

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

RGC GRF/ECS 2016-17

List of Awarded Projects

	<b>Funding Scheme</b>	<b>Principal Investigator</b>	<b>Department/School</b>	<b>Project Title</b>	<b>Project Fund Awarded (HK\$)</b>	<b>ECS Grant Awarded (HK\$)</b>	<b>Grant Total Awarded (HK\$)</b>
1.	GRF	Dr. Z. Xia	Anaesthesiology	PKC- $\epsilon$ facilitates adiponectin to restore diabetic heart responsiveness to ischemic postconditioning: The importance of PKC- $\epsilon$ /Cav3 association	913,152		913,152
2.	GRF	Professor D. Chan	Biomedical Sciences	IHH regulating CDO/GAS1 function in synovial joint formation	1,122,632		1,122,632
3.	GRF	Professor Y.S. Chan	Biomedical Sciences	Integration of new neurons into the mature vestibular circuitry requires GABAergic signaling for relevant outcome in behaviour	1,049,587		1,049,587
4.	GRF	Dr. A. Cheung	Biomedical Sciences	Role and mechanism of serglycin in promoting esophageal cancer invasion and metastasis	1,081,941		1,081,941
5.	GRF	Dr. M.C.H. Cheung	Biomedical Sciences	Elucidating the therapeutic potential of neural stem cells with genetic manipulation of Sox9 expression following spinal cord injury	903,220		903,220
6.	ECS	Dr. W.T.L. Cheung	Biomedical Sciences	Targeting PIK3R1 copy number loss in ovarian cancer	1,049,111	50,000	1,099,111
7.	GRF	Dr. M.L. Fung	Biomedical Sciences	Pathophysiological role of local inflammation in nitric oxide deficit in the carotid body in intermittent hypoxia	1,102,080		1,102,080
8.	GRF	Dr. M.S.Y. Huen	Biomedical Sciences	Role of The USP7-RNF169 axis in DNA double-strand break responses	935,623		935,623

9.	GRF	Dr. K.O. Lai	Biomedical Sciences	Investigating the role of the kinesin motor KIF5B in dendritic mRNA trafficking in neurons	1,233,067		1,233,067
10.	GRF	Dr. S.W.C. Lai	Biomedical Sciences	Reversible microcircuitry of fear learning and unlearning in the mouse auditory cortex	1,030,217		1,030,217
11.	ECS	Dr. C.W. Lee	Biomedical Sciences	Spatiotemporal regulation of actin monomers for promoting membrane protrusions in axonal growth, guidance and regeneration	1,095,395	50,000	1,145,395
12.	ECS	Dr. L.W. Lim	Biomedical Sciences	Memory and cognitive enhancement by electrical stimulation in experimental animal models of dementia: In search of brain targets and mechanisms	1,331,751	50,000	1,381,751
13.	GRF	Dr. S.K.Y. Ma	Biomedical Sciences	Role of PRMT6 in regulating cancer and stemness properties in hepatocellular carcinoma	963,484		963,484
14.	GRF	Dr. C. Qian	Biomedical Sciences	New Mechanistic Insights into DNMT1-mediated maintenance DNA methylation	1,154,550		1,154,550
15.	GRF	Dr. J.A. Tanner	Biomedical Sciences	Expanding the functional repertoire of nucleic acid aptamers by fluorescence-activated droplet sorting	1,081,775		1,081,775
16.	GRF	Dr. G.L. Tipoe	Biomedical Sciences	Defining the protective functional role of cyclooxygenase-1 in acute and chronic liver diseases	1,022,514		1,022,514
17.	GRF	Dr. C.M. Tsang	Biomedical Sciences	The importance of EBV miR-BARTs in promoting the in vivo tumor growth of nasopharyngeal carcinoma by managing apoptotic responses under metabolic stress	1,393,740		1,393,740
18.	GRF	Professor G.S.W. Tsao	Biomedical Sciences	Immortalization of nasopharyngeal epithelial cells by the EBV-encoded LMP1	1,256,240		1,256,240
19.	GRF	Professor M.H. Sham	Biomedical Sciences	The roles of N-Myc, Sufu and Gli genes in regulating the dynamic progression of mammalian cochlear hair cell differentiation	1,222,625		1,222,625
20.	ECS	Dr. S.L. Wong	Biomedical Sciences	High-throughput discovery of combination therapies by CombiGEM-CRISPR	1,465,200	100,000	1,565,200
21.	GRF	Dr. Z. Zhou	Biomedical Sciences	SIRT6 deacetylates p53 to modulate cellular senescence and aging	1,141,440		1,141,440

