

### List of 2017 Hong Kong Principal Investigators

Ref. No	Academic Discipline	Name	Institution	Academic Rank	Department	Research Project
2017-001	0202		LN	Professor	Economics	Educational, Human Capital Development and Economic Growth
2017-002	0402		EDUHK	Associate Professor	Psychology	Language Acquisition
<b>2017-003</b>				Professor	Physics	
2017-004	0702		Physics PolyU			

				Technology	C-O
2017-013	0703	PolyU	Chair Professor	Applied Biology and Chemical Technology	New Molecular Functional Materials for Energy Conversion and Storage
2017-014	0703	HKBU	Associate Professor	Chemistry	Probing the Environmental Fate of Emerging Contaminants
2017-015	0703	HKBU	Associate Professor	Chemistry	Lanthanide bioprobes for imaging and inhibition of overexpressed proteins for cancer therapy
2017-016	0703	HKUST	Associate Professor	Chemical and Biomolecular Engineering	Advanced Materials for Electrochemical Energy Devices
2017-017	0703	HKBU	Associate Professor	Chemistry	Development of Pin1 inhibitors for the treatment of hepatitis C Pin1
2017-018	0703	CUHK	Professor	Chemistry	Multi-functional Molecular Theranostic Agents for Cancer Imaging and Therapy
2017-019	0705	CUHK	Associate Professor	Geography and Resource Management	Integrating satellite data for compliance monitoring on CO <sub>2</sub> , SO <sub>2</sub> and NO <sub>x</sub> in China's emission hotspots: A case study CO <sub>2</sub> , SO <sub>2</sub> NO <sub>x</sub>
2017-020	0705	CUHK	Professor	Institute of Space and Earth Information Science	Simulation and evaluation on the interactive influence between human activities and global change
2017-021	0706	PolyU	Professor	Civil and Environmental Engineering	Urbanisation and Atmospheric Secondary Organic Matter: Role of Anthropogenic Processes on its Formation and Consequences on Human Exposure and Health :

2017-024	0707		HKUST	Chair Professor	Life Sciences	Metal ecotoxicology and biogeochemistry, nanotoxicology
2017-025	0709		HKU	Professor	Earth Sciences	Magmatic/hydrothermal mineral deposits ( )
2017-026	0709		HKU	Professor	Earth Sciences	Groundwater and its interaction with surface water
2017-027	0710		HKBU	Professor	Biology	Osmosensing and Osmoregulation in Fish
2017-028	0710		HKBU	Professor	Biology	Transcriptional and epigenetic regulation of stress responses in plants
2017-029	0710		PolyU	Professor	Health Technology and Informatics	Zebrafish as a model system for the study of human diseases
2017-030	0710		HKU	Professor	School of Public Health	Codon bias of influenza virus and its potential application
2017-031	0710		PolyU	Associate Professor	Health Technology and Informatics	Mechanistic study of high-intensity interval training (HIIT)
2017-032	0710		HKU	Associate Professor	School of Biomedical Sciences	Understanding Self-Restraining Mechanisms in DNA Damage Surveillance & Repair DNA
2017-033	0710		CityU	Associate Professor	Biology and Chemistry	Vertebral Deformity Induced by Ancestral Exposure to Benzo[a]pyrene Using Unique Transgenic Medaka Bone Model a
2017-034	0710		PolyU	Associate Professor	Health Technology and Informatics	Establishing the role of phosphoinositide 3-kinase delta isoform in cancer metastasis 3 p110
2017-035	0710		CityU	Chair Professor	Biomedical Sciences	developing novel therapeutics to enhance cardiac repair: lessons learned from the zebrafish heart regeneration
2017-036	0714		HKU	Professor	School of Business	Precision Care for Stroke: Healthcare Big Data- Driven Clinical Decision Support :
2017-037	0714		CUHK	Associate Professor	Statistics	Gastric cancer genomics and beyond – moving from patient samples to 3D

