

## Participants of Summer Research Fellowship (SRF) Scheme

\*Excellence in Poster Presentation

#Best Presenter

### 2023-24

Name	Curriculum	Year	Project Title	Supervisor
Aslam Humayl	BSc (4)	2	Fabricating Gyromagnetics	Prof Shuang Zhang, Department of Physics
Cao Jiyue	BSc (4)	2	Explore the Individual Role of BLM and TOP3A in the Resolution of UFBs	Prof Gary Ying Wai Chan, School of Biological Sciences
Chan Cheong Ming	BSc&MRes (4)	2	Enhancing Energy Storage - Improving Cycling Performance of Li-Cl Coin Cells.	Prof Hong Jie Dai, Department of Chemistry
Chen Jiabei	BSc (4)	1	Detecting Specific Integrin Activity using Synthetic Phosphotyrosine-Based Live-Cell Biosensor	Prof Heath Johnson, School of Biological Sciences
Cheng Ruijia	BSc (4)	1	Design and Synthesis of Side-Wall Conjugated Imine-Linked 3D Covalent Organic Framework	Prof Seungkyu Lee, Department of Chemistry
Cheng Yuet Lam	BSc (4)	1	Industry Analysis Based on Risk Capital Allocation among The 11 S&P 500 Indices	Prof Tim J. Boonen, School of Computing and Data Science (Statistics and Actuarial Science)
Choy Tsun Hin	BSc&MRes (4)	1	Synthetic Biology-Guided Antimicrobial Peptide Discovery From The Human Gut Microbiome	Prof Philip Yong-Xin Li, Department of Chemistry
Fan Xinyue	BSc (4)	2	Credit Card Fraud Detection Comparison among Different Machine Learning Algorithms	Prof Tim J. Boonen, School of Computing and Data Science (Statistics and Actuarial Science)
Fu Tianlu	BSc (4)	1	Royal Jelly Modulates Autophagy and Exerts Senolytic Effect in a GBA1-dependent Manner	Prof Zhongjun Zhou, School of Biomedical Sciences
Gong Jiayi	BSc (4)	3	Study the Role of ANKLE1-BAF in Resolving Chromatin Bridges by Generating an Auxin-inducible Degron Knock-in Cell Line	Prof Gary Ying Wai Chan, School of Biological Sciences
Gong Rufan	BSc (4)	2	Atroposelective Reduction of 1,1'-Biaryl-2,6-dinitriles by a Cobalt-Catalyzed Desymmetrization	Prof Zhongxing Huang, Department of Chemistry
Gu Yawen	BSc&MRes (4)	1	Effect of PD-L1 on T Cells in Immune Microenvironment of Ovarian Cancer	Prof Alice S. T. Wong, School of Biological Sciences
He Qiyu	BSc (4)	2	Macrocyclic vs. [2]Catenane Pyridine N-oxide Cation Receptors: Preparation and Characterization	Prof Ho Yu Au-Yeung, Department of Chemistry
He Qizhen	BSc (4)	2	Synthesis of Guanidine-Based [2]Catenane Receptor for Anion Guests	Prof Ho Yu Au-Yeung, Department of Chemistry
Ho Kai Wing	BSc&MRes (4)	2	Utilizing the Bioactivity of Teixobactin	Prof Xuechen Li, Department of Chemistry
Ho Yat Laam	BSc (4)	3	Beta-Perfluorinated Iron Porphyrin Complexes Catalyzed Alpha-CN-Alpha-alkyl Carbene Insertion into C(sp <sup>3</sup> )-H bonds	Prof Chi-Ming Che, Department of Chemistry
Hu Jiayi	BSc (4)	2	Synthesis of Teixobactin Analogs	Prof Xuechen Li, Department of Chemistry
Huang Helene Heling	BSc (4)	1	Interacting Residue Mapping of STK36 and ULK4 using BRET	Prof Mu He, School of Biomedical Sciences

Lai Ruize	BSc (4)	2	The Role of Derived Category in Homological Algebra	Prof Kei Yuen Chan, Department of Mathematics
Lam Yuk Shan	BSc (4)	2	Taxonomic Revision of The Genus Anochetus (Trap-Jaw Ant) in Hong Kong and Southeast Asia	Prof Benoit Guénard, School of Biological Sciences
Law Wai Chung Fiona	BSc&MRes (4)	1	Relationship Between Geological Activity and Space Environment on Active Moons in The Solar System	Prof Zhonghua Yao, Department of Earth Sciences
Lee Jia Yi	BSc (4)	2	Role of Brain-derived Neurotrophic Factor (BDNF) Signaling in Brown Adipocyte Differentiation	Prof Chi Bun Chan, School of Biological Sciences
Li Anran	BSc (4)	1	Synthesis and Antibacterial Studies of Teixobactin Analogues via Convergent Ser Ligation	Prof Xuechen Li, Department of Chemistry
Li Jia	BSc (4)	1	Finding H3K79 Demethylases in Human Cells	Prof David Xiang Li, Department of Chemistry
Liu Haoyang	BSc (4)	3	Distribution of Hurwitz Class Number	Prof Benjamin Kane, Department of Mathematics
Liu Zhonglin	BSc (4)	2	Integrating Machine Learning to Enhance Online Portfolio Selection	Prof Wai Ki Ching, Department of Mathematics
Lo Ching Yan	BSc&MRes (4)	1	Role of GEN1 Endonuclease in Inhibiting cGAS-STING Immunological Response	Prof Gary Ying Wai Chan, School of Biological Sciences
Loo Sum	BSc&MRes (4)	1	Design, Synthesis, and Self-Assembly Studies of Luminescent Platinum(II) Complexes	Prof Vivian W. W. Yam, Department of Chemistry
Lyu Xinke	BSc (4)	2	Optimal Transport: Sinkhorn & ARBCD Method	Prof Zhiwen Zhang, Department of Mathematics
Shen Kaizhe	BSc (4)	2	Supervised Study on Coxeter Groups	Prof Zheng Hua, Department of Mathematics
Sun Youreng	BSc (4)	1	Thickness Measurement of Thin Films: A Matlab Approach with White Light Interference	Prof Tran Trung Luu, Department of Physics
Tan Jing Yee	BSc&MRes (4)	1	Analysing Bitcoin Transactions Using Queuing Models	Prof Wai Ki Ching, Department of Mathematics
Tang Yihan	BASc(AppliedAI) (4)	2	Semantic EHR Transformer: Using Transformer-based Generative Model with a Semantic-enhanced ICD-coding System to Improve Clinical Disease Prediction	Prof Lequan Yu, School of Computing and Data Science (Statistics and Actuarial Science)
Teng Jiayi	BSc&MRes (4)	1	Metastatic Heterogeneity upon Tumor-T Cell Interaction in a Novel Isogenic Model of Spontaneous Ovarian Cancer Metastasis	Prof Alice S. T. Wong, School of Biological Sciences
Wan Yuheng	BSc (4)	2	Geometry in Grassmannians	Prof Zheng Hua, Department of Mathematics
Wang Junkai	BSc (4)	3	Relative Astrometry on Guitar Nebula Pulsar B2224+65	Prof Stephen Chi Yung Ng, Department of Physics
Wang Rui	BSc (4)	2	Investigating Toxicity Of Asian Danaid (Danaus Chrysippus) Caterpillars Through Hong Kong Praying Mantis Feeding Behavior	Prof Timothy Carlton Bonebrake, School of Biological Sciences
Wang Yuexi	BSc&MRes (4)	1	Finding New Teixobactin Analogues	Prof Xuechen Li, Department of Chemistry
Wei Yumeng	BSc (4)	2	Deep-sea Ostracods Faunal Turnover in the Southern Ocean During the Eocene-Oligocene Transition	Prof Moriaki Yasuhara, School of Biological Sciences
Wong Shuk Yam	BSc&MRes (4)	1	Heterogeneous Sea Surface Temperatures in Chinese Marginal Seas	Prof Zhonghui Liu, Department of Earth Sciences
Wu Donglai	BSc (4)	2	Towards Better Robustness Analysis of Pairwise Learning	Prof Yunwen Lei, Department of Mathematics
Wu Runqiu	BSc&MRes (4)	2	Towards Better Robustness Analysis of Pairwise Learning	Prof Yunwen Lei, Department of Mathematics

Xiao Suyang	BSc (4)	2	A Variational Quantum Algorithm for The Black-Scholes PDE with Stochastic Volatility	Prof Zhiwen Zhang, Department of Mathematics
Xiong Hanyi*	BASc(AppliedAI) (4)	1	Geographic Information Analysis and Prediction Based on Machine Learning	Prof Kai Han, School of Computing and Data Science (Statistics and Actuarial Science)
Xu Jing Xiang	BSc (4)	2	Probabilistic Boolean Networks	Prof Wai Ki Ching, Department of Mathematics
Yan Jiaying	BSc (4)	1	Study of Nonlinear Wave Generation in Optical Ring Resonators	Prof Yi Yang, Department of Physics
Yau Yeuk Laam	BSc&MRes (4)	1	Investigation of RNA Binding Proteins Involved in the Axonal Transport of mec-17 mRNA Along the Touch Receptor Neurons in <i>C. Elegans</i>	Prof Chaogu Zheng, School of Biological Sciences
Yeung Tsz Yin	BSc (4)	2	Discovery on Cellular NAD <sup>+</sup> Boosting Compound by Compound Library Screening with NAD <sup>+</sup> Sensor Cell Line	Prof Wallace Boon Leong Lim, School of Biological Sciences
Yin Jiaxiang*	BSc (4)	1	White-light Interferometry for Thickness Measurement of Thin Films	Prof Tran Trung Luu, Department of Physics
Yu Wing Hin	BSc (4)	2	Deformational Features of Neoproterozoic Banded Iron Formations in North China	Prof Guochun Zhao, Department of Earth Sciences
Zhang Li	BSc (4)	3	Investigation of Auranofin-derived Gold Complexes as Antimicrobial Agents	Prof Hongzhe Sun, Department of Chemistry
Zheng Jiale	BSc (4)	3	Investigate the Role of BCM and EGY1 in Chloroplast-mediated Plant Immunity Response	Prof Peng Wang, School of Biological Sciences
Zhu Hongyi	BSc (4)	2	Investigation of p28, a Novel Type-I Interferon Antagonist, in Poxvirus Infections	Dr Chi Ping Chan, School of Biomedical Sciences
Zhu Zi	BSc (4)	2	Geochronological Study on the Formation and Growth of the Oldest Continent in North China	Prof Jian Zhang, Department of Earth Sciences
Zu Ziqing	BSc&MRes (4)	1	The Role of the Endonuclease LEM-3 in Neuronal Cell Fate Specification	Prof Chaogu Zheng, School of Biological Sciences

### 2022-23

Name	Curriculum	Year	Project Title	Supervisor
Aarons Cynthia	BSc (4)	2	Constructing a 'Dispersion-Less' Microscope	Dr Tran Trung Luu, Department of Physics
An Junying	BSc (4)	2	Using Box & Tiao Decomposition to Find Mean-Reversion Coefficient	Dr Zhiwen Zhang, Department of Mathematics
Aslam Humayl	BSc (4)	1	A Quantum Mechanical Interplay of Electrons and Photons	Dr Yi Yang, Department of Physics
Chan Cheong Ming	BSc&MRes(4)	1	Antimicrobial Peptide Organic Synthesis for Pharmaceutical Use	Prof Xuechen Li, Department of Chemistry
Chan Hoi Yat	BSc (4)	1	Dependence of the Centrally Depleted Structure on Nuclear Deformation in the Deformed Relativistic Hartree-Bogoliubov theory in continuum	Dr Jenny Hiu Ching Lee, Department of Physics
Chen Chun	BSc (4)	1	Investigating the Effects of Urban Green Space on Avian Biodiversity in Urban Hong Kong with a Citizen Science Approach	Prof Timothy Carlton Bonebrake, School of Biological Sciences
Chen Zhihui	BSc&MRes(4)	1	Nuclear Mass Calculations Using Deformed Relativistic Hartree-Bogoliubov Theory in Continuum	Dr Jenny Hiu Ching Lee, Department of Physics

Cheng Hin Chung	BSc (4)	2	Kramers-Wannier Duality & Transform in Spin Models	Dr Chenjie Wang, Department of Physics
Cheng Nai Ming	BSc&MRes(4)	2	Do Brightest Cluster Galaxies Possess Massive Dark Matter Halos	Dr Jeremy Jin Leong Lim, Department of Physics
Cheng Yufan	BSc (4)	1	Cherenkov Radiation in Isotropic and Anisotropic Media	Dr Yi Yang, Department of Physics
Cheung Long In	BSc&MRes(4)	1	Effects of Human Activities on Butterfly Stress in HK	Prof Timothy Carlton Bonebrake, School of Biological Sciences
Chung Yiu Tak	BSc&MRes(4)	1	Expression and Purification of Retroviral-like Transposon Protein PEG10 GAG Domain	Dr Tao Ni, School of Biomedical Sciences
Du Meining	BSc (4)	2	Global Optimization	Dr Meng Zi Yang, Department of Physics
Fan Zixian	BSc (4)	3	Combining Rnn with The Transformer for Video Recognition Learning	Prof Guodong Li, Department of Statistics and Actuarial Science
Feng Yushi	BSc (4)	3	Generative Pre-trained Models As Context-Driven Graph Data Augmenter	Dr Lequan Yu, Department of Statistics and Actuarial Science
Fung Chiu Wah	BSc&MRes(4)	2	Global Magnetosphere Model of a Uranus-Like Planet	Dr Binzheng Zhang, Department of Earth Sciences
Guo Sheung Yu	BSc (4)	2	CRISPR Cas9 mediated Knockout of ARID1A gene to Generate ID8 Model of Ovarian Clear Cell Carcinoma	Prof Alice Sze Tsai Wong, School of Biological Sciences
Guo Yirong	BSc&MRes(4)	1	The Effect of Width of Road Toward Density of Giant Wood Spider Nephila Pilipes and Herbivory	Prof Timothy Carlton Bonebrake, School of Biological Sciences
He Yiwei	BSc (4)	2	Measurement of Hubble Constant Based on Gravitational Lens Models	Dr Jeremy Jin Leong Lim, Department of Physics
Ho Kai Wing	BSc&MRes(4)	1	Histone Expression and Purification	Prof Xiang Li, Department of Chemistry
Ho Sin Yiu#	BSc (4)	2	Investigating the Role of Melanoma-secreted FSTL1 in Cancer Angiogenesis	Dr Martin Chi Hang Cheung, School of Biomedical Sciences
Huang Jiasheng	BSc (4)	3	Complex Tori and Abelian Variety	Prof Ngaiming Mok, Department of Mathematics
Kan Cheuk Kwan	BSc (4)	3	Observing Pulsar Kick by Measuring Proper Motions of Pulsars Using Chandra Data	Dr Stephen Chi Yung Ng, Department of Physics
Kesici Aybala Nisa	BSc (4)	2	Development of A New Optogenetic Control of Membrane-Focal Adhesion Tension	Dr Heath Johnson, School of Biological Sciences
Kim Da Hyung	BSc (4)	3	Calculation of Nuclear Masses Using Deformed Relativistic Hartree-Bogoliubov Theory for Odd-Even Nuclei in a Drip Line Range of 61 to 69	Dr Jenny Hiu Ching Lee, Department of Physics
Kongsawangchai Areeya	BSc&MRes(4)	1	Design, Synthesis, Photophysical and Electrochemical Study of Cyclometalated Arylgold(III) Complexes	Prof Vivian Wing Wah Yam, Department of Chemistry
Law Chun Hoi	BSc (4)	2	Investigating the Effects of Body Size and an Invasive Ant Species on Carrion Decomposition	Dr GUÉNARD, Benoit, School of Biological Sciences
Li Baorui	BSc (4)	3	Numerical Investigations on Quantum Phase Transitions	Dr Meng Zi Yang, Department of Physics
Li Guoming	BSc (4)	2	Refinement of Lotka-Volterra Equations for Competition Model and Mathematical Justification	Dr Tak Kwong Wong, Department of Mathematics
Lim Xin Yue	BSc (4)	2	Enhancing Bioenergy Recovery and Sulphide Suppression in Anaerobic Digestion through Micro-aeration	Dr Edmund Tse, Department of Chemistry
Lin Qianli	BSc (4)	2	Cointegration Test Between Financial Time Series Using Global Optimization	Dr Zhang Zhiwen, Department of Mathematics

