiating cells with microRNAs	712,000
Dr D Jin	Biochemistry	Roles and regulation of MIP-T3 in centrosomal and ciliary function	712,000
Professor HC Lee	Physiology	Chemical synthesis and biological characterizations of antagonists of a novel calcium signaling enzyme - CD38	712,000
Professor KF So	Anatomy	Investigate retinal neuromechanisms of seasonal affective disorder	584,000
Dr A Xu	Medicine	Adipocyte fatty acid binding protein as a novel diagnostic marker and therapeutic target to combat vascular complications of diabetes: mechanisms and clinical implications	712,000

**2007/2008**

<b>Principal Investigator</b>	<b>Department/School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Dr RCC Chang	Anatomy	Elucidating the roles of ER stress responses in $\beta$ -amyloid peptide production and tau phosphorylation as a common pathological pathway	799,000
Dr ST Cheung	Surgery	Circulating cancer biomarkers in liver cancer patients undergoing liver transplantation	657,000
Professor AWC Kung	Medicine	To identify osteoporosis susceptibility gene(s) at chromosome 2q, 4q, 5q, 7q, 10q and 12q in Chinese	799,000
Dr L Lu	Pathology	Regulation of dendritic cell function and its therapeutic application in autoimmune diabetes	789,000

**2006/2007**

<b>Principal Investigator</b>	<b>Department/School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Dr CKF Lee	Obstetrics & Gynaecology	Functional characterization of a testis-specific Trs4 gene on spermatogenesis by tissue-specific conditional inactivation	730,700
Professor IOL Ng	Pathology	Characterization of regulatory molecules of Wnt/betacatenin signaling in liver cancer	730,700
Professor RTP Poon	Surgery	A study of the effect of vascular endothelial growth factor (VEGF) on chemoresistance of hepatocellular carcinoma (HCC) and blockade of VEGF to enhance chemosensitivity of HCC	670,700

**2005/2006**

<b>Principal Investigator</b>	<b>Department/School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Professor TH Lam	Community Medicine	Genetic and environmental risk factors of atherosclerotic cerebrovascular and cardiovascular disease in Hong Kong and Guangzhou Chinese	800,000
Professor HF Tse	Medicine	Hypoxia-mediated differentiation of murine and human embryonic stem cells into cardiomyocytes: mechanistic roles of calcium and ion channels	796,000
Dr A Xu	Medicine	The use of adiponectin as biomarker to identify novel anti-diabetic and anti-atherogenic agents from Chinese herbs	784,000

**2004/2005**

<b>Principal Investigator</b>	<b>Department/School</b>	<b>Project Title</b>	<b>Awarded Amount (HK\$)</b>
Professor CL Lin	Surgery	Development and clinical evaluation of peptide vaccines for immunotherapy of Epstein-Barr virus-positive nasopharyngeal carcinoma	631,403
Dr L Lu	Pathology	Functional interactions of dendritic cells and B cells in autoimmunity	385,990
Professor GSW Tsao	Anatomy	Functional study of EBV infection and genetic alterations in immortalized epithelial cells	470,574