						organoid cultures for integrative genomics analysis, drug sensitivity assays, cell biological studies and animal models :
2017-038	0801		CityU	Professor	Architecture and Civil Engineering	A Symplectic Elasticity Approach for Large Deformation Nonlinear Mechanics of Topological Gels
2017-039	0801		CityU	Chair Professor	Mechanical and Biomedical Engineering	Joint R&D of Biomaterials as Orthopaedic Implants
2017-040	0801		PolyU	Chair Professor	Mechanical Engineering	Structural and Acoustic Waves: Manipulation, Control and Monitoring
2017-041	0802		CUHK	Professor	Mechanical and Automation Engineering	Smart Materials and Structures, Energy Harvesting, Vibration, Mechatronics, Robotic Exoskeleton
2017-042	0802		CUHK	Professor	Mechanical and Automation Engineering	Medical robots design and control, human-robot interactions, service robotics, vision-based control of robotic systems, machine intelligence
2017-043	0802		PolyU	Professor	Industrial and Systems Engineering	Micro/nano manipulation robot
2017-044	0802		PolyU	Professor	Mechanical Engineering	Gaseous and Particulate Pollutants in Combustion
2017-045	0802		PolyU	Professor	Industrial and Systems Engineering	An Encoded-light-based Autostereoscopic Metrology System for In-situ Measurement of Three Dimensional (3D) Structured Surfaces 3D
2017-046	0803		HKU	Associate Professor	Electrical and Electronic Engineering	III-V Electronics and Optoelectronics Integration III-V
2017-047	0803		PolyU	Chair Professor	Electronic and Information Engineering	Research on silicon based optical waveguides and photonic devices
2017-048	0803		PolyU	Chair Professor	Electrical Engineering	Raman and Brillouin sensors with micro and nanostructured optical fibers
2017-049	0803		PolyU	Associate Professor	Industrial and	Ultra-precision machining of hierarchical micro/nano-structures

					Systemes Engineering	
2017-050	0803		CUHK	Professor	Electronic Engineering	Integrated Quantum Photonics
2017-051	0805	Juan Antonio Zapien	CityU	Associate Professor	Physics and Materials Science	Design and optimization of hybrid semiconductor - plasmon nanostructures for sensing and energy applications -
2017-052	0805		PolyU	Associate Professor	Electronic and Information Engineering	High performance organic photovoltaic devices
2017-053	0805		HKUST	Chair Professor	Institute for Advanced Study	Degradation of OLED devices OLED
2017-054	0805		CityU	Associate Professor	Physics and Materials Science	Development of Semiconductor Nanowire Based Devices for Terahertz Applications
2017-055	0805		CityU	Chair Professor	Physics and Materials Science	Structure Relaxation and Phase Transition in Metallic Liquids
2017-056	0805		CUHK	Professor	Physics	Intracellular sensing by nanomaterials
2017-057	0805		CityU	Professor	Physics and Materials Science	oxide based photovoltaic materials
2017-058	0805		PolyU	Professor	Industrial and Systems Engineering	Molecular Dynamic Simulations of Deformation Behaviour of Metallic Glasses
2017-059	0805		CityU	Associate Professor	Physics and Materials Science	Safe Physical Sensory Systems for Human-Robot Collaborative Tasks
2017-060	0805		CUHK	Professor	Electronic Engineering	Towards Uniform High-Aspect-Ratio Metal-assisted Chemical Etching of Silicon in Nanoscale
2017-061	0805		CityU	Professor	School of Energy and Environment	Development of solar photocatalyst for clean energy and environment
2017-062	0805		PolyU	Associate Professor	Institute of Textiles & Clothing	Study on photocatalytic efficiency of encapsulated perovskite nanoparticles

2017-063	0805	Andrey ROGACH	CityU	Chair Professor	Physics and Materials Science	Optical spectroscopy and devices based on semiconductor nanocrystals
2017-064	0805		PolyU	Professor	Applied Physics	Novel optoelectronic and energy materials for device applications
2017-065	0805		HKBU	Associate Professor	Physics	Interfacial Engineering of Wearable Solar Energy Harvesting and Storage
2017-066	0805		CityU	Associate Professor	Mechanical and Biomedical Engineering	Superhydrophobic surface
2017-067	0807		PolyU	Professor	Building and Real Estate	Modeling and simulation of fuel cells/batteries for efficient energy conversion
2017-068	0808	Ian Ridley	CityU	Associate Professor	School of Energy and Environmnet	Advanced Wireless Power Transfer for Smart Home
2017-069	0808		HKU	Chair Professor	Electrical & Electronic Engineering	Smart Grid
2017-070	0808		PolyU	Professor	Electrical Engineering	Research and Development of Multi-phase High-torque-density Direct-drive Electric Motors
2017-071	0809		HKBU	Associate Professor	School of Chinese Medicine	Wearable Acupoint Diagnostic and Treatment Device Project
2017-072	0809		CityU	Associate Professor	Electronic Engineering	Efficient Algorithms and Hardware Accelerators for Tensor Decomposition and Their Applications to Multidimensional Data Analysis
2017-073	0810		CityU	Chair Professor	Electronic Engineering	On-Body Antenna for Health Monitoring
2017-074	0810		CUHK	Associate Professor	Information Engineering	Incentive Mechanism Design for Wireless Network Resource Allocation
2017-075	0810		CityU	Associate Professor	Electronic Engineering	Distributed Coded Caching in 5G Wireless Networks
2017-076	0810		PolyU	Associate Professor	Electrical Engineering	Low-complexity signal processing techniques for optical communication systems

