

Full details of the CUHK-led projects are as follows:

**CRF 2021/22 Collaborative Research Project Grant (CRPG) and Collaborative Research Equipment Grant (CREG) Proposals**

Project Coordinator (Faculty/Department)	Proposal Title	Duration (Months)	Amount Awarded (HK\$)
Professor JIANG Liwen (Life Sciences)	The First Integrated State-of-the-Art Live Cell Imaging Platforms to Timely Promote Interdisciplinary and Advanced Life Sciences Research in Hong Kong and Beyond	36	10,000,000
Professor WONG Patrick Chun-man (Linguistics and Modern Languages)	A Predict-to-Prescribe Approach to Social Communication Treatment in Chinese Preschool Children with Autism Spectrum Disorder	36	7,974,224
Dr CHEUNG Wing- hoi (Orthopaedics and Traumatology)	Dissecting the Therapeutic Mechanism of an Effective Combination Treatment Targeting Neuromuscular Junction Degeneration and Myosteatosis to Combat Sarcopenia	36	4,772,807
Professor XING Guoliang (Information Engineering)	Small Data Learning for Alzheimer's Disease: From Digital Biomarker to Personalised Intervention	36	8,230,720
Professor WING Yun-kwok (Psychiatry)	Multi-modal Approaches to Determine Digital Clinical Phenotyping, Novel Proteomic Biomarkers, and Microbiota-host Responses of REM Sleep Behavior Disorder, a Prodromal Stage of Alphasynucleinopathy Neurodegeneration, in a Prospective Family Cohort	36	7,214,620
Professor SUN Xiankai (Electronic Engineering)	A Sub-10-nm Resolution Electron-Beam Lithography System for Cross-disciplinary Nanomaterial and Nanodevice	36	9,750,000

	Research		
Professor CHOY Richard Kwong-wai (Obstetrics and Gynaecology)	Recurrent First Trimester Miscarriage: Genetic Etiology, Diagnosis and Prevention	48	8,021,650

### Second CRF Covid-19 and NID Exercise Group Research Proposals

Project Coordinator (Faculty/Department)	Proposal Title	Duration (Months)	Amount Awarded (HK\$)
Professor REN Hongliang (Electronic Engineering)	Minimally Contiguous Intubation and Tracheostomy for Severe COVID-19 Patients with Teleoperated Endotracheal cum Percutaneous Dual Robotic Modules and Multi-Modality Guidance	33	7,200,000
Dr CHAU Steven Wai-ho (Psychiatry)	Neuropsychiatric 'Long-COVID' in Adult Patients	12*	3,251,480
Professor XING Guoliang (Information Engineering)	High-precision and Privacy- preserving Indoor Social Contact Tracking Technologies for Infectious Disease Transmission Modeling and Control	36	7,775,600
Dr CHEUNG Peter Pak-hang (Chemical Pathology)	From Structural to Genomic Biology: A Multi-scale Approach Tightly Integrating Structural Biology and Novel Genomics Platform to Quantitatively Analyse the Transcription and its Regulation of SARS-CoV-2 Viral RNA Polymerase	36	8,000,000

\* Supported for one-year seed money and exploratory funding.