22.	GRF	Dr. H. Chen	Chinese Medicine	The latent TGF- $\beta$ protects against diabetic kidney disease via GARP-latent TGF- $\beta$ mediated anti-inflammation: mechanism and therapeutic potential	1,052,563		1,052,563
23.	GRF	Dr. Y. Feng	Chinese Medicine	Inhibitory effect of geniposide on hepatocellular carcinoma: the role of Hiwi	669,636		669,636
24.	GRF	Dr. J. Rong	Chinese Medicine	$\omega$ -Alkynyl arachidonic acid induces anti-inflammatory M2 polarization of macrophages in acute myocardial infarction via regulating the cross-talk between PKM2, iNOS and HIF-1 $\alpha$	1,088,950		1,088,950
25.	GRF	Dr. A.K.L. Cheung	Clinical Oncology	Elucidation of the role of Epstein-Barr Virus in modulating DNA damage repair and cancer-associating signaling pathways via bivalent H3K4me3 and H3K27me3 histone modifications in nasopharyngeal epithelial and cancer cells	1,054,087		1,054,087
26.	GRF	Professor X. Guan	Clinical Oncology	Characterization of the suppressive effects of ANG3 on cancer growth, metastasis and angiogenesis in hepatocellular carcinoma	1,086,454		1,086,454
27.	GRF	Dr. H.C.C. Chang	Diagnostic Radiology	Advanced technical development for free-breathing liver diffusion-weighted Propeller echo-planar imaging	660,509		660,509
28.	GRF	Dr. E.Y.P. Lee	Diagnostic Radiology	Characterising and quantifying intratumour heterogeneity in cervical cancer with intravoxel incoherent motion diffusion-weighted MRI.	570,115		570,115
29.	GRF	Professor D.T.M. Chan	Medicine	Acetate in the Pathogenesis of Lupus Nephritis	1,217,431		1,217,431
30.	GRF	Dr. W.K.W. Seto	Medicine	Metabolic determinants of fibrosis reversal in advanced chronic hepatitis B during long-term nucleoside analogue therapy	768,228		768,228
31.	GRF	Dr. D.C.W. Siu	Medicine	Fabrication of bio-artificial atrio-ventricular node for biological pacing combining 3D bio-printing and induced pluripotent stem cell technology	610,720		610,720

32.	GRF	Professor S.C.W. Tang	Medicine	Role of kallistatin in Wnt/ $\beta$ -catenin signaling during renal fibrosis	1,098,800		1,098,800
33.	GRF	Professor A. Xu	Medicine	Fibroblast growth factor-21 as an autocrine regulator of browning and adaptive thermogenesis in subcutaneous adipose tissue	1,247,772		1,247,772
34.	GRF	Dr. H. Chen	Microbiology	Study on regulation of expression of EBV BARTs and function of BART LncRNAs in nasopharyngeal carcinoma cells	1,029,084		1,029,084
35.	GRF	Dr. K.H. Kok	Microbiology	The role of ARRDC3 in the innate immune response to influenza A virus infection	1,037,690		1,037,690
36.	GRF	Dr. W. Deng	Nursing	Role of IL-6/IL-6R $\alpha$ signaling activation in supporting persistent EBV infection in premalignant nasopharyngeal epithelial cells	864,408		864,408
37.	GRF	Professor E.H.Y. Ng	Obstetrics and Gynaecology	Understanding the regulatory mechanisms of endometrial cells on activities of endometrial mesenchymal stem-like cells during menstruation.	1,046,320		1,046,320
38.	GRF	Dr. Q. Lian	Ophthalmology	Regulation of mitochondrial transfer potency by Kif5b in mesenchymal stem cells to rescue mitochondrial dysfunction-provoked ganglion cell degeneration	856,080		856,080
39.	GRF	Dr. J.P.Y. Cheung	Orthopaedics and Traumatology	Defining indications for managing scoliosis using comparative outcomes and cost analysis.	831,585		831,585
40.	GRF	Professor W.W. Lu	Orthopaedics and Traumatology	Hydrogel-based tailored PRP; a non-invasive novel treatment for early onset osteoarthritis	675,647		675,647
41.	GRF	Dr. K.W.K. Yeung	Orthopaedics and Traumatology	Development of magnesium-enriched decellularized allogenic bone matrix for large bone defect management	675,647		675,647
42.	GRF	Dr. W. Yang	Paediatrics and Adolescent Medicine	Unravelling the genetic puzzle of systemic lupus erythematosus (SLE) through comprehensive analyses of genetic association by functional annotation of genes, variants, and genomic regions	1,016,800		1,016,800

