

**Appendix: PolyU-led projects awarded RGC Collaborative Research Funding 2023/24**

**1. 2023/24 Collaborative Research Project Grant (CRPG) projects**

<b>Project Title</b>	<b>Project Coordinator</b>	<b>Funded Amount (HKD)</b>
Towards future climate-resilient sea-crossing bridges via intelligent learning of long-term real monitoring data	<b>Prof. XIA Yong</b> Professor of the Department of Civil and Environmental Engineering (in collaboration with CityU, HKUST and HKU)	5,056,919
High-resolution single-cell multi-omics: Joint profiling of multiple types of biomolecules in the same single cell	<b>Prof. YANG Mo</b> Associate Head (Research) and Professor of the Department of Biomedical Engineering (in collaboration with CUHK and HKUST)	6,412,248
Multi-sensor monitoring, geophysical interpretation and prediction of sea level rise in Hong Kong	<b>Prof. CHEN Jianli</b> Professor of the Department of Land Surveying and Geo-Informatics (in collaboration with CUHK and HKUST)	6,567,108
The roles of mechanically heterogeneous local niches within primary tumours in metastatic organotropism	<b>Dr TAN Youhua</b> Associate Professor of the Department of Biomedical Engineering (in collaboration with CUHK and HKU)	5,985,252
Heterogeneity-aware Collaborative Edge AI Acceleration	<b>Prof. CAO Jiannong</b> Dean of Graduate School, Otto Poon Charitable Foundation Professor in Data Science, Chair Professor of Distributed and Mobile Computing of the Department of Computing (in collaboration with HKUST and HKU)	7,364,305
Improving the health and stability of roadside trees in compact urban development through novel road systems and tree root “training”	<b>Prof. WANG Yuhong</b> Professor of the Department of Civil and Environmental Engineering (in collaboration with HKBU, HKUST and HKU)	5,407,780
White Adipose Tissue (Fat) Dysfunction in Ageing and its Related Metabolic Diseases: New Insights and Therapeutic Potential	<b>Dr Kenneth King Yip CHENG</b> Associate Professor of the Department of Health Technology	8,166,029

	and Informatics (in collaboration with CUHK and HKU)	
Towards Next-generation Artificial Auditory System with Brain-inspired Technologies	<b>Prof. TAN Kay Chen</b> Chair Professor of Computational Intelligence, Associate Head of the Department of Computing (in collaboration with CUHK, HKUST and HKU)	6,430,953
Scalable Two-Dimensional Polymorphic Ferroelectrics Towards In-Memory Processing	<b>Dr ZHAO Jiong</b> Associate Professor of the Department of Applied Physics (in collaboration with CityU)	4,100,714

## 2. 2023/24 Young Collaborative Research Grant (YCRG) projects

<b>Project Title</b>	<b>Project Coordinator</b>	<b>Funded Amount (HKD)</b>
The role of the human frontopolar cortex in complex decision making: neural network modelling, aging, and enhancement	<b>Dr Bolton CHAU</b> Associate Professor of the Department of Rehabilitation Sciences (in collaboration with HKBU, CUHK)	4,591,504
Sensing in 6G Cellular Networks	<b>Dr LIU Liang</b> Assistant Professor of the Department of Electrical and Electronic Engineering (in collaboration with HKU)	4,843,318