|   | Funding Scheme | Department/School                  | Principal Investigator | Project Title                                                                 | Grand Total Awarded (HK$) |
|---|----------------|------------------------------------|------------------------|-------------------------------------------------------------------------------|--------------------------|
| 1 | GRF            | Department of Anaesthesiology      | Dr. G.T.C. Wong        | Elucidating the role of IL-1β/IL-1R signaling dependent Th17 cells differentiation in the pathogenesis of perioperative neurocognitive disorders | 1,020,000                |
| 2 | GRF            | Department of Clinical Oncology    | Dr. V.H.F. Lee         | Role of TCIM in Progression-Fated Subclones in Nasopharyngeal Carcinoma       | 1,588,800                |
| 3 | GRF            | Department of Diagnostic Radiology | Dr. P. Cao             | Integrated Heteronuclear MRI System for Metabolic Imaging Using a Novel Multiple-coil-gradient/radiofrequency(RF)-coil Design | 995,293                  |
| 4 | GRF            | Department of Medicine             | Dr. Y.H. Chan          | A Randomized Controlled Trial on Effects of Ivabradine for Strict Rate Control in Persistent Atrial Fibrillation: Ameliorating Myocardial Dysfunction and Inflammation | 1,293,844                |
| 5 | GRF            | Department of Medicine             | Dr. C.K. Wong          | Glucagon-like Peptide-1 Receptor Agonist for Reduction of Peri-operative Myocardial Injury in Non-cardiac Surgeries: A Randomized Controlled Trial | 1,072,696                |
| 6 | GRF            | Department of Medicine             | Professor A. Xu        | STAP1 as a Novel Perpetrator of Metabolic Inflammation: Molecular Basis and Pathophysiological Implications | 1,596,200                |
| #  | Funding Scheme | Department/School                  | Principal Investigator | Project Title                                                                                                                                  | Grand Total Awarded (HK$) |
|----|----------------|------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 7. | GRF            | Department of Microbiology         | Professor Z. Chen      | Role of HIV-1-specific antibodies cloned from Δ42PD-1 positive memory B cells                                                                | 1,576,960                |
| 8. | ECS            | Department of Microbiology         | Dr. X. Li              | Characterisation of anti-GM-CSF autoantibodies in COVID-19 patients                                                                         | 1,445,998                |
| 9. | GRF            | Department of Microbiology         | Dr. S. Sridhar         | Designing next-generation molnupiravir-based treatment regimens for chronic hepatitis E using immunocompromised animal models                | 1,490,184                |
| 10.| GRF            | Department of Microbiology         | Dr. Z. Tan             | Mechanism of ‘cold’ tumor elimination by in situ vaccination using engineered viral vectors                                                 | 1,347,464                |
| 11.| GRF            | Department of Microbiology         | Dr. S. Yuan            | Deciphering the roles of Influenza A matrix protein M1-mediated host PFKFB3 SUMOylation during virus infection                                | 1,473,580                |
| 12.| GRF            | Department of Nursing              | Dr. P.H. Chau          | Mediating and moderating role of health and social care utilisation in the association between social frailty and depression                   | 1,589,000                |
| 13.| GRF            | Department of Nursing              | Dr. J.J. Lee           | Instant message-delivered personalised acceptance and commitment therapy (IMPACT) for neuropsychiatric symptoms in persons with mild cognitive impairment: a mixed methods study | 932,480                  |
| 14.| GRF            | Department of Nursing              | Dr. Y.W. Lok           | An ecological momentary intervention to improve breastfeeding outcomes: a randomised controlled trial                                        | 1,268,280                |
| 15.| GRF            | Department of Nursing              | Dr. T.T. Luk           | Mobile instant messaging-based lifestyle intervention for pregnant women at risk of gestational diabetes: a randomised controlled trial  | 1,292,000                |
|   | Funding Scheme | Department/School                                | Principal Investigator          | Project Title                                                                 | Grand Total Awarded (HKS) |
|---|----------------|-------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------|---------------------------|
|16.| GRF            | Department of Nursing                          | Professor M.P. Wang             | A randomized 2 by 2 factorial trial on mHealth support and financial incentives to promote smoking cessation in deprived older smoke | 1,500,000                 |
|17.| GRF            | Department of Nursing                          | Professor S.F.D. Yu             | Effects of the Buddy-Up Dyadic Physical Activity (BUDPA) Program on the health outcomes and social dynamics of persons with dementia and their family caregivers: A mixed-method randomized controlled trial. | 1,186,250                 |
|18.| GRF            | Department of Obstetrics and Gynaecology       | Dr. C.L. Lee                   | The maternal contribution to early-onset preeclampsia: A perspective from endometrial gland development and functions | 1,484,248                 |
