

### List of 2017 Hong Kong Principal Investigators

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

				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