Ling Kai Yan	BSc&MRes(4)	1	Synthesis of Metal-organic Framework Particles	Dr Yufeng Wang, Department of Chemistry
Liu Xuan	BSc (4)	1	Effects of Plantation on Leaf Litter Ants Communities in Southeast China	Dr GUÉNARD, Benoit, School of Biological Sciences
Liu Yiting	BSc (4)	1	Cu-Catenane Crosslinked Gel--Preparation and Testing of Physical Properties	Dr Yufeng Wang, Department of Chemistry
Liu Ziyi	BSc (4)	2	To Induce and Capture Eight-cell Embryo-like Cells and Naïve Pluripotent Stem Cells from Porcine Expanded Potential Stem Cells	Prof Pengtao Liu, School of Biomedical Sciences
Lui Yuk Sing	BSc (4)	3	What is Missing, Investigating the Essential Domains for Gen1 Endonuclease to be Functional In Cellular Environment	Dr Gary Ying Wai Chan, School of Biological Sciences
Lyu Dengqian	BSc (4)	2	Making Cyclic Nanostructures from Grafted Block Copolymers	Dr Yufeng Wang, Department of Chemistry
Mah Catherine See Yee	BSc (4)	2	The Nature of Extreme Emission Line Galaxies in a Galaxy Cluster	Dr Lim, Jeremy Jin Leong, Department of Physics
Ng Victor Koonhei	BSc&MRes(4)	1	Modeling of CD47-SIRPA Signaling in Tumor Microenvironment by Assembloid of Vascular Immune Organoids and Cancer Organoids	Dr Rio Sugimura, School of Biomedical Sciences
Or King Long	BSc (4)	2	Design, Synthesis, and Photophysical Studies of Polynuclear Copper(I) Chalcogenido Clusters	Prof Vivian Wing Wah Yam, Department of Chemistry
Pan Siqi	BSc (4)	2	Scanning Tunneling Microscopic Study of Two-dimensional Graphene and One-dimensional Carbon Nanotubes	Prof Maohai Xie, Department of Physics
Poon Yui Hang	BSc (4)	3	A Mechanistic Study of SARS-CoV-2 3CLpro-mediated Cleavage of ZAP	Dr Chi Ping Chan, School of Biomedical Sciences
Pu Ruiling*	BSc (4)	2	Controllable Text-to-image Generation with Customized Guidance on Appearance and Position	Dr Kai Han, Department of Statistics and Actuarial Science
Qian Yunzhi	BSc (4)	3	Using Tyrosine-Based Motif as a Life Biosensor for Integrin Activity	Dr Heath Johnson, School of Biological Sciences
Qin Suyue	BSc (4)	2	Image Description Generation with Large-Scale Language Models	Dr Kai Han, Department of Statistics and Actuarial Science
Sha Taole	BSc (4)	3	Sequential Student-T Processes for Online Learning of Nonstationary Functions	Dr Michael Minyi Zhang, Department of Statistics and Actuarial Science
Shut Wing Chun	BSc (4)	2	Growth of a Single-crystal, Flat, Thin Gold Film on Sapphire	Prof Maohai Xie, Department of Physics
Sun Jiaqi	BSc (4)	1	Synthesis and Comparison of 1,4-Azaborine Inserted Conjugated Macrocycles and its Linear Contrast Molecules	Dr Junzhi Liu, Department of Chemistry
Tsang Hin Lam*	BSc&MRes(4)	1	Effect of Probiotic Mixture "Prohep" on Hepatocellular Carcinoma Development	Dr Hani El-Nezami, School of Biological Sciences
Tu Hao Chen	BSc (4)	2	Symmetry and Stability Analysis of a Gapless Spin Chain	Dr Chenjie Wang, Department of Physics
Wang Linjing	BSc (4)	2	Common Types of Integral Inequalities with Analogues in Discrete Cases	Prof Wing Sum Cheung, Department of Mathematics
Wang Xining	BSc (4)	2	Structure-Activity Relationship Analysis on The Access Binding Pocket of The Pseudomonas aeruginosa Major Efflux Protein MexB	Prof Aixin Yan, School of Biological Sciences
Wong Alika Yuk Wai	BSc&MRes(4)	1	Assessing the Effects of Traditional Chinese Medicine Compound B on Ovarian Cancer Stem Cells	Prof Alice Sze Tsai Wong, School of Biological Sciences

Wong Annabella Chun	BSc&MRes(4)	1	Relationship Between Butterfly (Papilionoidea, Lepidoptera) Morphological Traits and Temperature Tolerance	Dr Louise Amy Ashton, School of Biological Sciences
Wong Cheuk Lam Matthew	BSc (4)	3	Optogenetic Control of JAK/STAT Signalling	Dr Heath Johnson, School of Biological Sciences
Wong Wai Lok	BSc&MRes(4)	1	Design, Synthesis, Photophysical and Electrochemical Study of Luminescent Tridentate C <sup>N</sup> C Arylgold(III) Complexes	Prof Vivian Wing Wah Yam, Department of Chemistry
Xie Ruiyang	BSc&MRes(4)	1	Realising THz Emission and Detection with Femtosecond Lasers and Semiconductor High-mobility Transistors	Prof Xiaodong Cui, Department of Physics
Yan Ruijie	BSc (4)	3	Construction of Ultrafast Laser Source of Million Hertz Frequency Level	Prof Xiaodong Cui, Department of Physics
Yan Yilou	BSc (4)	1	Research on Triangular Billiards Conjecture	Dr Zhang Xin, Department of Mathematics
Yan Yongkang	BSc (4)	2	Study on The Transcription Factors of STS and SOMT Genes Involved in Stilbene Biosynthesis in Sorghum	Dr Clive S.C. Lo, School of Biological Sciences
Yang Qianru	BSc (4)	3	Basic Study on the Lithography Technique for Micro/Nanorobots	Dr Jinyao Tang, Department of Chemistry
Ye Siyu	BSc (4)	1	Breast Cancer Risk Analysis	Dr Dora Yan Zhang, Department of Statistics and Actuarial Science
Yeung Ka Ho	BSc (4)	3	Roles of Structure-specific Endonucleases in the Fragility of FRA16D FlexI Sequence	Dr Gary Ying Wai Chan, School of Biological Sciences
Zhang Xuanjia	BSc&MRes(4)	1	Electrical Transport Properties of Bismuth Oxychloride	Prof Xiaodong Cui, Department of Physics
Zhang Yizhi	BSc (4)	1	Effects of Transcutaneous Auricular Vagus Nerve Stimulation on Glucocorticoid Expression in the Brain	Dr Wei Lim Lee, School of Biomedical Sciences
Zhang Zheng	BSc (4)	2	Small Gaps Between Primes	Dr Zhang Xin, Department of Mathematics
Zhou Yuxuan	BSc (4)	1	Study on Fabricating Core-Shell Microparticles with Microfluidic System	Dr Jinyao Tang, Department of Chemistry
Zhu Zi	BSc (4)	1	The Geochemistry of Transition Metals in Volcanic Vapors	Dr Lemke, Kono, Department of Earth Sciences
Zhuo Qianlin	BSc (4)	2	Exploring Animal Models for Studying the Effects of Social Isolation	Dr Raymond C.C. Chang, School of Biomedical Sciences

## 2021-22

Name	Curriculum	Year	Project Title	Supervisor
Chan Chun Lai	BSc (4)	2	Study of the genetic interaction between human ANKLE 1 and other nucleases for chromosome segregation	Dr Gary Ying Wai Chan, School of Biological Sciences
Chan Ho Ling	BSc (4)	1	The preparation of samples for the measurement of E/Ca ratios in planktic foraminifera Globigerina bulloides and Neoglobobulimina inflata tests	Dr Christelle Not, Department of Earth Sciences
Chau Tim Lok	BSc (4)	2	Study on Phase Transitions of Classical and Quantum Ising Model with Monte Carlo Simulation	Dr Zi Yang Meng, Department of Physics
Cheng Hin Chung	BSc&MRes (4)	1	Low dimensional halide perovskite materials for thermoelectric applications	Prof Aleksandra B. Djurišić, Department of Physics
Cheung Cheuk Hei	BSc (4)	3	Many Bosons System of One Dimension with Generalized $\delta$ -function Potential Interaction	Dr Shizhong Zhang, Department of Physics

Choi Hin Hang	BSc (4)	2	Investigating the impact of alternate splicing in sleep regulation of <i>C. elegans</i>	Dr Chaogu Zheng, School of Biological Sciences
Chong Wing Lam*	BSc (4)	3	Molecular Mechanism of How Phosphorylated PLK1 Interacts with PICH-BTRR Complex on UFBs	Dr Gary Ying Wai Chan, School of Biological Sciences
Chow Yin Hei	BSc (4)	1	Conditional generative adversarial network and identification of planetary nebulae	Prof Quentin A. Parker, Department of Physics
Du Liheng	BSc (4)	3	Treatment Effect Estimation Under Semi-supervised Causal Inference	Prof Stephen MS Lee, Department of Statistics and Actuarial Science
Erisir Atilla Kaan	BSc (4)	2	Polymorphism in microRNAs in <i>C. elegans</i>	Dr Chaogu Zheng, School of Biological Sciences
Fan Ting Hay	BSc (4)	3	Biofilm Cultivation on Electrode for Coral Reef Restoration	Dr Edmund Chun Ming Tse, Department of Chemistry
Fan Zixian	BSc (4)	2	Analysis of the impact of the epidemic on people's psychology and behavior	Dr Jinfeng Xu, Department of Statistics and Actuarial Science
Fu Wai Ki	BSc (4)	2	Designing and preparation of ZAP and PACT knock-out cells by CRISPR-Cas9 technology to study their roles in modulating interferon responses during IAV infection	Prof Dong-Yan Jin, School of Biomedical Sciences
Fung Chiu Wah	BSc (4)	1	Investigation on Trace Element Ratios in Benthic Foraminifera <i>Hoeglundina elegans</i>	Dr Christelle Not, Department of Earth Sciences
Guo Jiaxin	BSc (4)	2	Delineating the Effect of Promoter and Coding Region Mutations in a Master Regulator LasR on the Virulence of the “ESKAPE” Pathogen <i>Pseudomonas aeruginosa</i>	Dr Aixin Yan, School of Biological Sciences
Ho Ka Chun	BSc (4)	2	Modelling tumor endothelial cell (TEC) formation and TEC-tumor microenvironment interaction with organoid	Dr Sugimura Ryohichi, School of Biomedical Sciences
Hung Yuen Ching	BSc (4)	3	Amino Acid (Alanine) Taste Preference In <i>Agapornis roseicollis</i> (Rosy-Faced Lovebird)	Dr Simon Y.W. Sin, School of Biological Sciences
Kwan Long Hei	BSc (4)	2	Theoretical study on Anderson localization	Dr Chenjie Wang, Department of Physics
Kwok Man Yu Kelly	BSc&MRes (4)	1	Establishing cancer-vascular-immune organoid for human hepatocellular carcinoma from expanded potential stem cells	Dr Rio Sugimura & Prof Alice S.T. Wong, School of Biomedical Sciences & School of Biological Sciences
Lee Sze Yuen	BSc (4)	2	Function of FANCM in DNA damage response	Dr Gary Ying Wai Chan, School of Biological Sciences
Leung Sai Yu Richard	BSc (4)	3	Computational modeling and analysis of structural vibrations in fluid-structure interactions	Dr Tak Kwong Wong, Department of Mathematics
Leung Yuen Ting*	BSc (4)	3	Developing Difluoroalkylamino Biotin for Singlet Oxygen-mediated RNA Proximity Labelling	Dr Ying Li, Department of Chemistry
Li Chenyang	BSc (4)	3	Primitive representations by sums of squares	Dr Benjamin Kane, Department of Mathematics
Li Kau Chun	BSc (4)	2	Design, Synthesis, Photophysical and Electrochemical Study of Cyclometalated Alkynylgold(III) Complexes	Prof. Vivian W. W. Yam, Department of Chemistry
Liu Yuheng*	BSc (4)	1	Exoplanets and the corresponding planetary motion of the system	Dr Man Hoi Lee, Department of Earth Sciences