2017-077	0810		HKU	Associate Professor	Electrical and Electronic Engineering	Integrating signal processing and machine learning
2017-078	0810		CityU	Chair Professor	Electronic Engineering	Tensor Computing and Multidimensional Big Analysis
2017-079	0810		CityU	Professor	Computer Science	Apply learning techniques to Video Analytics
2017-080	0810		CityU	Associate Professor	Electronic Engineering	Interference Management and Video-Streaming Transmission in Caching-Aided Next-Generation Mobile Communication Systems
2017-081	0810		CityU	Professor	Electronic Engineering	Near-Optimal Robust Beamforming: Algorithms and Analysis
2017-082	0811		CityU	Chair Professor	Electronic Engineering	Bode Integrals and Power Gain Bounds for Disturbance Attenuation of MIMO Networked Control Systems
2017-083	0812		HKBU	Chair Professor	Computer Science	Complex Networks & Visual Analytics
2017-084	0812		PolyU	Chair Professor	Computing	Urban Computing: Big Data Processing and Analytics
2017-085	0812		PolyU	Professor	Computing	Cloud resource allocation and optimization through advanced machine learning technologies
2017-086	0812		PolyU	Professor	Computing	Big Data Analytics for Healthcare
2017-087	0812		PolyU	Associate Professor	Computing	Deep Learning for Dialogue Generation
2017-088	0812		PolyU	Professor	Computing	Efficient and Robust Visual Recognition on Large Datasets
2017-089	0812		CUHK	Professor	Systems Engineering and Engineering Management	Research and Development of INCOMIRS (Integrated Community-based Microblog Recommendation System)
2017-090	0812		CityU	Professor	Computer Science	Algorithm and Theory of Evolutionary Computation
2017-091	0812		HKBU	Associate Professor	Computer Science	Privacy-preserving Linear Algebra for Graph Query Algorithms for Massive

					Networks
2017-092	0812	HKBU	Professor	Computer Science Department	Big Data Management
2017-093	0812	CityU	Professor	Computer Science	Beyond Relevancy: Multimedia Analytics for Exploratory Video Search
2017-094	0812	CUHK	Associate Professor	Computer Science and Engineering	Design and Implementation of Dependable In-Memory Storage Clusters for Big Data Analytics
2017-095	0812	HKBU	Professor	Computer Science	Research on Key Technologies of Diversified-Incomplete-Information Based Image Retrieval for Big Data
2017-096	0812	PolyU	Professor	Institute of Textiles and Clothing	Robust Image Feature Extraction in Big Data Environment
2017-097	0812	CityU	Chair Professor	Computer Science	Privacy-preserving Task Recommendation for Cloud-based Crowdsourcing
2017-098	0812	CityU	Associate Professor	Computer Science	Deep Learning for Computer Vision and Crowd Surveillance
2017-099	0813	PolyU	Professor	Building Services Engineering	Study on Indirect Evaporative

					Engineering	
2017-105	0814		HKU	Associate Professor	Earth Sciences	Application of acoustic emission technique to microcracking study in rocks
2017-106	0815		PolyU	Professor	Civil & Environmental Engineering	Use of contemporary meta-heuristic algorithms in hydrological prediction
2017-107	0816		PolyU	Chair Professor	Land Surveying and Geo-Informatics	Optimization of SAR/InSAR Data Processing SAR/InSAR
2017-108	0816		PolyU	Chair Professor	Land Surveying and Geo-Informatics	Automated generation of schematic maps
2017-109	0817		HKU	Professor	Mechanical Engineering	Development of efficient VUV photocatalysis technology
2017-110	0817		CUHK	Associate Professor	Mechanical and Automation Engineering	Developing durable SCR catalytic converter for advanced diesel engines
2017-111	0823		PolyU	Associate Professor	Logistics and Maritime Studies	Empirical and Theoretical Studies of the Marine Traffic Flow with Mixed Vessels
2017-112	0823		HKU	Chair Professor	Civil Engineering	Safety, Reliability, and Disruption Management of High Speed Rail and Metro Systems
2017-113	0823	CHEN Anthony	PolyU	Professor	Civil and Environmental Engineering	Advanced Transport Network Models for Smart Transportation Systems
2017-114	0825		PolyU	Professor	Mechanical Engineering	Flow Control on Boundary Layer Separation
2017-115	0830		HKU	Professor	Civil Engineering	Enhanced Separation and Sludge Refinery for Wastewater Treatment – Solving the Nexus of Pollution Control and Resource Recovery in Mega Cities
2017-116	0830		HKU	Professor	Civil Engineering	Core Bacteria Populations in Wastewater Treatment Plants
2017-117	0830		HKU	Associate Professor	Civil Engineering	Superhydrophilic and superoleophobic membranes for efficient oil/water separation

