

THE UNIVERSITY OF HONG KONG
LKS FACULTY OF MEDICINE

RGC GRF/ECS 2022-23

List of Awarded Projects

	Funding Scheme	Department/School	Principal Investigator	Project Title	Grand Total Awarded (HK\$)
1.	GRF	Bau Institute of Medical and Health Sciences Education	Dr. B. Zheng	Fostering collaborative knowledge construction in blended problem-based learning (bPBL): A mixed-methods study	547,594
2.	GRF	Department of Anaesthesiology	Dr. G.T.C. Wong	Elucidating the role of IL17/CEBP dependent astrocytic C3 upregulation in perioperative neurocognitive disorder	1,180,218
3.	GRF	Department of Anaesthesiology	Dr. S.C.S. Wong	Role of Serpina3n in regulating the effects of different dietary patterns in an acute postoperative pain model	971,556
4.	GRF	Department of Clinical Oncology	Dr. W. Dai	Tumor-Specific Alternative Splicing: A New Source for Neoantigens in Nasopharyngeal Carcinoma?	1,180,167
5.	GRF	Department of Clinical Oncology	Professor X. Guan	ADAR1-mediated RNA editing of GLI1 drives hepatocellular carcinogenesis by increasing cancer stemness	1,179,746
6.	GRF	Department of Clinical Oncology	Dr. V.H.F. Lee	A phase II study on immune checkpoint inhibitor and radioembolisation for previously untreated metastatic hepatocellular carcinoma	1,180,218
7.	GRF	Department of Medicine	Dr. K.H. Chan	Role of B lymphocytes and potential therapeutic efficacy of Bruton's tyrosine kinase inhibitor in neuromyelitis optica spectrum disorder	1,166,064

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8.	GRF	Department of Medicine	Professor B.M.Y. Cheung	Treating the metabolic syndrome with a sodium-glucose cotransporter-2 inhibitor: a randomised controlled trial	1,179,805
9.	GRF	Department of Medicine	Professor W.K.W. Seto	Multi-scale deep learning versus standard radiological interpretation in computed tomography to predict microvascular invasion in hepatocellular carcinoma: a multi-center randomized trial	1,056,473
10.	GRF	Department of Medicine	Professor S.C.W. Tang	Dissecting the role of C5aR-mediated autophagy and mitophagy in diabetic kidney disease	1,180,213
11.	GRF	Department of Medicine	Dr. B. Wang	Bone marrow adipose tissue orchestrates hematopoiesis to facilitate type 2 immune response during cold-induced beiging of white adipose tissue	1,180,022
12.	GRF	Department of Medicine	Professor A. Xu	A novel Role of Stanniocalcin-2 in the Regulation of Insulin Secretion from Pancreatic β cells	1,369,053
13.	GRF	Department of Medicine	Dr. K.H. Yiu	Effect of empagliflozin on progression of left ventricular hypertrophy and myocardial dysfunction in patients with aortic stenosis: a randomized double-blind placebo-controlled trial	762,224
14.	GRF	Department of Medicine	Dr. S.S.Y. Yung	Defining the Role of Hyaluronan in the Pathogenesis of Lupus Nephritis and the Effect of 4-Methylumbelliferone and Mycophenolate	1,179,884
15.	GRF	Department of Microbiology	Dr. J.F.W. Chan	Elucidating the novel role of cholesterol consensus motif in coronavirus infections: implications for pathogenesis and treatment	1,179,699
16.	GRF	Department of Microbiology	Professor Z. Chen	Mechanism of vaccine-induced mucosal immune responses against SARS-CoV-2 infection	1,179,038