Ma Qiyao	BSc (4)	2	Elliptic Functions and Theta Functions with Applications in Number Theory	Prof Ngaiming Mok, Department of Mathematics
Pan Zhilin	BSc&MRes (4)	1	Tumor initiating cell-specific localization of P70 S6 kinase in ovarian cancer	Prof Alice S.T. Wong, School of Biological Sciences
Pant Sudikshya	BSc (4)	3	Cluster Algebras and Quiver Mutations	Prof Jiang-Hua Lu, Department of Mathematics
Qian Junyi	BSc (4)	3	Design, Synthesis and Photophysical Studies of Luminescent Alkynylplatinum(II) Complexes for RNA Detection	Prof. Vivian W. W. Yam, Department of Chemistry
Qu Tianyong	BSc (4)	2	Two Proofs of the Poincaré-Birkhoff-Witt Theorem	Dr Zheng Hua, Department of Mathematics
Si Zhewei	BSc (4)	2	Monitoring Plant Water-use Using Hyperspectral Image	Dr Jin Wu, School of Biomedical Sciences
Sui Hangke	BSc (4)	2	Physics-Informed Neural Networks (PINNs) for solving spatio-temporal PDEs in Metaverse	Prof Xiaoming Yuan, Department of Mathematics
Sui Shaoti	BSc (4)	2	Investigation on tricin biosynthesis regulation mediated by MYB-family transcription factor MYB58/63 (LOC_Os04g50770) in rice.	Dr Clive Sze Chung Lo, School of Biological Sciences
Tam Hoi Yau	BSc (4)	3	Elucidating the role of a metabolic regulator MMD2 in determining neuron-glial fate choice in the dorsal root ganglia	Dr Martin Chi Hang Cheung, School of Biomedical Sciences
Tu Hao Chen	BSc (4)	1	Renormalization Group Study of $\phi^4$ Theory	Dr Chenjie Wang, Department of Physics
Wang Han	BSc (4)	2	Association between Coffee Intake and Cardiometabolic Biomarkers A Mendelian Randomization Study	Dr Jimmy Louie, School of Biological Sciences
Wong On Ki	BSc&MRes (4)	1	Investigate the impact of Type 2 diabetes mellitus (T2D) on mucosal immune barrier to respiratory viral infections	Dr Heidi Guang Sheng Ling & Dr Boon Leong Lim, School of Biomedical Sciences & School of Biological Sciences
Wong Yat Long	BSc&MRes (4)	1	On the Excitation Mechanisms of Nebula in Brightest Cluster Galaxies	Dr Jeremy Jin Leong Lim, Department of Physics
Wu Peilin	BSc (4)	1	Elucidating the Molecular Mechanism of Rad53 in Inhibiting DDK Mediated Helicase Activation Using Cryo-Electron Microscopy	Dr Yuanliang Zhai, School of Biological Sciences
Wu Yonglin	BSc (4)	2	Stk36(Fused) interacts with Kif27 in the mammalian motile ciliogenesis pathway	Dr Mu He, School of Biomedical Sciences
Xue Luhao	BSc (4)	2	Eisenstein series part of the primitive representations for even rank quadratic forms	Dr Benjamin Kane, Department of Mathematics
Yan Yongkang	BSc (4)	1	Study on stilbene synthase activity in Phaseolus vulgaris	Dr Clive Sze Chung Lo, School of Biological Sciences
Yang Jiayu	BSc (4)	3	Representation set of the product of two prime with the sum of triangular number	Dr Benjamin Kane, Department of Mathematics
Yang Muhua	BSc (4)	2	Research on possible autocrine signalling inhibitors, SIRT1 and PTPN1, inducible by GH and have an inhibitory effect on IGF-I & II expression at the hepatic level of Ctenopharyngodon Idella (Grass carp)	Prof Anderson On Lam Wong, School of Biological Sciences



Yao Yuanyue	BSc (4)	2	Tackling Misclassified Weathering Grades Using Novel Artificial Intelligence Technique	Dr Louis Ngai Yuen Wong, Department of Earth Sciences
Yu Can	BSc (4)	1	Ibrutinib, Agrimol B and its derivatives: Synthesis, anticancer activities and mechanism studies	Prof Chi-Ming Che, Department of Chemistry
Yu Cheuk Tim	BSc (4)	3	SSHP-1 and SHP-2 as Feedback Inhibitors for Growth Hormone-induced IGF-1 Expression in Carp Hepatocytes	Prof Anderson On Lam Wong, School of Biological Sciences
Yun Ze	BSc (4)	3	Mordell-Weil Theorem for Elliptic Curves over Complex Function Fields, and the Finiteness of Mordell-Weil Groups of Elliptic Modular Surfaces	Prof Ngaiming Mok, Department of Mathematics
Yung Yiu Yin	BSc(ActuarSc) (4)	3	On Semi-supervised Learning Methods for Multivariate Density and Conditional Density Estimation	Prof Stephen MS Lee, Department of Statistics and Actuarial Science
Zhang Xinyuan	BSc (4)	2	The Convergence Analysis of Gradient Descent-Ascent Method for a class of Minimax problem	Prof Michael Kwok Po Ng, Department of Mathematics
Zhou Polly	BSc (4)	2	Pharmacological evaluation of small molecule MRGPRX2 antagonist against allergy and inflammation	Prof Billy Kwok Chong Chow, School of Biological Sciences

## 2020-21

Name	Curriculum	Year	Project Title	Supervisor
Au Kwing Nam	BSc (4)	1	Design, Synthesis and Photophysical Study of Luminescent Cyclometalated Platinum(II) Complexes for Biological Applications	Prof Vivian W W Yam, Department of Chemistry
Bin Islam Fahad	BSc (4)	1	Comparing the Optical and Infrared Colour Gradients of Selected Galaxies	Dr Jeremy J L Lim, Department of Physics
Chan Ching Si	BSc (4)	3	Exploring the metabolic theory of ecology in freshwater shrimps	Dr Juan Diego Gaitán-Espitia, School of Biological Sciences
Chen Haoyang	BSc (4)	2	Expressions as sum of square of integers	Dr Benjamin R Kane, Department of Mathematics
Chen Weiyi	BSc (4)	1	Microfluidic Chip in Isolation of Metastatic Cells and Test Their Adhesion Potential by Automation Counting	Prof Alice S T Wong, School of Biological Sciences
Cheng Cheung Hin	BSc (4)	2	Identify the functions of different domains in FANCM	Dr Gary Y W Chan, School of Biological Sciences
Cheong Tsz Ho	BSc (4)	2	Apply deep learning to numerically solve 1-d Poisson problem	Dr Guanglian Li, Department of Mathematics
Chow Cheuk Ying Tweety	BSc (4)	2	Development of a replication-competent influenza A virus carrying a near-infrared fluorescent protein 670 (iRFP670) reporter for in-vivo animal study	Dr Kok Kin-Hang & Dr Kwok Ming Yao, School of Biomedical Sciences & Department of Microbiology
Ho Ho Ching	BSc (4)	3	Purification of Metalloprotein as targets for Antibacterial Agents	Prof Hongzhe Sun, Department of Chemistry
Hou Shuwen	BSc (4)	2	Reveal the Antibody Response in Liver Transplant Patients of Hepatitis B Virus Reactivation	Prof Ren Sun & Dr Chengmin Qian, School of Biomedical Sciences

Ip Ki	BSc (4)	3	Design, Synthesis, Photophysical and Electrochemical Study of 2,6-Di(thiazol-2'-yl)pyridine Ligands and Platinum(II) Complexes	Prof Vivian W W Yam, Department of Chemistry
Jian Tianyi	BSc (4)	2	Apply machine learning in particle physics experiment	Dr Yanjun Tu, Department of Physics
Kang Liang	BSc (4)	2	Unraveling of the Inhibitory Regulation of Orc6 by S-CDK Using Cryo-EM	Dr Yuanliang Zhai, School of Biological Sciences
Khicha Saharsh	BSc (4)	2	Investigating the role of PICH in the localization of PLK1 to the centromere	Dr Gary Y W Chan, School of Biological Sciences
Ko Cheng Hoi	BSc (4)	2	Palladium (IV) Catalyzed Difluorination of Alkenes	Prof Chi Ming Che, Department of Chemistry
Kwan Long Hei	BSc (4)	1	Triggering Active Galactic Nuclei in Cluster Environments	Dr Jeremy J L Lim, Department of Physics
Kwok Chun Yin	BSc (4)	3	Development of Potential Two-Photon Activated Photoremovable Protecting Groups with Fluorene Derivatives	Prof David Lee Phillips, Department of Chemistry
Lam Hei Man Charlotte	BSc (4)	3	Mechanism underlying tyloxapol and thonzonium bromide on biofilm inhibition	Dr Olivier Habimana, School of Biological Sciences
Law Ho Wai	BSc (4)	1	Applying machine learning in particle physics at the ATLAS experiment	Dr Yanjun Tu, Department of Physics
Li Jiawen	BSc (4)	2	Plastic Pollution In Hong Kong Coastal Environment	Dr Christelle A Not, Department of Earth Sciences
Li Kau Chun	BSc (4)	1	Design, Synthesis, Photophysical and Electrochemical Study of Cyclometalated Alkynylgold(III) Complexes	Prof Vivian W W Yam, Department of Chemistry
Li Wei	BSc (4)	2	Deep Neural Network Approximation to Piecewise Constant Functions	Dr Guanglian Li, Department of Mathematics
Lin Yen-hsu	BSc (4)	2	Supramolecular Assembly of Carbazole-Containing Platinum(II) Complexes through Pt···Pt and $\pi$ - $\pi$ Stacking Interactions, Hydrogen-Bonding and Hydrophobic-Hydrophobic Interactions: Synthesis, Characterization, Photophysics and Self-Assembly Behaviors	Prof Vivian W W Yam, Department of Chemistry
Liu Ruizhe	BSc (4)	2	A study on quantum critical model: The Fibonacci Anyon Chain	Dr Chenjie Wang, Department of Physics
Liu Yiming	BSc (4)	2	Quaternary Quadratic Forms And Sums Of Divisors	Dr Benjamin R Kane, Department of Mathematics
Luo Yongqi	BSc (4)	1	Investigating Neurological Effects of Physical Trauma In PTSD Using the Zebrafish Model	Dr Raymond C C Chang, School of Biomedical Sciences
Ng Cheuk Yan	BSc (4)	1	Characterization of aluminium oxide thin film fabricated by pulsed laser deposition	Dr Francis C C Ling, Department of Physics
Ooi Xin Ci	BSc (4)	2	Roles of brain-derived neurotrophic factor (BDNF) signaling in hepatic metabolism	Dr Chi Bun Chan, School of Biological Sciences
Park In Young	BSc (4)	3	Effect of Mn doping in the electrocatalytic performance of Co-G nanospheres for oxygen evolution reaction	Prof Zheng Xiao Guo, Department of Chemistry
Poon Pak Shing Billy	BSc (4)	2	Studies Toward The Total Synthesis Of Toxicodenane A through (4+3) cycloaddition	Prof Pauline Chiu, Department of Chemistry
Poon Yu Ching	BSc (4)	3	Induction of Natural Killer Cells from Human Expanded Potential Stem Cells in vitro	Dr Rio Ryohichi Sugimura & Prof Pengtao Liu, School of Biomedical Sciences

Radhakrishnan Samhita Ramanan	BSc (4)	3	The Physiological Effects of Somatolactin in Regulating Feeding in Goldfish and Grass carp: Optimising IPTG Induction	Prof Anderson O L Wong, School of Biological Sciences
Reese Robert Miles Ryan*	BSc (4)	1	Synthesis of patchy particles via solvent extraction	Dr Yufeng Wang, Department of Chemistry
Rogatch Michael	BSc (4)	1	Optimization of hydrothermal synthesis of Bismuth Ferrite (BiFeO <sub>3</sub> ) microplates	Dr Jinyao Tang, Department of Chemistry
Roychowdhury Soumil	BSc (4)	2	Application of Machine Learning to Particle Physics for Signal Classification	Dr Yanjun Tu, Department of Physics
Seong Yang-woo	BSc (4)	3	Attitude Control of a 6U CubeSat for a MeV Gamma-ray telescope by using Simulink	Prof Quentin A Parker, Department of Physics
Siu Kin To Hugo	BSc (4)	3	Functional study of different domains of PICH by analyzing different truncations	Dr Gary Y W Chan, School of Biological Sciences
Sui Shaoti	BSc (4)	1	In planta investigation of the regulation of pyruvate-related mechanisms using a fluorescent sensor	Dr Wallace B L Lim, School of Biological Sciences
Tabarova Munisa#	BSc (4)	3	Alternative RNA splicing as a mechanistic response to ocean acidification in coral reef fish species Acanthochromis polyacanthus	Dr Celia Schunter, School of Biological Sciences
Tewari Anushka	BSc (4)	2	Computational Study of Application of Eosin-Y as a Photocatalyst in Organic Synthesis Reactions	Prof David Lee Phillips, Department of Chemistry
Vaghani Darsh Arvindhbai	BSc (4)	2	Generation of Ocular Motor Neurons from Urine-derived Induced Pluripotent Stem Cell Lines	Dr Martin C H Cheung & Dr Chaogu Zheng, School of Biomedical Sciences & School of Biological Sciences
Wan Bowen	BSc (4)	2	Skin microbiome of the Hong Kong newt in relation to habitat locality and fungal infections	Dr Simon Y W Sin, School of Biological Sciences
Wang Nan	BSc (4)	2	Resistance exercise improves cognitive functions by attenuating hyperphosphorylated tau in 3xTg mice	Dr Raymond C C Chang, School of Biomedical Sciences
Wang Zimeng	BSc (4)	1	Design, Synthesis, and Characterization of Luminescent Three-Coordinate Boron(III) Complexes and Their Photophysical Studies	Prof Vivian W W Yam, Department of Chemistry
Wong Cheuk Kiu	BSc (4)	3	Perceptual learning and plasticity in the aging binocular visual system	Dr Chi Bun Chan, School of Biological Sciences
Wu Chi Long	BSc (4)	2	Investigation of Teixobactin Analogues for Antibiotic Development	Prof Xuechen Li, Department of Chemistry
Yajaman Siddharth	BSc (4)	2	The Application of Machine Learning in Particle Physics at the ATLAS Experiment	Dr Yanjun Tu, Department of Physics
Yao Yuanyue	BSc (4)	1	Automatic Weathering Grade Classification Using Artificial Intelligence Technique	Dr Louis N Y Wong, Department of Earth Sciences
Yau Siu Ham	BSc (4)	2	Analysis of Biofilm Formation and Eradication by Using Chemical Agents	Dr Edmund C M Tse, Department of Chemistry
Yu Hao	BSc (4)	2	Number of Solutions to Certain Equations	Dr Benjamin R Kane, Department of Mathematics

Yu Pak Hei	BSc (4)	1	The use of 5-fragments Gibson Assembly in CRISPR-Cas9 mediated gene knock-in in <i>C. elegans</i>	Dr Karen W Y Yuen, School of Biological Sciences
Zeng Tianyou*	BSc (4)	2	Convex Quadratic Maximization Over Polyhedral Sets	Dr Zheng Qu, Department of Mathematics
Zhang Hongzhuo	BSc (4)	2	Using Gibson Assembly to Construct Cas9 Mediated Dendra2 Knock in Plasmid with Self Excising Selection Cassette	Dr Karen W Y Yuen, School of Biological Sciences
Zhang Jiayi*	BSc (4)	2	Root Systems, Reflection Groups and Coxeter Groups	Prof Jianghua Lu, Department of Mathematics
Zhang Qidi	BSc (4)	1	Unraveling the Photorearrangement Reaction Mechanism of Quinoline-Protected Dialkylanilines	Prof David Lee Phillips, Department of Chemistry
Zhang Suihan	BSc (4)	2	A Unified and Desymmetric Approach towards the Synthesis of Chiral Tertiary Alkyl Halides	Dr Zhongxing Huang, Department of Chemistry
Zhang Zhexing	BSc (4)	2	Rubik's Hypercube Group & Cryptography	Prof Wing Sum Cheung, Department of Mathematics
Zhao Yiwen	BSc (4)	3	Solution of the Black-Scholes Equation	Dr Zhiwen Zhang, Department of Mathematics