2017-118	0830		PolyU	Chair Professor	Civil and Environmental Engineering	Physico-chemical Characterization and Inhalation Toxicity of Urban Ambient Airborne Particulate Matters (PMs) in Subtropical Regions
2017-119	0830		CityU	Chair Professor	Biology and Chemistry	Environmental Assessment of Chiral Pharmaceuticals in Hong Kong and its Surrounding Region: Occurrence, Fate and Potential Toxicological Significance
2017-120	0831		CityU	Chair Professor	Electronic Engineering	High Performance Biomedical Microsystems
2017-121	0831		HKU	Associate Professor	Mechanical Engineering	Droplet microfluidics for biomedical applications
2017-122	0831		HKU	Associate Professor	School of Biomedical Sciences	Characterisation of the role of chromosome instability in cancer formation and metastasis
2017-123	0831	Jan W H Schnupp	CityU	Professor	Biomedical Science	Auditory perception through learning statistical structures of sounds
2017-124	0831		PolyU	Associate Professor	Biomedical Engineering	Ultrasound brain stimulation and neuro-modulation
2017-125	0831		PolyU	Professor	Interdisciplinary Divison of Biomedical Engineering	Biomechanical Study of Musculoskeletal system for sports sciences, orthopaedics and rehabilitation
2017-126	0831		CityU	Associate Professor	Biomedical Sicences	Establishing a resarch platform to study neuropsychiatric lupus in human and murine model
2017-127	0831		CUHK	Professor	Electronic Engineering	Brainwave Integrated with Exoskeleton Robotic System for Rehabilitation
2017-128	0832		CUHK	Chair Professor	School of Life Sciences	Diet, Nutrition and Heart Diseases
2017-129	0833		PolyU	Professor	Building and Real Estate	Integrating Flagship-Led project for Urban Renewal: A Catalyst for Change
2017-130	0835		CityU	Associate Professor	Computer Science	FAVOR: a testing Framework for detecting Atomicity viOlations in concurrent traces

						FAVOR:
2017-131	0835		PolyU	Associate Professor	Health Technology and Informatics	Computer-Aided Differentiation of Malignant and Benign Lymph Nodes
2017-132	1001		CUHK	Associate Professor	School of Life Sciences	Role of TRP channels in regulating the functions of embryonic stem cells TRP
2017-133	1001		HKU	Associate Professor	School of Chinese Medicine	Elucidating critical role of GPR49 in mediating cancer dormancy and activation of breast cancer stem cells by enhancing Wnt signaling GPR49 -catenin
2017-134	1001		CUHK	Associate Professor	School of Biomedical Sciences	Decoding female germ cell aging by single-cell genomics
2017-135	1001		CUHK	Associate Professor	School of Biomedical Sciences	Identification of Novel Tumor Suppressor Long Non-coding RNAs epigenetically silenced in Hepatocellular Carcinoma RNA(lncRNA)
2017-136	1001		PolyU	Professor	Applied Biology and Chemical Technology	Reversing cancer drug resistance using small molecules
2017-137	1001		PolyU	Associate Professor	Optometry	Ectopic expression of the light-sensitive protein melanopsin in rod photoreceptors prevents retinal degeneration.
2017-138	1001		PolyU	Professor	Optometry	Myopia Research - from optical inputs to biological signalling -
2017-139	1001		CUHK	Chair Professor	School of Biomedical Sciences	Targeting TFEB to reverse endothelial dysfunction in diabetic mice through inhibition of autophagy TFEB
2017-140	1001		PolyU	Associate Professor	School of Optometry	Switching the progenitor cells program to repair the retinal ganglion cells with glaucomatous damage
2017-141	1001		CUHK	Chair Professor	Medicine & Therapeutic	a.\tTGF-beta/Smad3 signaling in tissue fibrosis and inflammation related to hypertension, diabetes, drug toxicity, and autoimmunity in heart, Kidney, liver, lung and peritoneum. TGF- / Smad3
2017-142	1001		PolyU	Associate Professor	Health	Depletion of mast cells for the treatment of allergic diseases