|19.| GRF            | Department of Ophthalmology                   | Dr. Y.K. Chan                  | Revisiting the origin of and developing novel strategies to tackle silicone oil emulsification in vitreoretinal surgery | 1,592,680                 |
|20.| GRF            | Department of Ophthalmology                   | Professor K.S. Leung           | ROTA-guided Glaucoma Treatment in Patients with Advanced Disease – A Randomized Clinical Trial | 1,600,000                 |
|21.| GRF            | Department of Paediatrics and Adolescent Medicine | Dr. B.H.Y. Chung               | Application of amniocyte RNA sequencing in deciphering Mendelian diseases in prenatal diagnosis | 1,464,160                 |
|22.| GRF            | Department of Paediatrics and Adolescent Medicine | Dr. P. Ip                     | Profiles and predictors of behavioral resilience among children living in disadvantaged areas: a 6-year longitudinal study from preschool to primary school | 380,230                   |
|23.| GRF            | Department of Paediatrics and Adolescent Medicine | Professor W.H. Leung           | Preclinical development of chimeric antigen receptor engineered NK-cells for acute myeloid leukaemia | 1,600,000                 |
| No. | Funding Scheme | Department/School | Principal Investigator | Project Title | Grand Total Awarded (HK$) |
|-----|----------------|-------------------|------------------------|--------------|--------------------------|
| 24. | GRF            | Department of Paediatrics and Adolescent Medicine | Professor W. Tu | Development of gammadelta-T cell exosomes-based therapeutic cancer vaccines against Epstein-Barr virus-associated tumors | 1,600,000 |
| 25. | GRF            | Department of Pathology | Dr. X. Mao | Secretory Nidogen 1 triggers the endocytic trafficking of β5 integrin in hypoxia induced liver cancer metastasis | 1,400,000 |
| 26. | GRF            | Department of Pathology | Dr. C.M. Wong | Deregulation of RNA N4-acetylcytidine modification promotes liver cancer development | 1,545,012 |
| 27. | GRF            | Department of Pharmacology and Pharmacy | Professor E.W.Y. Chan | Safety and effectiveness of cardiovascular drugs in the management of atrial fibrillation with mitral stenosis among Chinese patients: a real-world population-based cohort study | 1,098,000 |
| 28. | GRF            | Department of Psychiatry | Dr. S.Y.S. Lui | Characterizing clinical and functional outcomes of neurological soft-signs in first-episode schizophrenia: A 10-year follow-up study | 535,368 |
| 29. | GRF            | School of Biomedical Sciences | Dr. X. Bao | The role of linker histone H1 lysine acetylation in regulating chromatin compaction and chromatin-templated processes | 1,599,920 |
| 30. | GRF            | School of Biomedical Sciences | Dr. C.P. Chan | SARS-CoV-2 main protease 3CLpro cleaves zinc-finger antiviral protein ZAP as a viral countermeasure against host restriction | 1,600,000 |
| 31. | GRF            | School of Biomedical Sciences | Dr. R. Hervas Millan | Cryo-EM structure of mammalian CPEB2, a neuronal amyloid implicated in memory persistence | 1,599,700 |
|   | Funding Scheme | Department/School                  | Principal Investigator | Project Title                                                                                     | Grand Total Awarded (HKS) |
|---|---------------|------------------------------------|------------------------|---------------------------------------------------------------------------------------------------|--------------------------|
| 32. | GRF          | School of Biomedical Sciences     | Dr. J.W.K. Ho          | Charting clonal dynamics in nasopharyngeal carcinoma using a mitochondrial-enriched single cell RNA-seq approach | 1,600,000               |
| 33. | GRF          | School of Biomedical Sciences     | Professor M.S.Y. Huen   | Regulation of Transcription Recovery on the Damaged Chromatin                                     | 1,596,000               |
| 34. | GRF          | School of Biomedical Sciences     | Dr. R. Jauch           | Defining the evolutionary origin for the capacity of SOX and POU transcription factors to heterodimerise as possible foundation of stemness and animal multicellularity | 1,561,000               |
| 35. | GRF          | School of Biomedical Sciences     | Professor D. Jin       | Activation of innate DNA sensing by IFI16 through direct binding with cGAMP                      | 1,600,000               |
| 36. | GRF          | School of Biomedical Sciences     | Dr. S.C. Kwon          | Single-nucleotide resolution mapping of RNA-targeting Cas13 cleavage sites                       | 1,400,000               |
| 37. | GRF          | School of Biomedical Sciences     | Dr. C.W. Lee           | Regulation of local mRNA translation by FMRP and m6A modification in axonal outgrowth and synaptogenesis | 1,600,000               |
| 38. | GRF          | School of Biomedical Sciences     | Dr. G.S.H. Ling        | Elucidating how type 2 diabetes impairs anti-viral Th1 responses via lipid peroxidation          | 1,602,756               |
| 39. | GRF          | School of Biomedical Sciences     | Professor P. Liu       | Investigation of Tumor suppressor protein p53 in cell lineage development in mouse pre-implantation embryos and in human pluripotent stem cell differentiation | 1,600,000               |
| 40. | ECS          | School of Biomedical Sciences     | Dr. Y. Liu             | Histone variant H3.3 deposition at heterochromatin by histone chaperone DAXX and chromatin remodeler | 1,496,193               |
| Funding Scheme | Department/School               | Principal Investigator          | Project Title                                                                                                                                  | Grand Total Awarded (HK$) |