## **2019-20**

<b>Name</b>	<b>Curriculum</b>	<b>Year</b>	<b>Project Title</b>	<b>Supervisor</b>
Awasthi Swambhavi	BSc (4)	2	Understanding the pathogenesis of type V osteogenesis imperfecta through analysis of protein expression changes in osteoblasts during <i>in vitro</i> mineralization	Prof Danny Chan, School of Biomedical Sciences
Cai Fangxin	BSc (4)	2	TEDA cloning of ACTR5 overexpression vector	Dr Jiangwen Zhang, School of Biological Sciences
Chan Chin Tung	BSc (4)	2	Investigating the possible cause of sterility in <i>Cananga odorata</i> var. <i>fruticosa</i> (Annonaceae)	Prof Richard Saunders, School of Biological Sciences
Chan Ka Fai	BSc (4)	2	Towards Cortistatin A Analogue: Asymmetric Reduction of Diketone	Prof Pauline Chiu, Department of Chemistry
Chang Liyan	BSc (4)	2	Sentiment analysis of Shenzhen FinTech news	Dr Philip L H Yu, Department of Statistics & Actuarial Science
Cheung So Yee	BSc (4)	2	EVLA observations of Betelgeuse	Dr Jeremy J L Lim, Department of Physics
Choi Yeseo	BSc (4)	1	Characterization of Sorghum bicolor overexpressing SbFNR via qRT-PCR and metabolites profiling	Dr Clive S C Lo, School of Biological Sciences
Chow Sung In	BSc (4)	3	Peptide sequencing by liquid chromatography-tandem mass spectrometry	Dr Ivan Keung Chu, Department of Chemistry
Dwi Wai Shan Jaimie	BSc (4)	4	Light intensity shapes the thermal niche of the successful worldwide macroalgae invader <i>Codium fragile</i> ?	Dr Juan Diego Gaitán-Espitia, School of Biological Sciences
Fayeeja Najeebah Ibnat	BSc (4)	1	Determining the Thermal Tolerance of <i>Littoraria ardouiniana</i>	Prof Gray A Williams, School of Biological Sciences
Gupta Aditya	BSc (4)	1	What is the Semantic Rationale for a CNN in the classification of CT Scans to determine if a patient has Covid-19?	Prof Michael K P Ng, Department of Mathematics
He Yifu	BSc (4)	2	Safeguard Legal Rights for Hotel Guests -- Study on Price Discrimination across Different Travel Agency Platforms	Dr Ke Zhu, Department of Statistics & Actuarial Science

Ho Meng Chit	BSc (4)	3	Theoretical calculation and experimental measurement on production cross section of Z boson in mu-mu channel with Monte Carlo simulated data	Dr Yanjun Tu, Department of Physics
Hsu An Chu	BSc (4)	3	Accumulation and Translocation of Heavy Metals in Mangroves at Mai Po	Dr Stefano Cannicci, School of Biological Sciences
Hung Ling Sum	BSc (4)	2	Investigating the impact of depression on neuroinflammation in Alzheimer's Disease	Dr Raymond C C Chang, School of Biomedical Sciences
Karim Kazi Neha	BSc (4)	2	Using Bioinformatics for the identification of novel epithelial-to-mesenchymal transition regulators	Prof Alice S T Wong, School of Biological Sciences
Kong Tsz Ching	BSc (4)	3	The Attitude of The Public Towards Human-Wild Boar (Sus scrofa) Interaction in Hong Kong	Dr Hannah S. Mumby, School of Biological Sciences
Kwok Yi Hin	BSc (4)	2	Directed evolution of human transcription factor SOX17 for pluripotency reprogramming	Dr Ralf Jauch & Dr Kwok Ming Yao, School of Biomedical Sciences
Lee Man Yin Leo	BSc (4)	3	Machine Learning to improve the sensitivity of the MAGIC telescope	Dr Stephen C Y Ng, Department of Physics
Leung Yu Hin	BSc (4)	2	Synthesis and dynamics study of [7]catenane	Dr Ho Yu Au Yeung, Department of Chemistry
Levitskiy Arsen	BSc (4)	3	Nature of the compact UV emission in Brightest Cluster Galaxies	Dr Jeremy J L Lim, Department of Physics
Liang Zhuo	BSc (4)	1	Validation for Learning to Reweight Examples for Robust Deep Learning	Dr Zhonghua Liu, Department of Statistics & Actuarial Science
Lim Hui Yuan	BSc (4)	3	Understanding the Axonal mRNA Transport in Various Organisms	Dr Chaogu Zheng, School of Biological Sciences
Lin Minghui	BSc (4)	3	The influence of caste ratio on the colony investment in the dimorphic ant---Pheidole megacephala	Dr Benoit Guénard, School of Biological Sciences
Lin Yen-hsu	BSc (4)	1	Design, Synthesis and Photophysical Studies of Luminescent Calix[4]arene-based Alkynylplatinum(II) Phosphine Complexes	Prof Vivian W W Yam, Department of Chemistry
Liu Sizhe	BSc (4)	1	Quasi-2D lead-free halide perovskite materials	Prof Aleksandra Djurišić, Department of Physics
Low Megan Mei Yan	BSc (4)	3	Variation of ventral color patterns and their association with life history factors in Hong Kong Newts	Dr Simon Y W Sin, School of Biological Sciences
Man Hei Chun*	BSc (4)	1	Design, Synthesis, Photophysical and Electrochemical Study of Luminescent Cyclometalated Gold(III) Complexes	Prof Vivian W W Yam, Department of Chemistry
Mia Md Bayezid	BSc (4)	2	The role of C-terminus of GEN1 Holliday junction resolvase in somatic cells	Dr Gary Y W Chan, School of Biological Sciences
Mohiuddin Saad	BSc (4)	3	White-light interferometry for thickness measurement of thin films	Dr Tran Trung Luu, Department of Physics
Mou Yuanbiao	BSc (4)	3	Constructing a transposon library in clinical multidrug-resistant P. aeruginosa	Dr Aixin Yan, School of Biological Sciences
Pillai Vismaya Rajeev	BSc (4)	1	Identification of terminal selectors and cell fate markers of c. elegans neurons	Dr Chaogu Zheng, School of Biological Sciences
Singhal Kush	BSc (4)	2	Near-miss Identities Involving Representations by Ternary Quadratic Forms and Class Numbers	Dr Benjamin Robert Kane, Department of Mathematics

Siu Tsz Ho	BSc (4)	2	Improved OPA Cyclization for Bioactive Peptide Analogues	Prof Xuechen Li, Department of Chemistry
Song Menghan	BSc (4)	2	Monte Carlo investigations on classical and quantum Ising models and their phase transitions	Dr Zi Yang Meng, Department of Physics
Sun Anqi	BSc (4)	2	Roles of neuronatin in hepatic metabolism	Dr Chi Bun Chan, School of Biological Sciences
Tang Tze Tung	BSc (4)	2	PDZD2 and primary open-angle glaucoma - Characterization of PDZD2-deficient mice and human PDZD2 SNPs	Dr Kwok Ming Yao, School of Biomedical Sciences
Tsang Hiu Yu	BSc (4)	3	Bats ectoparasites in Hong Kong and their specificity of host-parasite interaction	Dr Simon Y W Sin, School of Biological Sciences
Urbana Sayeeda Ibnat	BSc (4)	2	The Variability of Si/Ca Ratios in Ostracod Shells	Dr Christelle A Not, Department of Earth Sciences
Wang Zihan	BSc (4)	2	Detecting Cytosolic G4-binding proteins in Live Cells Using DBF-Conjugated AS1411	Dr Ying Li, Department of Chemistry
Wong Kwan Yuen	BSc (4)	2	Development of YEATS2 Inhibitor as a Potential Non-Small Cell Lung Cancer Cure	Prof Xiang Li, Department of Chemistry
Wong Yik Lok	BSc (4)	2	Incidence and Luminosity of Active Galactic Nuclei in Cluster Elliptical Galaxies	Dr Jeremy J L Lim, Department of Physics
Woo Sing Yi*	BSc (4)	3	Effects of Light Pollution and Urbanization on Moth Communities in Hong Kong	Dr Louise Amy Ashton , School of Biological Sciences
Wu Shuang	BSc (4)	1	Developing new stamping techniques for ultra-large atomically thin 2D crystals	Dr Dong-Keun Ki, Department of Physics
Wu Yuxi	BSc (4)	2	A Study on an Algorithm to Reweight Examples for Robust Deep Learning	Dr Zhonghua Liu, Department of Statistics & Actuarial Science
Xiong Jiaming	BSc (4)	2	A Tail Index Regression Approach to Analyzing Extreme Event Data	Dr Jinfeng Xu, Department of Statistics & Actuarial Science
Yang Jiayu	BSc (4)	1	Generation of OAM light using interferogram and binary hologram	Prof Xiaodong Cui, Department of Physics
Yang Juanyi	BSc (4)	2	Theoretical calculation on production cross section of Z-boson and experimental measurement of production cross section of Z-boson in e-e+ channel with Monte Carlo simulated data	Dr Yanjun Tu, Department of Physics
Ye Wenwen	BSc (4)	1	Effect of H2O2 on SIRT7 gene expression in Huh7	Dr Jiangwen Zhang, School of Biological Sciences
Yeung Ryan Wai-yen	BSc (4)	3	Causality of Viscous Dark Fluids	Dr Jenny H C Lee, Department of Physics
Yu Haoshengzhe	BSc (4)	2	Computational analysis of aptamer-proteincomplex between cubane modified aptamer and PvLDH	Prof Julian A Tanner, School of Biomedical Sciences
Zhan Linying	BSc (4)	2	Investigation on Quantum Search Algorithm and its Possible Applications	Prof Zidan Wang, Department of Physics
Zhang Jiahao	BSc (4)	2	An integration of phenocam observations with machine learning helps monitor leaf phenology in tropical evergreen forests	Dr Jin Wu, School of Biological Sciences
Zhang Steffi Xi Yue	BSc (4)	2	Optimising the Concentration of Dextran Sulfate Sodium to Induce Colitis in Murine Models	Dr Hani El-Nezami, School of Biological Sciences
Zhang Zhuoyuan	BSc (4)	3	Development of a mitochondria targeting ratiometric probe for hydrogen peroxide detection and imaging	Prof Dan Yang, Department of Chemistry

Zhu Zhengyi	BSc (4)	3	Studying portfolio theory using MMVaR	Dr Guodong Li, Department of Statistics & Actuarial Science
Zou Xiang*	BSc (4)	1	The Astrophysics of Gaseous Nebulae and HASH Database Exploitation	Prof Quentin A Parker, Department of Physics

## 2018-19

Name	Curriculum	Year	Project Title	Supervisor
Ahmed Mahnoor*	BSc (4)	1	Deep Learning-based Sentiment Analysis of HK Fintech News	Dr Philip L H Yu, Department of Statistics & Actuarial Science
Cai Fangxin	BSc (4)	1	The role of ACTR5 in liver tumorigenesis as a core component of the chromatin remodeling INO80 complex	Dr Jiangwen Zhang, School of Biological Sciences
Chan Alistair Kai Chak	BSc (4)	2	Investigating the role of BDNF in cigarette smoke-exposed airway cells	Dr Judith C W Mak, Department of Medicine & Prof Dong-Yan Jin, School of Biomedical Sciences
Chan Ka Kui	BSc (4)	3	Characterisation of human EPSCs cultured in an optimised medium	Prof Pengtao Liu & Prof Dong-Yan Jin, School of Biomedical Sciences
Chan Lai Ying	BSc (4)	4	Japanese Tit or Cinereous Tit? The missing piece in the Parus puzzle	Dr Simon Y W Sin, School of Biological Sciences
Chan Lok Hang	BSc (4)	3	Unsupervised machine learning in Particle Physics	Dr Yanjun Tu, Department of Physics
Chan Sze Wen	BSc (4)	3	Microplastics retention efficiency in wastewater treatment plant	Dr Christelle A Not, Department of Earth Sciences
Chan Timothy	BSc (4)	2	Investigating the likelihood and nature of mutated resistance and fitness of Influenza A virus to T-705	Prof Leo L M Poon, School of Public Health & Prof Dong-Yan Jin, School of Biomedical Sciences
Cheung Ka Chuen	BSc (4)	3	Towards the binding study of $\gamma$ -CD, CB[6] – cowheeled Hetero-[4]-rotaxane with small molecules	Dr Ho Yu Au-Yeung, Department of Chemistry
Chin Honston T	BSc (4)	1	Screening of novel antagonist for the treatment of anaphylactoid shock	Prof Billy K C Chow, School of Biological Sciences
Chiu Lok Ching Sandra	BSc (4)	2	The impact of Erythromycin exposure on biofilms formed within simulated irrigation water distribution systems: a metagenomic study	Dr Olivier Habimana, School of Biological Sciences
Cui Jinze	BSc (4)	2	Detecting and Locating Bone Fractures Using a Deep Neural Network	Dr Philip L H Yu, Department of Statistics & Actuarial Science
Deng Jianqiao	BSc (4)	2	Probing Structures and Imaging of Black Hole Accretion Disks	Dr Lixin Dai, Department of Physics
Do Ye Lim	BSc (4)	2	Effect of Tubulin Glutamylation on Regulation of Neuronal Growth in <i>C.elegans</i>	Dr Chaogu Zheng, School of Biological Sciences
Dong Boya	BSc (4)	1	Prediction Region based on High-dimensional Non-parametric Regression	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Du Zhixu	BSc (4)	2	Solving PDE with Deep Learning	Dr Zhiwen Zhang, Department of Mathematics
Fan Jingjing	BSc (4)	3	The Travelling Salesman Problem And Its Application	Prof Wenan Zang, Department of Mathematics
Felicianna	BSc (4)	2	The Effect of Zearalenone on the proliferation of Colon Cancer Cells	Dr Hani S El-Nezami, School of Biological Sciences
Feng Yueqing	BSc (4)	2	On height function: from Mordell-Weil Theorem to Kaehler manifolds	Prof Ngai Ming Mok, Department of Mathematics