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17.	GRF	Department of Microbiology	Dr. H. Chu	Epigenetic modulation as a novel approach to establish antiviral state for the control of emerging viral pathogens	1,160,548
18.	GRF	Department of Microbiology	Dr. L. Liu	Novel mechanism restoring HBsAg-specific B cell response during chronic hepatitis B virus infection	1,165,466
19.	GRF	Department of Obstetrics and Gynaecology	Dr. K.K.L. Chan	The impact of CXCL10 derived from ovarian cancer cells on T cell antitumor immunity	1,020,503
20.	GRF	Department of Obstetrics and Gynaecology	Dr. C.N. Chiu	The role of adrenomedullin on trophoblast differentiation and its association with early-onset preeclampsia	1,169,026
21.	GRF	Department of Orthopaedics and Traumatology	Professor K.M.C. Cheung	Development of nickel-titanium shape memory alloy based growing spinal system for early-onset scoliosis	1,007,013
22.	GRF	Department of Orthopaedics and Traumatology	Professor W.W. Lu	Subfornical organ in forebrain senses and regulates serum parathyroid hormone and modulates bone remodeling	1,337,677
23.	GRF	Department of Orthopaedics and Traumatology	Dr. G.K.H. Shea	Understanding why human bone marrow gives rise to both CNS and PNS glia: Implications for remyelination therapy	1,180,217
24.	GRF	Department of Orthopaedics and Traumatology	Professor K.W.K. Yeung	Near infrared responsive hydrogenated titanium oxide nano-structures enable rapid bacterial killing and superior bone-to-implant integration via immunosteomodulation	1,121,404

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25.	GRF	Department of Paediatrics and Adolescent Medicine	Dr. H.S.S. Chan	Dystrophinopathy patient-derived iPSC disease model for novel epigenetic mechanisms evaluation and advancing small molecules therapies development.	1,115,601
26.	GRF	Department of Paediatrics and Adolescent Medicine	Professor W.H. Leung	Development of chimeric antigen receptor engineered T-cell therapy for T-lineage malignancy	1,180,218
27.	GRF	Department of Paediatrics and Adolescent Medicine	Professor W. Tu	Effect of glucose metabolism on tumor immunosurveillance of human V γ 9V δ 2-T cells	1,180,218
28.	GRF	Department of Pathology	Professor L. Lu	The role of $\gamma\delta$ T cells in Sjögren's syndrome: functional characterization and therapeutic implication	1,163,027
29.	GRF	Department of Pathology	Dr. J.W.P. Yam	Role of sodium-hydrogen exchanger in the regulation of extracellular vesicle uptake in hepatocellular carcinoma	1,020,220
30.	GRF	Department of Pharmacology and Pharmacy	Dr. E.W.Y. Chan	Effectiveness and safety of NOACs and warfarin in Chinese patients with atrial fibrillation and mitral stenosis: evidence from real-world data	1,028,773
31.	GRF	Department of Pharmacology and Pharmacy	Dr. S.W.S. Leung	The novel impact of the cardiac glycoside ouabain on angiotensin II signaling: their interplay in the development of vascular dysfunction and progression of cardiovascular complications	1,178,185
32.	GRF	Department of Pharmacology and Pharmacy	Professor I.C.K. Wong	Antidepressant Discontinuation and the association of Suicide (ADS)	961,091

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33.	GRF	Department of Psychiatry	Dr. K.W. Chan	The long-term impact of clozapine on mortality hospitalisation and comorbidity in patients with schizophrenia: a population-based registry study	363,845
34.	GRF	Department of Psychiatry	Dr. W.C. Chang	Ambulatory digital phenotyping of negative symptoms and functional outcome in first-episode psychosis: a prospective 6-month follow-up study	874,146
35.	GRF	Department of Psychiatry	Dr. S.Y.S. Lui	The influence of emotion-behaviour decoupling on clinical and functional outcomes in patients with schizophrenia: Evidence from two independent longitudinal cohorts	789,055
36.	GRF	Department of Surgery	Professor K. Man	The role of lipid metabolism reprogramming mediated by FADS1 in steatotic graft injury and hepatocellular carcinoma recurrence after liver transplantation	1,179,038
37.	GRF	Department of Surgery	Professor E.S.W. Ngan	Vinculin-Yap1-TGF β signaling in cardiac neural crest cell-mediated valvulogenesis	928,438
38.	GRF	Medical Ethics and Humanities Unit	Dr. A.D. Gearin	Healing in the Forest: A Sensory Ethnography of Nature Therapy in Hong Kong	377,756
39.	GRF	School of Biomedical Sciences	Dr. C.P. Chan	Characterization of CGREF1 as a novel CREB-H-induced hepatokine that implicates in hepatic steatosis	1,180,218
40.	GRF	School of Biomedical Sciences	Dr. R.C.C. Chang	Investigating the biological mechanisms of how IL-1beta from systemic immune responses affect neuroimmune responses in zebrafish	1,180,218
41.	GRF	School of Biomedical Sciences	Dr. M.C.H. Cheung	Elucidating the role of PHF5A-SF3B1 splicing complex in determining trunk neural crest cell fate	975,144

