

**THE UNIVERSITY OF HONG KONG  
LI KA SHING FACULTY OF MEDICINE**

**List of Successful Projects for RGC CERG 2006-07**

<b>Project Code</b>	<b>Department</b>	<b>PI</b>	<b>Project Title</b>	<b>Award (HK\$)</b>	<b>Duration</b>
<b>Li Ka Shing Faculty of Medicine</b>					
HKU 7603/06M	Li Ka Shing Faculty of Medicine	Dr GR Li	Studies on ion channels and cell proliferation in human cardiac fibroblasts	1,159,000	30
HKU 7526/06M	Li Ka Shing Faculty of Medicine	Dr C Liu	Identification and characterization of chromosomal functional domains in completely sequenced genomes	798,276	36
HKU 7552/06M	Anatomy	Dr RCC Chang	Elucidating the biological mechanisms of autophagy in Alzheimer's disease	1,229,500	36
HKU 7556/06M	Anatomy	Dr A Cheung	Centromeric instability in human cells undergoing immortalization: implication for progression of chromosomal instability in carcinogenesis	1,252,500	36
HKU 7504/06M	Anatomy	Dr SK Chung	Conditional knockout of osmotic responsive element binding protein, OREBP/NFAT5/TonEBP, to study its role in brain edema and infarct after ischemic stroke: a leading cause of mortality and morbidity	1,374,300	36
HKU 7631/06M	Anatomy	Professor GSW Tsao	Mechanisms involved in Id1 induced centrosome abnormalities	1,047,877	36
HKU 7643/06M	Anatomy	Dr W Wu	Axonal regeneration of CNS neurons after spinal cord injury	932,500	36
HKU 7485/06M	Biochemistry	Dr J Huang	Towards a visualized proteome of <i>Escherichia coli</i>	1,429,500	36
HKU 7486/06M	Biochemistry	Dr D Jin	Characterization of fusion oncoprotein FUS-CREBSL2 found in soft tissue sarcoma	932,500	36
HKU 7685/06M	Biochemistry	Dr MH Sham	Genetic and developmental defects of a mouse mutant <i>Mcc</i> with microphthalmia, cataract and closed eyelid	1,229,500	36
HKU 7670/06M	Biochemistry	Dr DKY Shum	Role of chondroitin sulfates in axonal growth and patterning in the developing hindbrain	1,229,500	36
HKU 7488/06M	Biochemistry	Dr JA Tanner	Targeting sclerostin with aptamer-based inhibitors as an approach to osteoporosis therapy	654,500	24

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HKU 7686/06M	Biochemistry	Dr NS Wong	Redox-mediated posttranscriptional regulation of <i>CHOP</i> expression: its implication in <i>CHOP</i> -mediated pathologies	1,145,200	36
HKU 7655/06M	Biochemistry	Dr Z Zhou	Triggering senescence in tumor cells via unprocessed lamin A	932,500	36
HKU 7672/06M	Community Medicine	Dr GN Thomas	SNP-based genome-wide screen for susceptibility genes for hypertension: a sibship study	1,566,916	24
HKU 7587/06M	Diagnostic Radiology	Dr PL Khong	Diffusion tensor MRI imaging (DTI) of radiation-induced white matter injury in a rat model	586,500	24
HKU 7550/06M	Medicine	Professor DTM Chan	Effect of rapamycin, alone or in combination with mycophenolate mofetil, in the treatment of murine lupus nephritis	754,500	24
HKU 7514/06M	Medicine	Dr Q Huang	Systematic evaluation and screen of the regions previously linked to osteoporosis in Southern Chinese	1,132,500	36
HKU 7582/06M	Medicine	Professor MSM Ip	Endothelial damage and atherosclerosis in obstructive sleep apnea: the role of advanced glycation end products	1,276,550	30
HKU 7661/06M	Medicine	Professor KN Lai	The tubular peroxisome proliferator - activated receptors (PPAR) - $\gamma$ system in IgA nephropathy: a potential therapeutic target	1,143,500	30
HKU 7590/06M	Medicine	Professor KSL Lam	Adipocyte fatty acid binding proteins: new mediators of the metabolic syndrome and coronary atherosclerosis	1,779,700	30
HKU 7592/06M	Medicine	Professor HY Lan	Regulation of immune response in glomerulonephritis by TGF- $\beta$ /smad signaling	1,429,500	36
HKU 7679/06M	Medicine	Dr G Lau	Role of upregulation of toll-like receptor 7 and functional polymorphisms within the toll-like receptor 7 gene in inducing sustained disease remission in chronic hepatitis B infection	754,500	24