Gan Dailin	BSc (4)	2	Image Similarity Comparison of HK Historic Carvings: A wavelet decomposition approach	Prof Jeff J F Yao, Department of Statistics & Actuarial Science
Garg Anahita	BSc (4)	1	Effects of Schisandrin B on Intestinal Barrier Function	Dr Hani S El-Nezami, School of Biological Sciences
Halim Stephanie	BSc (4)	1	Analogue Synthesis of Teixobactin to Explore Structure-Activity Relationship	Prof Xuechen Li, Department of Chemistry
Heo Chan	BSc (4)	2	Calculations of Nuclear Mass of Even-even Nuclei Through a New Nuclear Model	Dr Jenny H C Lee, Department of Physics
Ho Meng Chit	BSc (4)	2	Nuclear mass calculation with Deformed Relativistic Hartree-Bogoliubov theory in continuum	Dr Jenny H C Lee, Department of Physics
Hu Xinning	BSc (4)	2	Exploration of potential lysine modification by R-2-hydroxyglutarate	Prof Dan Yang, Department of Chemistry
Ip Ki	BSc (4)	1	Design, Synthesis, Photophysical and Electrochemical Study of Luminescent Cyclometalated Platinum(II) Complexes	Prof Vivian W W Yam, Department of Chemistry
Iu Chit Yu Elsie	BSc (4)	2	The use of SGT sprouting technique and C addition for enhancing GABA production in wheat sourdough	Prof Nagendra P Shah, School of Biological Sciences
Jogani Ritika Priyul	BSc (4)	2	Effect of NCBP2-AS2 on metastasis of Gastric Cancer	Dr Jiangwen Zhang, School of Biological Sciences
Kong Siyu	BSc (4)	2	Crystallization - Why Do Particles Pack in This Way?	Dr Tak Kwong Wong, Department of Mathematics
Lai Wenjing	BSc (4)	2	Understand the Molecular Basis of Congenital Scoliosis	Dr Bo Gao, School of Biomedical Sciences
Leong Tsun Lam	BSc (4)	3	Identifying active anti-metastatic components in YB1 treated mouse serum	Prof Jiandong Huang, School of Biomedical Sciences
Li Kam Yun	BSc (4)	2	Synthesis, Spectroscopic and Charge-Transfer Properties Studies of D- $\pi$ -A compounds based on triarylamine and benzothiadiazole	Prof Vivian W W Yam, Department of Chemistry
Li Pak Yi	BSc (4)	2	Applying unsupervised machine learning in particle physics	Dr Yanjun Tu, Department of Physics
Liu Suying	BSc (4)	1	Maximum Mutual Information A Boolean Function Can Reveal	Dr Guangyue Han, Department of Mathematics
Liu Xinqi	BSc (4)	1	Roles of Capase 3 Activation in Lytic Replication of Epstein-Barr Virus in Epithelial Cells	Prof Dong-Yan Jin, School of Biomedical Sciences
Low Megan Mei Yan	BSc (4)	2	Elevational distribution of Lycaenidae butterflies with and without False Head	Dr Timothy C Bonebrake, School of Biological Sciences
Mia Md Bayezid	BSc (4)	1	How is lncRNA, FAM83H-AS1 Associated with Gastric Cancer?	Dr Jiangwen Zhang, School of Biological Sciences
Ouyang Xiangyu	BSc (4)	1	Investigation on The Effects of Inserting Tetracysteine Tags in Vangl2 C-terminal to The Membrane Localization of Vangl2 Protein	Dr Bo Gao, School of Biomedical Sciences
Radhakrishnan Samhita Ramanan	BSc (4)	1	Photosynthesis and proton movement in guard cells	Dr Wallace B L Lim, School of Biological Sciences
Sang Yan	BSc (4)	2	A study of computational optimal transport—Recent advances for solving large-scale optimal transport problem	Dr Zheng Qu, Department of Mathematics
Shah Aashana Chetan	BSc (4)	1	The effect of the knockdown of gene VPS9D1-AS1 on the metastasis of gastric cancer cells	Dr Jiangwen Zhang, School of Biological Sciences
Siu Tsz Ho	BSc (4)	1	Development of New Antibiotics Based on Teixobactin	Prof Xuechen Li, Department of Chemistry



Szeto Dei Men	BSc (4)	2	Elucidating the role of DLC1 isoform 1 in chick motor neuron development using CRISPR/Cas9 approach	Dr Martin C H Cheung, School of Biomedical Sciences
Tam Sze Hon	BSc (4)	3	An Explorative Study on Relationship Between Ant Allometry and CTmax Variation	Dr Benoit Guénard, School of Biological Sciences
Taneja Sovina	BSc (4)	3	The effect of polyphenol Schisandrin B and probiotic mixture VSL#3 on HCT116 cell proliferation and migration	Dr Hani S El-Nezami, School of Biological Sciences
Telford Rachel Louise	BSc (4)	1	Further Characterisation of the Nuclear Localisation Signal (NLS) of the Human p70 S6 Kinase	Prof Alice S T Wong, School of Biological Sciences
Tjoa Michelle Angelina	BSc (4)	2	The measurement of consumer acceptance of cricket powder as a new alternative protein source	Dr Tanja Sobko, School of Biological Sciences
Tso Kwon Victor	BSc (4)	1	Towards catenane-based molecular machines	Dr Ho Yu Au-Yeung, Department of Chemistry
Tsui Shing Yan	BSc (4)	2	DNA Tiles – A High-Throughput Signal Amplification Platform	Dr Julian A Tanner, School of Biomedical Sciences
Wang Tsz Lam	BSc (4)	2	Synthesis of Asymmetric Oxetanyl Alcohol for [4+3] cycloaddition	Prof Pauline Chiu, Department of Chemistry
Wong Cheuk Kiu	BSc (4)	1	Effect of SH3 domain binding kinase 1 (SBK1) on stability of Nur77	Dr Chi Bun Chan, School of Biological Sciences
Wu Jiayi	BSc (4)	1	Two failures of classical physics and the emergence of quantum mechanics	Dr Shizhong Zhang, Department of Physics
Yau Shang Ping	BSc (4)	2	Maximum Thermal Limits of Web-building Spiders Communities in Hong Kong across Habitats	Dr Benoit Guénard, School of Biological Sciences
Yeung Chung Tai Anthony	BSc (4)	2	Understanding the Hub of Illicit Freshwater Turtles and Tortoises Trade for conservation	Dr Yik Hei Sung & Dr Simon Y W Sin, School of Biological Sciences
Yiu To Chung Martin	BSc (4)	2	Numerical calculations to extract the ground state properties of the nuclei for a new nuclear model ( $62 \leq z \leq 70$ )	Dr Jenny H C Lee, Department of Physics
Yuniar Shendy Marcello	BSc (4)	3	A Deep Learning Approach to Solving Partial Differential Equations	Dr Zhiwen Zhang, Department of Mathematics
Zhang Xiaotian	BSc (4)	2	Selection and Characterization of Fluorogenic DNA Aptamer Using Capture SELEX	Dr Julian A Tanner, School of Biomedical Sciences
Zhao Xiaofan	BSc (4)	1	Time series analysis with American trading data	Dr Guodong Li, Department of Statistics & Actuarial Science
Zhu Zhengyi	BSc (4)	2	An Exploration on Smoothly Clipped Absolute Deviation Penalized Methods in High Dimensional Settings	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Zhu Zixuan	BSc (4)	2	Use deep learning to solve PDEs	Dr Zhiwen Zhang, Department of Mathematics

## 2017-18

Name	Curriculum	Year	Project Title	Supervisor
Au Alison Hoi Kei	BSc (4)	3	Anticancer Effects of Schisandrin B in Colon Cancer	Dr Hani El-Nezami, School of Biological Sciences
Chan Ching Yin	BSc (4)	3	Synthesis of Reaction-Based Fluorescent Probes for Detection of Metal ions	Dr Ho Yu Au-Yeung, Department of Chemistry
Chan Long Hei	BSc (4)	2	Understanding the Extracellular Matrix Niche of Articular Cartilage Progenitor Cells	Prof Danny Chan, School of Biomedical Sciences

Chan Wai Fong	BSc (4)	3	The Effects Of PDZD2 On Retinal Müller Cells Under High Glucose Stress Via Sonic Hedgehog Signaling Pathway	Dr Kwok Ming Yao, School of Biomedical Sciences
Cheung Kit Chi	BSc (4)	3	Prospects of Detecting Gravitational Waves by High-precision Astrometric Measurement	Dr Meng Su, Department of Physics
Cheung Wing Ming*	BSc (4)	3	Promotion of skeletal muscle to brown fat tissue transdifferentiation by 7,8-Dihydroxyflavone	Dr Chi Bun Chan, School of Biological Sciences
Chik Gerald Julius	BSc (4)	3	Study on aziridination of alkenes using osmium (VI) nitrido-complexes as catalyst	Prof Chi Ming Che, Department of Chemistry
Ching Karen	BSc (4)	3	3D biomimetic platform for nasopharyngeal cancer drug screening	Prof Alice S T Wong, School of Biological Sciences
Chiu Yu-Cheng*	BSc (4)	1	The Study of Morse Theory	Dr Zheng Hua, Department of Mathematics
Chung Ming Wai	BSc (4)	3	A study of functions of Suppressor of fused and Spop in mammalian neural progenitor maintenance	Prof Mai Har Sham, School of Biomedical Sciences
Chung Wing Yi	BSc (4)	2	Market presence of critically endangered European eel ( <i>Anguilla anguilla</i> ) in Hong Kong	Dr David M Baker, School of Biological Sciences
Heo Chan	BSc (4)	1	GET System for Double-sided Silicon Strip Detector	Dr Jenny H C Lee, Department of Physics
Ho Ching Sum	BSc (4)	3	Recombinant Protein Expression and Testing of their Bioactivity in Mosquito Fish Scale Cells	Prof Anderson O L Wong, School of Biological Sciences
Hong Hei Ip	BSc (4)	2	Role of Epstein-Barr virus Zta protein in suppressing IRF3 transcription factor	Prof Dong-Yan Jin, School of Biomedical Sciences
Hsieh Chia-Chun	BSc (4)	2	Counting the embeddings of the ring of integers into orders of quaternion algebras	Dr Benjamin R Kane, Department of Mathematics
Kamaraj Ramanujam	BSc (4)	3	Study of polygonal numbers and their sums representing positive integers	Dr Benjamin R Kane, Department of Mathematics
Kang Xiaozhuo	BSc (4)	3	Promoter analysis of grass carp somatolactin a and b	Prof Anderson O L Wong, School of Biological Sciences
Lau Wai Ting Jackson	BSc (4)	3	How does the thermal preference of an intertidal snail <i>Nerita</i> sp. help itself to survive thermal stress?	Prof Gray A Williams, School of Biological Sciences
Lee Chun Yin	BSc (4)	1	A model for short-term electric power load forecasting and peak prediction	Dr Philip L H Yu, Department of Statistics & Actuarial Science
Leung Tsz Kin Calvin	BSc (4)	3	The phenology and potential temporal separation of different species of stag beetles (Family Lucanidae) in Hong Kong	Dr Timothy C Bonebrake, School of Biological Sciences
Leung Wang Shing	BSc (4)	3	On the blow-up of hydrostatic Euler equations	Dr Tak Kwong Wong, Department of Mathematics
Li Jiahui	BSc (4)	2	Shape-changing colloidal patchy particles with nonionic surfactant	Dr Yufeng Wang, Department of Chemistry
Li Zhuoxuan	BSc (4)	2	Genetic mechanisms of Alzheimer's Disease	Dr You-Qiang Song, School of Biomedical Sciences & Dr Karen W Y Yuen, School of Biological Sciences
Liang Shuang	BSc(ActuarSc) (4)	3	Generalization of regularized inner products and weakly holomorphic Hecke eigenforms	Dr Benjamin R Kane, Department of Mathematics

Lin Huayue	BSc (4)	2	Identification of Regulatory Enzymes Required for Vangl2 Ubiquitination	Dr Bo Gao, School of Biomedical Sciences
Mak Ho Cheung	BSc (4)	2	Understanding the Neomorphic Function of the Mutant IFITM5 in Osteogenesis Imperfecta type V	Prof Danny Chan, School of Biomedical Sciences
McLeod Wendy Finella Cabututan	BSc (4)	2	Investigation of Cassiopea polyp development under effect of various Symbiodinium clades	Dr David M Baker, School of Biological Sciences
Mohiuddin Saad	BSc (4)	1	Application of Machine Learning in Material Science	Prof Jian Wang, Department of Physics
Nianias James Michael George	BSc (4)	2	Constraining Excitation Mechanisms and Sources in Central Group/Cluster Elliptical Galaxies	Dr Jeremy J L Lim, Department of Physics
San Sheung Yin	BSc (4)	3	Nitrate and Polyphenols for the Protection against Endothelial Dysfunction	Dr Jimmy C Y Louie, School of Biological Sciences
Sang Yan	BSc (4)	1	Almost universal sums of pentagonal numbers	Dr Benjamin R Kane, Department of Mathematics
Shao Xiaoman	BSc (4)	2	Screening of EMT-Reversing Chemicals Based on Cell Morphology and Marker Expression	Prof Alice S T Wong, School of Biological Sciences
Shen Yichen	BSc (4)	3	Statistical Modeling of University Rankings	Dr Philip L H Yu, Department of Statistics & Actuarial Science
Siu Wing Man	BSc (4)	2	Floral Isolation in Bulbophyllum	Prof Richard Saunders, School of Biological Sciences
Su Zehao	BSc (4)	3	Spatial-temporal Forecast of Wind Speed and Direction for Power Generation	Dr Philip L H Yu, Department of Statistics & Actuarial Science
Tan Zhi Qing	BSc (4)	2	The Effect of Life-long High Sugar Intake in Metabolic Health in Mice	Dr Jimmy C Y Louie, School of Biological Sciences
Tang Tsz So Acacia	BSc (4)	2	Investigation on effect of temperature stress on holobiont using <i>Galaxea sp.</i>	Dr David M Baker, School of Biological Sciences
Taranjit-Singh	BSc (4)	2	From LIGO to Gaia: an innovative approach for detecting Gravitational Waves from Binary Supermassive Black Holes	Dr Meng Su, Department of Physics
Tsoi Jackie Chung Wing	BSc (4)	1	Panel Time Series Modelling using the LASSO	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Wang Tsz Lam	BSc (4)	1	The Design and Synthesis of conjugated polymer incorporated with cyclometalated platinum complexes	Prof Wai Kin Chan, Department of Chemistry
Wang Zeyu	BSc (4)	2	On Stein manifolds and some related topics in several complex variables	Prof Ngaiming Mok, Department of Mathematics
Wong Chin Leong*	BSc (4)	2	Synthetic study of interlocked structure: Catenane and Suitane	Dr Ho Yu Au-Yeung, Department of Chemistry
Wong Yin Pok	BSc (4)	2	Platinum and Gold Catalyzed Silicon Nanowire Growth Conditions with Machine Learning	Dr Jinyao Tang, Department of Chemistry
Wu Jiajun	BSc (4)	3	Relationship between oil price shocks and stock market volatility: a test on BRIC	Dr Ke Zhu, Department of Statistics & Actuarial Science
Xiao Xuan	BSc(ActuarSc) (4)	3	Hybrid block bootstrap for general distributional features of recurrent Markov chains	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Xu Hongting	BSc (4)	2	Role of Vangl Phosphorylation in Cancer Metastasis	Dr Bo Gao, School of Biomedical Sciences