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42.	GRF	School of Biomedical Sciences	Dr. W.T.L. Cheung	Elucidating the cooperative role of PIK3CA and ADAM15 in serous ovarian carcinoma	1,179,266
43.	ECS	School of Biomedical Sciences	Dr. Y.S.C. Chung	Superoxide-specific chemical probes and chemoproteomics platform to study superoxide redox biology	825,110
44.	GRF	School of Biomedical Sciences	Dr. B. Gao	A Novel Protein Quality Control Mechanism in Regulating Core Planar Cell Polarity Protein Vangl2 and Beyond	1,180,218
45.	GRF	School of Biomedical Sciences	Professor Q. Hao	Deciphering SAM-mediated positive cooperativity of methyltransferase by a structural and comparative approach	1,170,383
46.	GRF	School of Biomedical Sciences	Dr. M. He	Divergence of a Hedgehog pathway kinesin KIF27 in regulating motile cilia function	1,244,485
47.	GRF	School of Biomedical Sciences	Professor M.S.Y. Huen	Role of Nuclear Phosphoinositides in DNA Damage Detection and Repair Control	1,144,812
48.	GRF	School of Biomedical Sciences	Dr. R. Jauch	Dissecting reprogramming routes from somatic cells towards neural versus pluripotent stem cells to enable lineage exclusive cell fate transitions	1,162,712
49.	ECS	School of Biomedical Sciences	Dr. S.C. Kwon	An ultra-precise shRNA platform for the rapid development of siRNA therapeutics	1,222,718
50.	GRF	School of Biomedical Sciences	Dr. S.W.C. Lai	Serotonergic modulation of the medial prefrontal cortex in fear conditioning and extinction	1,179,750
51.	GRF	School of Biomedical Sciences	Dr. G.S.H. Ling	The role of Type I interferons-induced lipid peroxidation in CD8+T cell exhaustion and cancer immunotherapy resistance	1,180,179

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52.	GRF	School of Biomedical Sciences	Professor P. Liu	Functional and Single Cell Genomics Investigation of METTL3 and m6A RNA Methylation in Human Cell Lineage Development	1,180,218
53.	GRF	School of Biomedical Sciences	Dr. R. Hervas Millan	The structural basis of Pipsqueak amyloid assembly during embryonic development for functional insights	1,180,030
54.	GRF	School of Biomedical Sciences	Dr. R.R. Sugimura	Defining the molecular landscape of tumor-associated macrophages (TAMs) at the single-cell level	1,180,218
55.	GRF	School of Biomedical Sciences	Dr. S.C. Ti	Dissecting the effects of mechanosensation-related tubulin isoforms on the microtubule mechanical properties	1,494,944
56.	GRF	School of Biomedical Sciences	Dr. M. Tong	AMBRA1 coordinates mitochondrial functions to regulate cancer stemness and tumorigenesis in hepatocellular carcinoma	1,180,218
57.	GRF	School of Biomedical Sciences	Dr. S.L. Wong	Enabling high-throughput engineering of CRISPR base and prime editors for precise genome editing	1,574,899
58.	GRF	School of Biomedical Sciences	Dr. C. Yu	Unraveling the mechanism of PI(345)P3-mediated Cdc42 regulation in the macrophage podosome	1,180,218
59.	GRF	School of Nursing	Dr. S.T. Cheung	Improving Chemotherapy-induced Peripheral Neuropathy in Cancer Patients Using a Combined Qigong and Self-administered Acupressure Intervention: A Randomized Controlled Trial	1,192,254
60.	GRF	School of Nursing	Dr. Y.T.D. Cheung	Snapshot your drinking: Ecological momentary assessment and content analysis for alcohol marketing in Hong Kong in-school adolescents	1,047,115