43.	GRF	Professor C.W. Lam	Pathology	Regulatory signatures of two novel prognostic metabotypes of lung adenocarcinomas: integrated analysis of transcriptomics and metabonomics of malignant pleural effusions	713,958		713,958
44.	GRF	Dr. C.L.R. Lo	Pathology	Clinical relevance and functional characterization of Cripto-1 in conferring stemness properties of hepatocellular carcinoma	987,178		987,178
45.	GRF	Professor L. Lu	Pathology	The Role of interleukin-17 in the pathogenesis of experimental Sjögren's syndrome	1,158,650		1,158,650
46.	GRF	Professor I.O.L. Ng	Pathology	The role of RalA GTPase and its regulator RalGAP in liver cancer	886,420		886,420
47.	GRF	Dr. J.W.P. Yam	Pathology	Exosomes released from nuclear Met expressing cells promote liver cancer metastasis and formation of lung premetastatic niche	933,936		933,936
48.	GRF	Dr. H.H.N. Yan	Pathology	Characterization of gastric intestinal metaplasia and its role in gastric cancer progression	1,445,733		1,445,733
49.	GRF	Dr. C.M. Wong	Pathology	Deregulation and pathological implications of RNA N6-adenosine methyltransferase METTL3 in liver carcinogenesis	1,131,031		1,131,031
50.	GRF	Dr. Y. Wang	Pharmacology and Pharmacy	Timely resetting mitochondrial function by SIRT1 in adipose tissue determines the pace of metabolic ageing in mice	1,355,707		1,355,707
51.	GRF	Dr. M.P. Wong	Pathology	The role and mechanisms of CaMK2A/SOX2 coupling in tumor initiating cells regulation and drug resistance in non-small cell lung cancer	1,245,532		1,245,532
52.	GRF	Dr. C.C.L. Wong	Pathology	Clinical significance and metabolic roles of methylenetetrahydrofolate dehydrogenase 1-Like (MTHFD1L) in liver cancer development	883,035		883,035
53.	ECS	Dr. C.L. Cheung	Pharmacology and Pharmacy	Metabolomic study of osteoporosis in Southern Chinese	1,355,193	100,000	1,455,193

54.	GRF	Dr. G.P.H. Leung	Pharmacology and Pharmacy	Development of novel equilibrative nucleoside transporter-2 inhibitor and its application in studying the functions of equilibrative nucleoside transporter-2 in skeletal muscle	573,420		573,420
55.	GRF	Dr. E.H.C. Tang	Pharmacology and Pharmacy	Unexpected role of the telomere-associated protein Rap1 in protecting against endothelial dysfunction	992,856		992,856
56.	GRF	Dr. K.F. Chung	Psychiatry	Cognitive behavioral therapy for insomnia as a transdiagnostic early intervention of mood disorders: A randomized controlled trial	696,124		696,124
57.	ECS	Dr. C.L.M. Hui	Psychiatry	Cognitive deterioration and its underlying neurobiological basis in predicting relapse of first-episode psychosis	994,034		994,034
58.	GRF	Dr. H.M.E. Lee	Psychiatry	A 6-week double-blind randomized controlled trial of transcranial direct current stimulation for cognitive enhancement in schizophrenia	765,364		765,364
59.	ECS	Dr. K.C.D. Chan	Public Health	Learning safety in sport: Developing a theory-driven intervention for promoting sport injury prevention among secondary school students	690,866	50,000	740,866
60.	GRF	Dr. M.C.W. Chan	Public Health	Mechanisms of lung injury caused by Middle East respiratory syndrome coronavirus (MERS-CoV) and SARS-CoV and potential therapeutic effects of mesenchymal stem cells	1,476,689		1,476,689
61.	GRF	Dr. S.M. Fong	Public Health	Helping children with developmental coordination disorder (DCD): A randomized controlled trial	720,380		720,380
62.	GRF	Dr. N. Jiang	Public Health	Changing social norms around smoking: A cluster randomized controlled trial to address tobacco use among adolescents in Hong Kong	591,326		591,326
63.	GRF	Dr. M.Y. Ni	Public Health	Role of childhood neglect in common mental disorders: A sibling study nested in a population-based cohort	599,228		599,228

64.	GRF	Dr. T.Y. Lam	Public Health	Phylogeny-guided assembly of short reads from deep sequencing of microbial samples	590,905		590,905
65.	GRF	Dr. H.M.H. Pang	Public Health	A familial meta-omics study of the cutaneous microbiome in psoriasis	448,314		448,314
66.	GRF	Dr. H. Yen	Public Health	Impact of droplet and droplet nuclei exposure on onward influenza transmission potential and genetic bottleneck	977,712		977,712
67.	GRF	Professor K. Man	Surgery	The role of glutathione peroxidase 3 (GPx3) in liver graft injury after transplantation	1,100,029		1,100,029
68.	GRF	Dr. E.S.W. Ngan	Surgery	Kinesin family member protein 7 (KIF7) in ciliopathy associated gut motility disorders	961,033		961,033
69.	GRF	Dr. C.L.T. Wong	Surgery	Prospective study of stereotactic body radiation therapy as bridging therapy for hepatocellular carcinoma patients on waiting list for liver transplantation	649,547		649,547
<b>Total Number of Successful Projects:</b>					<b>69</b>		
<b>Total Amount of Grants Awarded:</b>					<b>HK\$68,032,070</b>		