Xu Jing*	BSc (4)	1	Nonlinear Time Series Modelling based on the Hysteretic Autoregressive Time Series Models	Prof Wai Keung Li, Department of Statistics & Actuarial Science
Xu Wan	BSc (4)	2	Expression and Function of PDZD2 in Neuronal Cell Differentiation and Proliferation	Dr Kwok Ming Yao, School of Biomedical Sciences
Yeung Chun Ming	BSc (4)	2	Synthetic studies on 9 and 10-membered ring carbocycles by [4+3] cycloaddition	Prof Pauline Chiu, Department of Chemistry
Yeung Ryan Wai-Yen*	BSc (4)	1	Probability of electron charge misidentification at the ATLAS experiment	Dr Yanjun Tu, Department of Physics
Yik Kai Hei	BSc (4)	2	Investigating Teixobactin structure-activity relationship through analogue synthesis	Dr Xuechen Li, Department of Chemistry
Yip Ka Hei Anson	BSc (4)	2	A Preliminary Study on Urban Park Plant Resources for the Establishment of Butterflies in Metropolitan Hong Kong	Dr Timothy C Bonebrake, School of Biological Sciences
Yip Ka Kin	BSc (4)	2	Development of RNA Interference Knockdown System for Investigating the Function of Essential Genes in the Budding Yeast <i>Saccharomyces cerevisiae</i>	Dr Karen W Y Yuen, School of Biological Sciences
Zhao Qingqing	BSc (4)	2	Study of Sulfur-28 beta-delayed proton decay	Dr Jenny H C Lee, Department of Physics

## 2016-17

Name	Curriculum	Year	Project Title	Supervisor
Cao Weihao	BSc(4)	2	Machine learning and its application to practical classification problems	Prof Jian Wang, Department of Physics
Chan Chiu Tung	BSc(4)	3	Isolating Articular Cartilage Superficial Zone Protein for Proteomics	Prof Danny Chan, School of Biomedical Sciences
Chan Shu Ting	BSc(4)	2	Relationship of phytate uptake from bread and the absorption of calcium in human	Dr Jennifer M F Wan, School of Biological Sciences
Chandra Aditi	BSc(4)	2	Identification of Genetic Events that Drive Oncogenesis	Dr Jiangwen Zhang, School of Biological Sciences
Cheng Cheuk Yin	BSc(4)	3	Functional Characterization of DYRK1A-mediated Histone Phosphorylation in DNA Double-strand Break Repair	Prof Dong-yan Jin & Dr Michael S Y Huen, School of Biomedical Sciences
Cheung Hiu Ying	BSc(4)	3	To investigate whether Cathepsin G is the key molecule involved in anti-metastasis effect of YB1	Prof Jiandong Huang, School of Biomedical Sciences
Chong Pooi Seong	BSc(4)	2	Mask Free Lithography Using a Laser System with 405nm Laser and a Motorized Stage	Prof Xiaodong Cui, Department of Physics
Cynthia Caroline	BSc(4)	2	The Relationship of Fibrillin with Asporin in TGF- $\beta$ Signaling	Prof Danny Chan, School of Biomedical Sciences
Ding Anyang	BSc(4)	3	Paleobiogeographic Analysis of Coelurosaurian Evolution	Dr Michael D Pittman, Department of Earth Sciences
Fan Kwok Lung	BSc(4)	2	Using hydrogen data to trace the galactic magnetic field and dust polarization angle for cosmic microwave background foregrounds	Dr Meng Su, Department of Physics
Fung Lok Hin	BSc(4)	3	Study on the Impact of Climate Change on the Phenology of Birds in China	Dr Timothy C Bonebrake, School of Biological Sciences

Gao Yuhe	BSc(4)	2	Improved Estimation of Population Proportion Using Ranked Set Sampling	Dr Philip L H Yu, Department of Statistics & Actuarial Science
Gong Zhengyangguang	BSc(4)	2	Simulation of the Polarized Magnetic Field In the Milky Way Galaxy with polarized thermal dust emission of Planck and rotation measures	Dr Meng Su, Department of Physics
Gu Jiacheng	BSc(4)	2	Study of the Molecular Mechanisms of Nitric Oxide Synthase Isoforms' Action in Heart Failure	Prof Billy K C Chow, School of Biological Sciences
Halim Melanie*	BSc(4)	2	A Functional Coating on Silicon Microswimmers	Dr Jinyao Tang, Department of Chemistry
Han Wendi	BSc(4)	2	Computing $\omega$ -values of Generators of Numerical Monoids	Dr Yuk Kam Lau, Department of Mathematics
He Anshan	BSc(ActuarSc) (4)	3	Selection of block number and block length in moving block bootstrap inference for quantiles of stationary time series	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Ho Sik Yin	BSc(4)	2	Effect of concentration of streptavidin on crosslinking-induced endocytosis of acetylcholine receptors	Dr Chi Wai Lee, School of Biomedical Sciences
Hsieh Chia-chi	BSc(4)	2	Investigation of the protein Scf1 and sHIP as potential vaccine antigens against Streptococcus pyogenes (GAS) infections	Prof Jiandong Huang, School of Biomedical Sciences
Hung Sze Ki	BSc(4)	3	Use of Human Induced Pluripotent Stem Cell-derived Sensory Neurons to Signal for Myelination	Prof Daisy K Y Shum, School of Biomedical Sciences
Jin Shasha	BSc(4)	1	Design, Synthesis and Photophysical Study of Water-Soluble Conjugated Polyelectrolytes	Prof Vivian W W Yam, Department of Chemistry
Keudanova Diana	BSc(4)	2	"Play&Glow" - Promoting healthy lifestyle by connecting Hong Kong families with preschool children to nature	Dr Tanja Sobko, School of Biological Sciences
Kong Wang Yeuk	BSc(4)	1	Synthesis of Teixobactin analogues for establishment of structure-activity relationship	Dr Xuechen Li, Department of Chemistry
Lai Lexiao	BSc(4)	2	Assessing Portfolios Containing Assets in the World Market	Dr Siu Pang Yung, Department of Mathematics
Lam Ho Yin	BSc(4)	2	Structure-Activity Relationship Study of Teixobactin by Analogues Synthesis	Dr Xuechen Li, Department of Chemistry
Lam Kai Ching	BSc(4)	1	Identifying age-related genes important for chromosome instability	Dr Karen W Y Yuen, School of Biological Sciences
Lam Yan Yi	BSc(4)	2	Interaction between FOXM1 and PRDM14 and Role of FOXM1 in Regulating Ovarian Carcinoma Cell Proliferation	Dr Kwok Ming Yao, School of Biomedical Sciences
Lee Hyeyoung	BSc(4)	1	Evaluation of the anti-cancer stem cell (CSCs) efficacy of compound K and compound PPD treatment, and their effect on the gene expression of Stem Cell Marker and EMT Markers	Prof Alice S T Wong, School of Biological Sciences
Lee Sungmin	BSc(4)	3	Analysis of Ionising Radiation on DNA Repair Pathways Using Imaging Techniques	Dr Nai Sum Wong, School of Biomedical Sciences
Leng Jiaqi	BSc(4)	1	On the Running Time of An Algorithm to Construct A Supersingular Elliptic Curve With A Given Endomorphism Ring	Dr Benjamin R Kane, Department of Mathematics
Leung Joyce Wei Yin	BSc(4)	2	Investigation on Duplicate Bridge Movements – Howell and Mitchell Movements	Dr Ka Ho Law, Department of Mathematics

Leung On Yi	BSc(4)	2	Effects of dietary extra virgin olive oil and olive oil on reducing oxidative stress in rat brain	Dr Jetty C Y Lee, School of Biological Sciences
Li Changxuan	BSc(4)	3	Statistical Models for Studying Pricing Strategies in Aviation from Shanghai to Tokyo	Dr Philip L H Yu, Department of Statistics & Actuarial Science
Li Hanfei	BSc(4)	1	Design and synthesis of stapled peptide that mimic estrogen	Dr Xuechen Li, Department of Chemistry
Li Jinyang*	BSc(ActuarSc) (4)	3	Optimal Life Insurance of a Family with Working Couple - A Dynamic Programming Approach	Prof Hailiang Yang, Department of Statistics & Actuarial Science
Li Ruohan	BSc(4)	2	Comparison and Integration of Different Post-model-selection Inference Procedures	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Lo Yik Hei	BSc(4)	2	DNA-programmed Tetrahedral Enzyme Cascade	Dr Xiaoyu Li, Department of Chemistry
Mak Ho Man	BSc(4)	3	Synthesis and Self-assembly Studies of Bi- and Tridentate Ligand Building Blocks for Unsymmetrical [2]catenanes	Dr Ho Yu Au-Yeung, Department of Chemistry
Ng Hin Ching	BSc(4)	1	Detrital zircons of the east Pilbara craton, Western Australia: A test of vertical tectonic v.s. plate tectonic model	Dr Alex Webb, Department of Earth Sciences
Ng Raissa Regina	BSc(4)	2	Elucidating the role of centromeric protein B in C. elegans	Dr Karen W Y Yuen, School of Biological Sciences
Ng Yan Ting	BSc(4)	2	Derivation of Fate-committed Schwann Cells from Bone Marrow Stromal Cells for Re-myelination Therapy - A Pilot Study with Rat Cells	Prof Daisy K Y Shum, School of Biomedical Sciences
Niu Xueyan	BSc(4)	2	Bayesian Inference for Gaussian Random Field	Dr Zhiwen Zhang, Department of Mathematics
Peng Lianghui	BSc(4)	2	Analysing material microstructure using convolutional neural network	Prof Jian Wang, Department of Physics
Ramesh Tejaskumar	BSc(4)	1	All finite stable points of infinite distributions	Dr Benjamin R Kane, Department of Mathematics
Sau Gin Heng	BSc(4)	4	Evaluation on the Effectiveness of Bleaching in Removing Trace Element Contamination During Cleaning of Ostracod Genus Krithe	Dr Christelle A Not, Department of Earth Sciences
Senthil Kumar Neema	BSc(4)	1	Investigating the past millennium's Hydroclimatic Variations in the Northern Chinese Daihai Lake Region	Dr Zhonghui Liu, Department of Earth Sciences
Shao Xiaoman	BSc(4)	1	Construction and Bacterial Expression of MTDH Deletion Mutants	Prof Alice S T Wong, School of Biological Sciences
Singh Jaskarandip	BSc(4)	3	The effect of chronic stimulation on prelimbic cortex of the ventral medial prefrontal cortex	Prof Daisy K Y Shum & Dr Lee Wei Lim, School of Biomedical Sciences
So Chi Chiu*	BSc(4)	3	Numerical Homogenization of Multiscale Problems Using the Hierarchical Matrix Method	Dr Zhiwen Zhang, Department of Mathematics
So Wing Lam	BSc(4)	2	Cellular Senescence in Mice Intervertebral Disc During Aging	Prof Kathryn S E Cheah, School of Biomedical Sciences
Su Yun-kuan	BSc(4)	1	The study of Arrow's Impossibility theorem and the Gibbard-Satterthwaite theorem	Prof Tuen Wai Ng, Department of Mathematics
Subah Silma	BSc(4)	2	Behavioral Read-outs of Perturbed Regulation in the Critical Period for Hardwiring the Sensori-motor Pathway for Graviception	Prof Daisy K Y Shum, School of Biomedical Sciences
Tang Jincheng	BSc(4)	2	Representations of Integers by Quadratic Polynomials	Dr Benjamin R Kane, Department of Mathematics

Tang Tsz So Acacia	BSc(4)	1	Cancer epigenetics	Dr Jiangwen Zhang, School of Biological Sciences
Taranjit-singh	BSc(4)	1	Density Profiles of Smooth and Non-smooth Component of Dark Matter	Dr Meng Su, Department of Physics
Tin Kwan Yau	BSc(4)	1	Tail the snails - Trail following behaviour in intertidal gastropods during mating season	Prof Gray A Williams, School of Biological Sciences
Tsang Kin Ming	BSc(4)	1	Factorization of Monoids	Dr Yuk Kam Lau, Department of Mathematics
Tsang To	BSc(4)	2	DNA Nanomedicine for targeted cancer therapy	Prof Dong-yan Jin & Prof Zhongjun Zhou, School of Biomedical Sciences
Tse Sze Wai*	BSc(4)	1	A novel way to co-express multiple polypeptides in chloroplasts	Dr Wallace B L Lim, School of Biological Sciences
Tsun Shue Man	BSc(4)	2	Bacterial Count and Mono- and Dual- Biofilm Studies on Wooden Cutting Boards in Hong Kong's Wet Markets	Dr Olivier Habimana, School of Biological Sciences
Wang Chuwen	BSc(4)	2	Some algebras associated to automorphisms of elliptic curves	Dr Zheng Hua, Department of Mathematics
Wang Daoye	BSc(4)	3	Random Fields Realization by Circulant Embedding	Dr Zhiwen Zhang, Department of Mathematics
Wang Jingxuan	BSc(4)	3	Statistical Inference for High-Dimensional Nonparametric Regression Using the Bootstrap	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Wei Ningning	BSc(4)	2	Fixed Point Theorems in Metric Spaces and Their Applications	Prof Wing Sum Cheung, Department of Mathematics
Wong Choi Yiu	BSc(4)	2	Histological Characterization of Embryonic Gut from a Novel Sox10 Mutant Mouse Line	Prof Kathryn S E Cheah, School of Biomedical Sciences
Wong Hong Tsun	BSc(4)	1	Searching for the Origin of High Energy Cosmic Ray Electron	Dr Meng Su, Department of Physics
Wong Yin Pok	BSc(4)	1	Design, Synthesis, Photophysical and Electrochemical Study of Bicyclometalated Alkynylgold(III) Complexes	Prof Vivian W W Yam, Department of Chemistry
Wu Yaochen	BSc(4)	3	Comparison Theorems in Riemannian Geometry	Prof Ngai Ming Mok, Department of Mathematics
Yeung Tik Tsun	BSc(4)	1	NPTool Simulation of Silicon Detector	Dr Jenny H C Lee, Department of Physics
You Zhaohe	BSc(4)	2	Selection of DNA-encoded Dynamic Library with Anchor against Selected Biological Target	Dr Xiaoyu Li, Department of Chemistry
Zhang Zikuan	BSc(4)	1	Time to event analysis for personal loan data	Dr Jinfeng Xu, Department of Statistics & Actuarial Science
Zhao Qingqing	BSc(4)	1	The GET System for Silicon Detectors	Dr Jenny H C Lee, Department of Physics
Zheng Shaoxiong	BSc(4)	2	Quantitative Trading Strategies Based on Time Series Analysis	Dr Ke Zhu, Department of Statistics & Actuarial Science

## **2015-16**

<b>Name</b>	<b>Curriculum</b>	<b>Year</b>	<b>Project Title</b>	<b>Supervisor</b>
Amruth Alfred	BSc(4)	3	Using Nature's Cosmic Telescopes to study the Early Universe	Dr Jeremy J L Lim, Department of Physics
Au Tsun Fung	BSc(4)	3	Does global warming bring in new butterfly species to Hong Kong?	Dr Timothy C Bonebrake, School of Biological Sciences
Bong Bon	BSc(4)	2	On the Universality of Sums of Polygonal Numbers	Dr Benjamin R Kane, Department of Mathematics