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61.	GRF	School of Nursing	Dr. P.H. Choi	Developing and testing an eHealth intervention to reduce sexual risks among men who have sex with men: a randomized controlled trial	982,232
62.	ECS	School of Nursing	Dr. S.L.C. Chui	Safe Antibiotics use in the Management of PEOple with Dementia (SAMPED)	921,882
63.	GRF	School of Nursing	Dr. Y.K.A. Lai	A Proactive Patient-centered Interactive Smartphone-based Self-Management Support Program to enhance Quality of Life in Patients with Chronic Obstructive Pulmonary Disease – A Pragmatic Randomized Controlled Trial with Mixed-method Evaluation	1,177,378
64.	GRF	School of Nursing	Dr. J.J.J. Lee	The effect of instant message-delivered brief cognitive behavioural therapy for insomnia (CBT-I) in stroke caregivers: a randomised controlled trial	1,197,535
65.	GRF	School of Nursing	Professor C. Lin	Effect of Tai-Chi versus Aerobic Exercise on Emotional Symptom Cluster in Late-stage Lung Cancer Patients: A Mixed-methods Intervention Evaluation with Mediation Analysis	1,197,844
66.	GRF	School of Public Health	Dr. S.L.R. Au Yeung	Characterizing proteomic signatures of childhood obesity: A recall by genotype design in a Chinese birth cohort	626,991
67.	GRF	School of Public Health	Dr. Z. Du	Impact of baloxavir treatment to mitigate future influenza epidemics in Hong Kong and the United States in the post-COVID-19 era	751,732
68.	GRF	School of Public Health	Dr. Y. Kim	Combined Effects of Communicating Genetic Risk of Type 2 Diabetes and Wearable Technologies On	1,158,912

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				Objectively Measured Behavioral Outcomes in Overweight or Obese East Asian Individuals.	
69.	GRF	School of Public Health	Dr. W.W.T. Lam	Managing fear of cancer progression metacognition-based Vs supportive-expressive based approaches: A randomized controlled trial	1,101,200
70.	GRF	School of Public Health	Dr. M.Y. Ni	Evolution and determinants of population mental health during the Myanmar conflict: a nationwide longitudinal study from 2021 to 2025	881,339
71.	GRF	School of Public Health	Dr. M.F.P. Siu	Examining the optimal exercise frequency for alleviating liver fat in obese adults with non-alcoholic fatty liver disease (NAFLD): A comparative randomized controlled trial	1,180,218
72.	GRF	School of Public Health	Dr. L. Tian	Silica fragments in human esophagus tissue and its association with esophageal cancer: a case-control study	1,136,944
73.	GRF	School of Public Health	Dr. K.L.T. Tsang	Heterogeneity of individual infectiousness and its implications on population transmission dynamics of COVID-19 in Hong Kong	713,338
74.	ECS	School of Public Health	Dr. H.M. Tun	Investigating the gut microbiota associated depression and its modifiable effect	1,220,550
75.	GRF	School of Public Health	Dr. P. Wu	Disease burden attributable to antimicrobial resistance in patients hospitalized with bacterial infections	728,981
76.	GRF	School of Public Health	Dr. H. Yen	Comparing host responses of SARS-CoV and SARS-CoV-2 infections	1,178,784
Total Number of Successful Projects:					76
Total Amount of Grants Awarded:					HKS 82,364,626