|----------------|---------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|                |                                 |                                 | ATRX                                                                                                                                             |                          |
| 41. GRF        | School of Biomedical Sciences    | Professor S.K.Y. Ma             | Oncofetal protein MAP2-induced tumor plasticity as a possible therapeutic window for hepatocellular carcinoma                                      | 1,600,000                |
| 42. ECS        | School of Biomedical Sciences    | Dr. T. Ni                      | Decipher the Structure and Mechanism of Coronavirus RNA Translocation Pore                                                                    | 1,575,681                |
| 43. ECS        | School of Biomedical Sciences    | Dr. J.H.D. Shih                | Scalable variable selection with non-local priors for multivariate analysis of high-dimensional biological data                               | 1,575,589                |
| 44. GRF        | School of Biomedical Sciences    | Dr. W.H.J. Wong                | Functional characterisation of cancer hotspot mutations in XPD (xeroderma pigmentosum group D protein)                                         | 1,599,980                |
| 45. GRF        | School of Biomedical Sciences    | Dr. C. Yu                      | Investigating the molecular mechanism of mechanosensitive activation and substrate compliance of integrin beta6 receptor                      | 1,600,000                |
| 46. GRF        | School of Biomedical Sciences    | Professor Z. Zhou              | Functional investigation of Isthmin-1 in branching morphogenesis during early kidney development                                               | 1,592,000                |
| 47. GRF        | School of Chinese Medicine       | Dr. H. Chen                    | Mettl3-mediated m6A modification of Ndrg1 promotes acute kidney injury (AKI) sensitivity in diabetic nephropathy                                  | 1,509,872                |
| 48. GRF        | School of Chinese Medicine       | Dr. X. Lin                     | Role of STING/IFN-I axis in the pathogenesis of primary Sjogren’s syndrome                                                                     | 1,506,800                |
| 49. GRF        | School of Chinese Medicine       | Professor J. Shen              | Elucidating roles of adaptor protein APPL2 in inhibiting adult neurogenesis via affecting mitochondrial function,                                 | 1,190,264                |
| Funding Scheme | Department/School       | Principal Investigator       | Project Title                                                                 | Grand Total Awarded (HK$) |
|----------------|-------------------------|------------------------------|--------------------------------------------------------------------------------|---------------------------|
|                |                         |                              | redox signaling and mitochondrial dynamics in ischemic stroke with hyperglycemia |                           |
| 50.            | GRF                     | School of Public Health      | Dr. D. Montero Barril                                                           | 1,538,400                 |
|                |                         |                              | Ethnic-specificity in cardiac capacity: shedding light into the Chinese heart at work |                           |
| 51.            | GRF                     | School of Public Health      | Dr. M.Y. Ni                                                                     | 1,173,600                 |
|                |                         |                              | Psychiatric sequelae of population shocks in Hong Kong: a 15-year prospective cohort study |                           |
| 52.            | GRF                     | School of Public Health      | Dr. M.F.P. Siu                                                                  | 1,580,000                 |
|                |                         |                              | Vigorous- versus moderate-intensity exercise to reduce liver fat in adults with obesity and non-alcoholic fatty liver disease (NAFLD): A randomized controlled equivalence trial |                           |
| 53.            | GRF                     | School of Public Health      | Dr. L. Tian                                                                     | 1,400,000                 |
|                |                         |                              | The glass roots of esophageal cancer in China: needle-shaped diatom frustules in trash fish |                           |
| 54.            | GRF                     | School of Public Health      | Dr. S.S. Wong                                                                   | 1,552,817                 |
|                |                         |                              | Systematic investigation into the breadth of antibody and B cell cross-reactivity to avian influenza neuraminidase (NA) proteins in humans |                           |
| **Total Number of Successful Projects:** | |                              |                                                                                | 54                        |
| **Total Amount of Grants Awarded:** | |                              |                                                                                | HK$ 76,819,299            |