Calvin	BSc(4)	3	Spin Dynamics in One-dimensional Spin Models	Dr Shizhong Zhang, Department of Physics
Chan Kong Wing	BSc(4)	2	Estimation of the age effect on DFS of breast cancer patients based on the partly linear Cox model	Dr Eddy K F Lam, Department of Statistics & Actuarial Science
Chan Ting Ho	BSc(4)	3	Synthesis of Teixobactin Analogues to Search for New Antibiotics	Dr Xuechen Li, Department of Chemistry
Chen Yuming	BSc(4)	2	Dimension of Voting System in EU Council under Lisbon Voting Rules	Prof Tuen Wai Ng, Department of Mathematics
Cheng Kai Man	BSc(4)	2	Analysis of Lipids and Fatty Acids in Corals	Dr Jetty C Y Lee, School of Biological Sciences
Cheung Man Him	BSc(4)	2	Characterization of HP1 $\alpha$ Acetylation	Prof Zhongjun Zhou, School of Biomedical Sciences
Chu Ka Chi	BSc(4)	2	Optimization of Planarian Cell Isolation and Neoblast Culture	Prof Danny Chan, School of Biomedical Sciences
Chu Ku Yin	BSc(4)	2	Uhrf1 Regulates Klf4 Stability Through Polyubiquitination	Prof Zhongjun Zhou, School of Biomedical Sciences
Ding Yuyan	BSc(4)	2	The effect of non-enzymatically derived metabolites on human neuroblastoma cells	Dr Jetty C Y Lee, School of Biological Sciences
Dong Chenxue	BSc(4)	3	The determinants of Default and Prepayment on fixed rate residential mortgage loans	Dr Jinfeng Xu, Department of Statistics & Actuarial Science
Fung Ka Yi	BSc(4)	3	Synthesis of Histone H4K31ac by Expressed Protein Ligation	Dr Xiang Li, Department of Chemistry
Gao Rui	BSc(4)	2	Biorthogonal Detection of Lipidation Induced by Lauric Acid	Prof Dan Yang, Department of Chemistry
Gu Haotian	BSc(4)	2	Attractor-strengths in Boolean Networks and a Class of Stable Structures	Prof Wai Ki Ching, Department of Mathematics
He Jilin	BSc(4)	3	Preparation of lipid reporters and profiling of potential protein targets	Prof Dan Yang, Department of Chemistry
Ho Ngai Hei Ernest	BSc(4)	3	Temporal Variation of Plastic Debris Composition in Littoral Zone in Response to Wave, Wind and Tide	Dr Christelle A Not, Department of Earth Sciences
Lam Joy Yan	BSc(4)	3	Molecular Cloning of Grass Carp HNF3 $\alpha$ & Functional Expression on LH $\beta$ promoter in $\alpha$ T3 cells	Prof Anderson O L Wong, School of Biological Sciences
Lang Yen-po	BSc(4)	3	Elucidating Human Cyclophilin B Properties as a Polyphosphate-binding Protein	Dr Julian A Tanner, School of Biomedical Sciences
Lau Ho Ting	BSc(4)	3	Synthesis and analysis of Teixobactin analogues	Dr Xuechen Li, Department of Chemistry
Levitskaya Zarina	BSc(4)	3	To compare cancer against normal samples with TCGA data and identify lincRNA involved in oncogenesis	Dr Jiangwen Zhang, School of Biological Sciences
Linardi Clarissa	BSc(3)	1	The Anticancer Mechanism of the Chinese Medicinal Mushroom <i>Phellinus linteus</i>	Dr Jennifer M F Wan, School of Biological Sciences
Liu Chen	BSc(4)	1	Gastric Cancer Map An integrative resource for human gastric cancer	Dr Jiangwen Zhang, School of Biological Sciences
Lui Wai Yin	BSc(4)	3	Role of viral proteins BPLF1 and BLRF2 of Epstein-Barr virus in suppressing antiviral DNA sensing pathway	Prof Dong Yan Jin, School of Biomedical Sciences
Ma Wing Tung	BSc(4)	3	Exploring the signal transduction route in bacterial two-component system CusSR	Dr Aixin Yan, School of Biological Sciences



Man Ho Lai Hilary	BSc(4)	3	Reconstruction of bottom-water temperature using Mg/Ca ratio of ostracode shells	Dr Christelle A Not, Department of Earth Sciences
Ni Haozheng	BSc(4)	3	A New Indicator of Dependence Structure for Discrete-Valued Time Series	Dr Guodong Li, Department of Statistics & Actuarial Science
Park Hyungjun	BSc(4)	2	Investigation of Phage Profiles in the Gut Microbiota of Obese and Lean Individuals	Dr Gianni Panagiotou, School of Biological Sciences
Poh Wei Church	BSc(4)	2	Synthesis, Photophysics and Electrochemistry of Luminescent Organometallic	Prof Vivian W W Yam, Department of Chemistry
Qian Yikun	BSc(4)	2	An analysis of bootstrap aggregation methods in cancer research using gene expression data	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Qiu Yang	BSc(4)	3	Differential forms and De Rham Theory	Dr Zheng Hua, Department of Mathematics
Reuven Jonathan Avraham	BSc(4)	3	Developing a Structure-Activity Relationship for New Antibiotic Teixobactin	Dr Xuechen Li, Department of Chemistry
Saha Sukanya	BSc(4)	2	Investigating nesting limitations and preferences in Hong Kong ants	Dr Benoit Guenard, School of Biological Sciences
Saran Ravneet	BSc(4)	1	Development of DNA aptamer-bound magnetic microbeads with HRP-mimicking properties	Dr Julian A Tanner, School of Biomedical Sciences
Shukla Yash Sanjaykumar	BSc(4)	1	Development of an aptamer-mediated sandwich assay for the detection of Plasmodium falciparum lactate dehydrogenase	Dr Julian A Tanner, School of Biomedical Sciences
Sun Jiashuo	BSc(4)	2	Variable Selection and Inference for Nonparametric Logistic Regression	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Tsang Kenneth Chi Hoy	BSc(4)	3	Basic Operations on Differential Forms	Prof Wing Sum Cheung, Department of Mathematics
Wai Chi Nga	BSc(4)	3	Structure-Activity Relationship Investigation of Teixobactin	Dr Xuechen Li, Department of Chemistry
Wan Zhihan*	BSc(4)	2	Selective and efficient reduction of carbon dioxide (CO <sub>2</sub> ) on p-typed silicon/ tungsten oxide (W <sub>18</sub> O <sub>49</sub> ) nanowires	Dr Jinyao Tang, Department of Chemistry
Wang Jianian	BSc(4)	2	A Two-Stage Bootstrap Approach to Meta-Analysis	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Wang Liuwei	BSc(4)	1	Ecological impacts of agroforestry on ant communities in Hainan Island, Mainland China	Dr Benoit Guenard, School of Biological Sciences
Wang Shuyuan	BSc(4)	3	Molecular Cloning and Protein Expression of Goldfish Adiponectin	Prof Anderson O L Wong, School of Biological Sciences
Wong Dag	BSc(4)	3	Does PRDM14 interact with FOXM1 to orchestrate epigenetic regulation of cell proliferation in normal and cancer cells?	Dr Kwok Ming Yao, School of Biomedical Sciences
Wong Kin Long	BSc(4)	2	Metabolic Reconfiguration in Glycogen Synthase Gene (GYS1) knock Out Human Intestinal Cancer Cells - Effect on Apoptosis	Dr Nai Sum Wong, School of Biomedical Sciences
Yau Yu Yan	BSc(4)	3	Nitrate reductase activity in coral Symbiodinium clades	Dr David M Baker, School of Biological Sciences
Zeng Ji	BSc(4)	1	Generalizations of Schwarz lemma	Prof Ngai Ming Mok, Department of Mathematics
Zhang Yechi	BSc(4)	2	Star Formation in Central Giant Ellipsoidal Galaxies of Clusters	Dr Jeremy J L Lim, Department of Physics
Zhou Ruiyi	BSc(4)	2	Open Quantum System Calculation: Simulation of Current-Induced Dissociation of Water Molecule on Metal Surface	Prof Guanhua Chen, Department of Chemistry

Zhu Zhiyuan	BSc(4)	2	Development of A New Lysosome-targeting Fluorescent Probe for Hypochlorous Acid	Prof Dan Yang, Department of Chemistry
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## **2014-15**

<b>Name</b>	<b>Curriculum</b>	<b>Year</b>	<b>Project Title</b>	<b>Supervisor</b>
Chen Jiawei	BSc(4)	3	Silver Halide Sensitized Graphene Photodetector	Dr Jinyao Tang, Department of Chemistry
Cheung Hey Pui	BSc(4)	2	Synthesis of Daptomycin Analogues - the Next Generation Antibiotics	Dr Xuechen Li, Department of Chemistry
Chung King Lun	BSc(4)	3	Synthesis of alkyne-tagged photoreactive amino acid that enables to investigate protein-protein interactions	Dr Xiang Li, Department of Chemistry
Dai Wei	BSc(4)	3	Fabrication of Si/TiO <sub>2</sub> Nanomotor	Dr Jinyao Tang, Department of Chemistry
Duraisamy Karthi	BSc(4)	3	Heterodimerization in G Protein-coupled receptors family by BRET analysis: Human Secretin Receptor and Acetylcholine receptors	Prof Billy K C Chow, School of Biological Sciences
Fang Boli	BSc(4)	1	Analysis of quantum transport process under voltage through computational methods	Prof Jian Wang, Department of Physics
Feng Qingyuan	BSc(4)	3	Finding the best models in Analyzing and Predicting Tourism Data	Dr Guodong Li, Department of Statistics & Actuarial Science
Fong Pak Ming	BSc(4)	2	Developing chemical reporters to profile modification sites of lysine long chain fatty acylation	Dr Xiang Li, Department of Chemistry
Fung Ho Ching	BSc(4)	2	Intramolecular [4+3] Cycloaddition of Aziridiny Enolsilane	Prof Pauline Chiu, Department of Chemistry
Ho Pak Ching	BSc(4)	2	Type II collagen degradation and the development of long bones	Prof Danny Chan, School of Biomedical Sciences
Hsu Sze Ching	BSc(4)	2	Investigations on protein interactors of an Arabidopsis thaliana acyl-CoA-binding protein (AtACBP)	Prof Mee-Len Chye, School of Biological Sciences
Hui Lok Chung	BSc(4)	3	Functional Roles of hnRNPA1 in mouse developing spinal cord	Dr You-Qiang Song, School of Biomedical Sciences
Lam Shiu Yeung	BSc(4)	3	Immobilization of recombinant Chondroitinase ABC I for improved stability and efficacy in glial scar treatment	Prof Daisy K Y Shum, School of Biomedical Sciences
Lee Kyung Hwan	BSc(4)	3	Validation of Hox gene Expression in Developing Mouse Notochord	Prof Kathryn S E Cheah, School of Biomedical Sciences
Lei Kuan Cheok	BSc(4)	3	Isolation and identification of Cellulose-degrading and Lignin-degrading Microbes in intestinal flora of camel and other sources	Prof Frederick C C Leung, School of Biological Sciences
Leung Kai Chuk	BSc(4)	3	Measurement of gold nanoparticles that are below the detection limit of single-particle ICPMS	Dr Wing Tat Chan, Department of Chemistry
Leung On Wah	BSc(4)	3	Lgr6 Expression in Synovial Joint Development	Prof Danny Chan, School of Biomedical Sciences
Leung Yu Yan	BSc(4)	3	Exploring the Stable Isotope Signatures of Birds in Hong Kong using their feathers	Dr Caroline E Dingle, Department of Earth Sciences & Dr David M Baker, School of Biological Sciences

Li Hung Wa	BSc(4)	2	Studies on Intramolecular [4+3] cycloadditions of epoxy enolsilanes	Prof Pauline Chiu, Department of Chemistry
Li Jiayi	BSc(4)	2	The Generalized Factorial Function and its Properties	Prof Kai Man Tsang, Department of Mathematics
Li Shuangning	BSc(ActuarSc) (4)	2	A regularization-based hypothesis test for linear regression models and related applications	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Li Shuangping	BSc(ActuarSc) (4)	2	The hyperbolic metric and geometric function theory	Prof Tuen Wai Ng, Department of Mathematics
Lo Shun Yu	BSc(3)	3	The Anti-Cancer Effect of Phellinus linteus on Human Leukemic HL-60 Cells	Dr Jennifer M F Wan, School of Biological Sciences
Lou Shing Bong	BSc(4)	2	A Practical Method for Generation of Unstabilized Diazo Compounds for Organic Reactions	Prof Chi Ming Che, Department of Chemistry
Lui Cheuk Woon	BSc(4)	3	Characterization of the flavonoid hydroxylation activities of a cytochrome P450 protein in Sorghum bicolor	Dr Clive S C Lo, School of Biological Sciences
Ma Wai Sum	BSc(4)	2	Shedding light on bird origins: using lasers to improve our anatomical knowledge in the closest avian relatives	Dr Michael Pittman, Department of Earth Sciences
Mak Ka Ho Jason	BSc(4)	3	Study of adenine nucleotide metabolizing enzymes expression in cultured cell lines	Dr Nai Sum Wong, School of Biomedical Sciences
Man Jason Yin Hei	BSc(4)	2	Towards the Self-Assembly of [2]Catenanes from Octahedral Metal Templates with Reversible Imine Ring-Closing Reactions	Dr Ho Yu Au-Yeung, Department of Chemistry
Man Pui Hei Marcus*	BSc(4)	1	Identification of novel cGAMP phosphodiesterases in cGAS-STING pathway	Prof Dong-Yan Jin, School of Biomedical Sciences
Man Siu Hang	BSc(4)	2	Synthesis of Molybdenum Disulfide Monolayer as Potent Thermoelectric Material	Dr Jinyao Tang, Department of Chemistry
Rabbani Mashiat	BSc(4)	2	The function of $\beta$ -catenin in hindbrain neurogenesis	Prof Mai Har Shum, School of Biomedical Sciences
Seow Jia Yin	BSc(4)	3	Conservation Status Assessment of Selected Hong Kong Marine Fishes According to IUCN Red List Categories and Criteria	Prof Yvonne J Sadovy, School of Biological Sciences
Shen Ji	BSc(4)	3	Analyzing PM2.5 in Hong Kong from a statistical aspect	Prof Jeff J F Yao, Department of Statistics & Actuarial Science
Siu Wing Hin Stanford	BSc(4)	2	Investigation of Kif5b-driven Anterograde Transport: Optimizing Western Blot and Confirming the Specificity of a Home-made Kif5b Antibody	Prof Jiandong Huang, School of Biomedical Sciences
Tse Yuen Cheong	BSc(4)	2	Synthesis and Self-Assembly Studies of Phenanthroline-Based Building Blocks for [2]Catenane Construction	Dr Ho Yu Au-Yeung, Department of Chemistry
Tseung Chi Hung	BSc(4)	3	The individual and combined effect of mycotoxins on modulation of mucus mRNA expression on human intestinal epithelial cells	Dr Hani S El-Nezamy, School of Biological Sciences
Wang Di	BSc(ActuarSc) (3)	2	Valuing equity-linked insurance products and options in a Markov regime-switching model	Prof Hailiang Yang, Department of Statistics & Actuarial Science
Wei Jihan	BSc(4)	3	Methods of Making Bootstrap Predictive Inference for Time Series, with application to PM 2.5 data	Prof Stephen M S Lee, Department of Statistics & Actuarial Science