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HKU 7520/06M	Medicine	Dr AYH Leung	The roles of survivin in hematopoiesis, angiogenesis and tumorigenesis in a zebrafish knock-down and transgenic model	1,032,500	36
HKU 7633/06M	Medicine	Dr HF Tse	Genetic enrichment of cardiac derivatives from human embryonic stem cells and their bioengineering for cell-based heart therapies	1,154,500	24
HKU 7673/06M	Medicine	Dr AYM Wang	Endothelial progenitor cells in renal failure patients and its modulation by treatment with the peroxisome proliferator-activated receptor-gamma agonist in relation to clinical atherosclerosis	1,539,352	36
HKU 7645/06M	Medicine	Dr A Xu	Hypoxia inducible factor 1 $\alpha$ as a mediator of obesity-induced chronic inflammation, aberrant production of adipokines, and insulin resistance	843,500	30
HKU 7653/06M	Medicine	Dr SSY Yung	The role of heparan sulfate proteoglycans in the pathogenesis of diabetic nephropathy and the effects of Sulodexide	654,500	24
HKU 7500/06M	Microbiology	Dr H Chen	H5N1 virus heterogeneity and mechanisms for adaptation to new hosts	1,210,692	36
HKU 7512/06M	Microbiology	Dr Y Guan	The role of migratory birds in the transmission of H5N1 influenza virus in eastern Asia	1,630,500	36
HKU 7513/06M	Microbiology	Dr PL Ho	The epidemiological relationships between CTX-M producing Escherichia coli from animal and human sources	484,180	24
HKU 7620/06M	Microbiology	Professor JSM Peiris	Role of toll-like receptors and retinoic acid-inducible gene 1 in the induction of cytokines in SARS-coronavirus infected human primary macrophages	1,054,500	24
HKU 7530/06M	Microbiology	Dr LLM Poon	Studies of mammalian, avian and chimeric influenza polymerase complexes	848,500	36
HKU 7546/06M	Microbiology	Dr B Zheng	A feasibility study on the inhibition of avian influenza virus H5N1 replication using siRNA	932,500	36

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HKU 7578/06M	Obstetrics and Gynaecology	Professor PC Ho	Adrenomedullin and sperm functions	654,500	24
HKU 7647/06M	Obstetrics and Gynaecology	Dr WSB Yeung	The mechanism of action of a novel glycodelin isoform from cumulus matrix on stimulating spermatozoa-zona pellucida binding	1,279,500	36
HKU 7658/06M	Orthopaedics and Traumatology	Dr KMC Cheung	Uncovering new compounds and mechanisms for treatment of intervertebral disc degeneration by chemical genetics	376,500	12
HKU 7130/06E	Orthopaedics and Traumatology	Dr Y Hu	Novel method for fast extraction and auto-recognition of somatosensory evoked potentials	431,000	24
HKU 7153/06E	Orthopaedics and Traumatology	Dr WW Lu	The micro-structure and micro-mechanics of human intervertebral disc	490,000	24
HKU 7594/06M	Paediatrics and Adolescent Medicine	Dr ASY Lau	HIV dysregulation of the toll-like receptor system - implications for pathogenesis	654,500	24
HKU 7498/06M	Pathology	Dr TL Chan	Expression of microRNAs in various stages and pathways of colorectal	1,132,500	36
HKU 7503/06M	Pathology	Dr ANY Cheung	Akt and p21-activated kinase signaling pathways in gestational trophoblastic disease	844,500	24
HKU 7580/06M	Pathology	Dr F Huang	Mechanistic assessment of autoimmune responses induced by dendritic cells in interleukin-10 deficient mice - implications in lupus pathogenesis	902,500	24
HKU 7524/06M	Pathology	Dr SY Leung	Systematic characterisation of genes participating in Wnt signaling pathway that regulate colon stem cell renewal and their functional significance in colon cancer pathogenesis	1,630,500	36
HKU 7608/06M	Pathology	Dr L Lu	Plasma cell development and its regulation in autoimmunity	654,500	24
HKU 7615/06M	Pathology	Professor IOL Ng	Significance of LRP6 coreceptor upregulation in the aberrant activation of Wnt signaling in liver cancer	1,830,500	36