					Technology and Informatics	
2017-143	1001		PolyU	Associate Professor	Health Technology and Informatics	Dynamic Interactions between pathogens and biofilm microbiota
2017-144	1001		HKU	Professor	AIDS Institute, Microbiology	Mechanism of potentiating HIV antigen-specific immune responses HIV
2017-145	1001		HKU	Associate Professor	Paediatrics and Adolescent Medicine	Pathway analysis from omics data
2017-146	1001		CityU	Associate Professor	Biomedical Sciences	Antiviral and Anticancer (Precision medicine and target-based anticancer studies)
2017-147	1002		PolyU	Professor	Rehabilitation Sciences	Management of diabetic associated complications: from basic to clinical reserach
2017-148	1007		HKBU	Associate Professor	School of Chinese Medicine	Drug nano delivery system
2017-149	1007		CityU	Associate Professor	Teaching and Research Division	To discover small molecule of bioactive compounds from the medicinal plants in Lingnan region
2017-150	1007		HKBU	Associate Professor	Institute for Advancing Translational Medicine in Bone & Joint Diseases	Translational Medicine & Drug Discovery
2017-151	1008		HKBU	Associate Professor	School of Chinese Medicine	Chemistry and bioactivities of polysaccharides from Chinese medicines
2017-152	1008		HKU	Associate Professor	School of Chinese Medicine	Chinese medicine puerarin regulates mTOR signaling in metabolic stress, aging and cardiovascular diseases via downregulating small GTPaseRagA GTP RagA mTOR
2017-153	1010		PolyU	Associate Professor	Health Technology and Informatics	Monitoring radiation induced anatomical changes and their dosimetric impact in radiotherapy of nasopharyngeal carcinoma
2017-154	1010		PolyU	Associate Professor	Health	The diagnostic and prognostic usefulness of a targeted plasma nCounter

					Technology and Informatics	developed non-invasive marker panel in colorectal cancer RNA
2017-155	1010		PolyU	Associate Professor	Health Technology and Informatics	Single-molecule imaging of cancer cell motility and molecular mechanism
2017-156	1010		PolyU	Associate Professor	School of Optometry	Corneal biomechanics and intraocular pressure
2017-157	1201		PolyU	Associate Professor	Building and Real Estate	Facilitating Mobile Knowledge Management through Mobile Applications (Apps) or Wearable Computing APPs
2017-158	1201		CityU	Professor	Information Systems	Advanced Intelligent Information Systems Research Centre
2017-159	1201		CityU	Chair Professor	Information Systems	Blockchain Technology and Business Innovation in
2017-160	1201		CityU	Associate Professor	Information Systems	Competitive Actions, Strategic Group, and Performance of E-Marketplace Sellers - A Longitudinal Study
2017-161	1201		PolyU	Associate Professor	Logistics and Maritime Studies	New Approaches for Large-Scale Optimization Problems in Logistics Management
2017-162	1201		PolyU	Professor	School of Hotel and Tourism Management	Evaluation of Hotel Websites using Fuzzy Multiple Attribute Decision Making Model.
2017-163	1201		CityU	Associate Professor	Architecture and Civil Engineering	Optimizing the Performance of Hong Kong Expatriate Construction Professionals in Mainland China via a Cross-cultural Stress Management Study
2017-164	1201		PolyU	Chair Professor	Logistics and Maritime Studies	Production and Delivery Scheduling Problems in Supply Chain Management
2017-165	1201		PolyU	Associate Professor	Logistics and Maritime Studies	Health care service quality in e-commerce
2017-166	1204		CityU	Professor	Public Policy	Hong Kong Professional Services in the Co-evolving Belt-Road Initiative: Innovative Agency for Sustainable Development

2017-167	1204		CityU	Associate Professor	Public Policy	How Green Turns into Gold? Optimizing the Dual Effect of ' Price Premium for Green' and ' Cost Premium for Green' of HK-BEAM Plus Certified Housing  HK-BEAM Plus
2017-168	1204		LN	Chair Professor	Sociology and Social Policy	A Study of Contracting Out Social Services and Changing Welfare Governance in China