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HKU 7627/06M	Pathology	Professor G Srivastava	Therapeutic potential and mechanisms of antitumor activity of proteasome inhibitor bortezomib in extranodal NK/T-cell lymphoma, nasal type	1,229,500	36
HKU 7674/06M	Pathology	Dr JWP Yam	Characterization of tensin2, the binding partner of DLC1 tumor suppressor in liver cancer	932,500	36
HKU 7565/06M	Pharmacology	Professor CH Cho	Cathelicidin: a potential peptide for gastric ulcer healing	784,500	24
HKU 7681/06M	Pharmacology	Professor RYK Man	Gender differences in the regulation of endothelium-dependent contracting factor	932,500	36
HKU 7490/06M	Pharmacology	Professor PMGR Vanhoutte	Genomic and proteomic basis of endothelial dysfunction in regenerated endothelium	954,500	24
HKU 7492/06M	Physiology	Dr JP Bourreau	Ventricular excitation-contraction coupling during septic shock: influence of adrenomedullin	507,500	24
HKU 7657/06M	Physiology	Professor YS Chan	Functional maturation of excitatory and inhibitory synaptic receptors in canal-and otolith-related neurons of the inferior olive	1,229,500	36
HKU 7510/06M	Physiology	Dr ML Fung	Renin-angiotensin system in the carotid body: its expression and functional implications in intermittent hypoxia	654,500	24
HKU 7470/06H	Psychiatry	Dr AM Lee	A multidimensional longitudinal study of disordered eating attitudes and behaviours and its risk factors and outcome among pregnant women	520,300	30
HKU 7669/06M	Psychiatry	Professor PC Sham	Optimal design of genome-wide association studies for multifactorial diseases	532,500	36
HKU 7555/06M	Surgery	Professor SWK Cheng	A prospective randomized trial of endovascular stent graft repair versus best medical treatment for patients with acute Type B aortic dissection	1,335,906	36
HKU 7560/06M	Surgery	Dr ST Cheung	GEP as a novel molecular target for liver cancer therapy	654,500	24

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HKU 7574/06M	Surgery	Professor ST Fan	Focal adhesion kinase and cell adhesionkinase $\beta$ as the potential therapeutic targets of tumor recurrence and metastasis in hepatocellular carcinoma	1,067,000	36
HKU 7606/06M	Surgery	Professor CM Lo	The impact of acute phase liver graft injury on tumor recurrence after liver transplantation in patients with hepatocellular carcinoma	932,500	36
HKU 7528/06M	Surgery	Dr VCH Lui	Investigation of cell autonomous function of Hedgehog signaling on vagal neural crest cells by conditional knockout of Smoothed in mice	1,279,500	36
HKU 7621/06M	Surgery	Professor RTP Poon	Senisitization of hepatocellular carcinoma (HCC) to hypoxia and chemotherapy by inhibition of hypoxia inducible factor-1 $\alpha$ (HIF-1 $\alpha$ )	920,180	24
HKU 7628/06M	Surgery	Professor PKH Tam	Study of the genetic basis of biliary atresia	922,500	24
HKU 7651/06M	Surgery	Professor PW Yuen	The evaluation of the clinical application of hypermethylated promoter DNA as tumor marker for the early detection of surgically salvageable residual or recurrent head and neck squamous cell carcinoma after treatment	646,500	24
<b>Total Number of Successful Projects</b>				<b>64</b>	
<b>Total Amount of Grants Awarded</b>				<b>64,075,885</b>	

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