Wong Ka Kiu	BSc(4)	2	The effect of habitat-dependent ambient noise on Red-whiskered Bulbul song	Dr Caroline E Dingle, Department of Earth Sciences
Wong Thomas Hin Fung	BSc(4)	2	Detection of Epstein-Barr Virus by CRISPR/Cas9 Technology	Prof Dong-Yan Jin, School of Biomedical Sciences
Wong Tsz Lam Matthew	BSc(4)	3	The effect of an enzyme-specific inhibitor on Arabidopsis seedling development	Prof Mee-Len Chye, School of Biological Sciences
Xu Yujie	BSc(4)	3	Explicit P-adic Modular Forms from Mock Modular Forms	Dr Benjamin R Kane, Department of Mathematics
Yan Junran*	BSc(4)	1	Interaction of AtPAP2 and AtPAP9 with ATP Synthase Beta-Subunits	Dr Wallace B L Lim, School of Biological Sciences
Yang Zhou	BSc(4)	2	Chandra observation of the magnetar SGR 0501+4516	Dr Stephen C Y Ng, Department of Physics
Yau Yu Fung	BSc(4)	3	Modulation of mucin mRNA expression upon bacterial exposure in human intestinal cells and the protective effects of probiotic <i>Escherichia coli</i> Nissle 1917	Dr Hani S El-Nezamy, School of Biological Sciences
Ye Xiyun	BSc(4)	1	Synthesis of Daptomycin Analogs based on the Total Synthesis of Daptomycin	Dr Xuechen Li, Department of Chemistry
Yeung Kar Fu	BSc(4)	2	Tail index regression for severity of terrorist events	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Ying Luk Hin	BSc(4)	3	To confirm the specificity of the home-made KIF5B antibody and to investigate the interaction of KIF5B with CLH in adult mouse cortex	Prof Jiandong Huang, School of Biomedical Sciences
Yue Kun	BSc(4)	2	Construction of confidence set for relative risk region	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Zhang Yue	BSc(4)	3	Development of Latent Fingerprint by Silver-Gold Alloy Nanoparticles	Dr Kwan Ming Ng, Department of Chemistry
Zhang Zhiqian	BSc(4)	2	Eradicating Latent Epstein-Barr Virus Infection by CRISPR/Cas9 Mediated EBNA1 Knockout as a Potential Treatment of Nasopharyngeal Carcinoma	Prof Dong-Yan Jin, School of Biomedical Sciences
Zhao Jingyu	BSc(ActuarSc) (4)	2	Kelly Optimal Portfolio and Tangency Portfolio Estimation using GPQ-based Two-step Approaches	Dr Philip L H Yu, Department of Statistics & Actuarial Science

### **2013-14**

<b>Name</b>	<b>Curriculum</b>	<b>Year</b>	<b>Project Title</b>	<b>Supervisor</b>
Cao Haoyang	BSc(3)	2	Computation of Channel Capacity With a Recent Algorithm	Dr Guangyue Han, Department of Mathematics
Chan Kin Ho	BSc(3)	2	Molecular Mechanism of Regulation of mRNA Stability by CHOP 3'UTR	Dr Nai Sum Wong, Department of Biochemistry
Chen Cuncheng	BSc(3)	2	Studies of interaction effects in Bose-Einstein condensate of dilute gases	Dr Shizhong Zhang, Department of Physics
Cheng Yu Hong	BSc(3)	2	Investigation of the binding site for fangchinoline by photoaffinity labeling	Prof Pauline Chiu, Department of Chemistry
Cheung Tin Lai	BSc(3)	2	hnRNP A1 regulates transcription factors in heart development	Dr You Qiang Song, Department of Biochemistry

Fan Ruolin	BSc(4)	2	Examining the Knockdown Effects of Coxsackievirus and Adenovirus Receptor on ZO-1 and JAM-C in Germ Cells	Dr Wing Yee Lui, School of Biological Sciences
Fung Cheuk Lai	BSc(3)	2	Mechanism of Suppression of Interferon Production by Middle East Respiratory Syndrome Coronavirus M Protein	Prof Dong Yan Jin, Department of Biochemistry
Fung Ka Ching	BSc(3)	2	Studies of the improved protecting group-free synthetic route of substituted BINOL phosphoric acid	Prof Pauline Chiu, Department of Chemistry
Guo Fengyi	BSc(4)	2	How does urbanization affect communication of spotted doves in Hong Kong?	Dr Caroline Dingle, School of Biological Sciences & Dr Timothy Bonebrake, Department of Earth Sciences
Halim Henry	BSc(3)	2	Catalytic conversion of Acetylene to polycyclic aromatic hydrocarbons over particles of Silicon Carbide	Prof Allan S C Cheung, Department of Chemistry
Massan Ayon Ahmed	BSc(4)	2	A metagenomic approach to study the microbial ecology of the gut of Giant Panda ( <i>Ailuropoda melanoleuca</i> )	Prof Frederick C C Leung, School of Biological Sciences
Ho Shuk Nga	BSc(3)	2	Production and characterization of recombinant chondroitinase ABC subtypes for use in scar treatment	Prof Daisy K Y Shum, Department of Biochemistry
Hu Chenchen*	BSc(3)	2	Poisson Regression Analysis of Risk Exposures in Civil Aviation Based on GLM and MCMC Methods	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Husain Abdullah	BSc(4)	2	Identification of G Protein-Coupled Receptors interacting with human Secretin Receptor in in vitro conditions	Prof Billy K C Chow, School of Biological Sciences
Kong Oi Yin	BSc(4)	2	Characterization of the effects of resveratrol on hepatitis B virus transcription	Prof Dong Yan Jin, Department of Biochemistry
Lau Lok Yee	BSc(3)	2	Mucus trail-following behaviour in Echinolittorina snails – a strategy for mate-searching	Prof Gray A Williams, School of Biological Sciences
Lee Wan-yi	BSc(4)	2	Effect Ocean Acidification on Shell Selection of Hermit Crab <i>Diogenes spinifrons</i>	Prof Gray A Williams, School of Biological Sciences
Lee Yuen Man	BSc(4)	2	Differences in the expression level of PDZD2 in INS-1E cells incubated with different glucose levels	Dr Kwok Ming Yao, Department of Biochemistry
Li Wenfei	BSc(4)	2	Extending the Substrate Scope of Intramolecular (4+3) Cycloaddition between Pyrrole and Enolsilanes	Prof Pauline Chiu, Department of Chemistry
Liu Shengxuan	BSc(4)	1	Computer Simulation of Molecular Motor	Prof Guanhua Chen, Department of Chemistry
Liu Tianyu	BSc(4)	1	Detection Of G6Pase In Different Cancer Cell Lines	Dr Nai Sum Wong, Department of Biochemistry
Liu Yangdongling	BSc(4)	2	Synthesis, Characterization and Photophysical Study of Alkynylplatinum(II) Phosphine Complexes	Prof Vivian W W Yam, Department of Chemistry
Luo Di*	BSc(4)	2	The Study of the Perfectly Matched Layer in Quantum Transport Calculation	Prof Jian Wang, Department of Physics
Mao Chenyu	BSc(3)	2	Managing Risk of Equity-linked Insurance Products	Prof Hailiang, Department of Statistics & Actuarial Science
Mau King Hang*	BSc(3)	2	The Role of Foxi1 Transcription Factor on Co-regulation of Irx3/5 in Mammalian Inner Ear Development	Prof Mai Har Shum, Department of Biochemistry
Ng John Joson Quimpo	BSc(4)	1	Effect of gold complexes on accumulation of ubiquitinated proteins in human cervical epithelial cancer cells	Prof Chi Ming Che, Department of Chemistry

Pan Xuetan	BSc(4)	2	Modeling of Photochemical Smog Formation In Hong Kong	Dr Shizhong Zhang, Department of Physics
Sze-to Shek Chung	BSc(3)	2	Polyphosphate binding domain (PPBD) expression, purification and characterization	Dr Julian A Tanner, Department of Biochemistry
Wai Hoi Yip	BSc(3)	2	Characterization of copper resistance bacteria in surface sediment of Kwun Tong typhoon shelter	Prof Frederick C C Leung, School of Biological Sciences
Wang Laixi	BSc(3)	2	Hybrid confidence region based on a combination of frequentist and Bayesian methods	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Wang Qinan	BSc(4)	2	X-ray Study of the Frying Pan Nebula	Dr Stephen C Y Ng, Department of Physics
Wang Zhongmin*	BSc(4)	2	Determining the biological function of Epstein-Barr virus BART microRNAs by use of CRISPR/Cas9 technology	Prof Dong Yan Jin, Department of Biochemistry
Wen Boya	BSc(4)	2	Hyperbolic Geometry and its Visualization	Dr Yat Ming Chan, Department of Mathematics
Wong Wai Chung	BSc(3)	2	Development of DNA aptamers for diagnostics	Dr Julian A Tanner, Department of Biochemistry
Xu Qingfeng	BSc(4)	2	Ricardian Equivalence Hypothesis Revisited: A Vector Error-correction Approach	Dr Gilbert C S Lui, Department of Statistics & Actuarial Science
Zhang Qiushui	BSc(4)	2	Data analysis of microRNA and Glioblastoma multiforme genome with Roleswitch in R/Bioconductor	Dr Jiangwen Zhang, School of Biological Sciences
Zhang Ruixian	BSc(4)	2	Characterization of a novel posttranslational modification on histone	Dr Xiang Li, Department of Chemistry
Zhang Yongquan	BSc(4)	2	Smale's Mean Value Conjecture and Finite Blaschke Products	Dr Tuen Wai Ng, Department of Mathematics
Zhang Zhe	BSc(4)	2	Construction of mutated Kif5b fragments and detection of their interactions with NMDA receptors	Dr Jiandong Huang, Department of Biochemistry
Zhao Dawei	BSc(4)	2	Estimation of the future behavior of online shopping customers based on recommendation system model	Prof Stephen M S Lee, Department of Statistics & Actuarial Science
Zhao Qian	BSc(4)	2	Sirt5 regulates histone lysine glutarylation	Dr Xiang Li, Department of Chemistry

## 2012-13

Name	Curriculum	Year	Project Title	Supervisor
Chen Zhedong	BSc(3)	2	Zero-Truncated Binomial distribution and its application	Dr G Tian, Department of Statistics & Actuarial Science
Cheung Ka Wai Christine	BSc(3)	1	GABA production in MRS culture medium and skim milk by nonstarter Lactobacillus plantarum P31, an isolate from traditional Chinese pickle	Prof N P Shah, School of Biological Sciences
Chin Promise L	BSc(3)	2	Formation of polycyclic aromatic hydrocarbons from acetylene over Beta silicon carbide	Prof A S C Cheung, Department of Chemistry
Han Wenbo	BSc(3)	1	Synthesis and modification of a building block of daptomycin	Dr X C Li, Department of Chemistry
Ho Samuel Xi Wei	BSc(4)	1	Location of genes related to anthocyanin production and root morphology in Arabidopsis under N-free environment	Dr C S C Lo, School of Biological Sciences
Lam Shuk Tak	BSc(3)	2	Potential of Polysaccharides derived from red seaweed as prebiotics	Prof N P Shah, School of Biological Sciences

Lam Tsz Fung	BSc(3)	2	Investigation of the role of PAX6 in regulation of BACE2 in Alzheimer's disease Pathway	Dr Y Q Song, Department of Biochemistry
Li Yan Yan	BSc(3)	2	Interaction between probiotics and dietary polyphenols	Dr M Wang, School of Biological Sciences
Luk Chak Hon*#	BSc(3)	2	Characterization of the signal binding and transduction mutants in the CusRS copper and silver sensing two-component system and its implications in heavy metal resistance in Escherichia coli	Dr A Yan, School of Biological Sciences
Luk Tin Chi Steve	BSc(3)	2	Construction and characterization of ER- and lysosomal-localized genetically encoded Ca <sup>2+</sup> sensors	Dr J B Yue, Department of Physiology
Ma Kin Fai	BSc(3)	2	The oncogenic potential of FoxM1 isoform: FoxM1c	Dr K M Yao, Department of Biochemistry
Ma Tsz Shan	BSc(3)	2	Construction of Bispecific Monoclonal Antibody Targeting Toxin A and Toxin B of Clostridium difficile	Dr J D Huang, Department of Biochemistry
Nanayakkara Vinethri Isurangi	BSc(3)	1	Influence of Tea Catechins On Probiotic and Yogurt Starter Bacteria	Prof N P Shah, School of Biological Sciences
Ng Ho Yin	BSc(3)	2	16s rDNC partial gene sequencing for bacteria A14 from Panda fecal swab	Prof F C C Leung, School of Biological Sciences
Ng Kwok Chung Joseph	BSc(3)	1	Using Porphyrin Dimer as an Organic Dye in Solar Cells	Prof C M Che, Department of Chemistry
Poon Wing Lam	BSc(3)	2	Effects of mycotoxins (DON & ZEA) exposure and probiotic supplementation on intestinal tight junctions mRNA expressions in Balb/c mice	Dr H El-Nezami, School of Biological Sciences
Shin Caren Pearl	BSc(3)	2	How's it going? Butterfly behavior in Hong Kong urban parks	Dr T C Bonebrake, School of Biological Sciences
Song Hanyu	BSc(ActuarSc)(3)	2	A Study on Evolving Market Efficiency of Hong Kong Stock Market: 1970-2013	Dr K P Wat, Department of Statistics & Actuarial Science
Sun Chenyue	BSc(4)	1	Spot out the Mainstay – SAR Study: Alanine Scanning of Daptomycin	Dr X C Li, Department of Chemistry
Tang Sze Lok Marco	BSc(3)	2	Role of CREB-regulated transcription coactivators (CRTCs) on transcription activation of HBV-pX promoter	Dr D Y Jin, Department of Biochemistry
Tse Lap Hang	BSc(4)	1	Finding the Anthocyanin pigmentation related genes in Arabidopsis	Dr C S C Lo, School of Biological Sciences
Tse Tze Kei	BSc(3)	2	Review of the Stephen Hui Geological Museum fossil collection and vertebrate fossils from Hong Kong	Dr M Pittman, Department of Earth Sciences
Wong Nok Hei Mickey*	BSc(4)	1	Establishing a molecular platform for the construction of Epstein-Barr virus molecular clone	Dr Y J Dong, Department of Biochemistry
Wong Tsz Tsun*	BSc(3)	2	Searching for X-Ray Synchrotron Emission and Particle Acceleration in Supernova Remnant G346.6-0.2	Dr S C Y Ng, Department of Physics
Wu Haoyun	BSc(3)	1	Identification of Representatives Using Data Depth Based on Within-Triplet Distances Test	Prof S M S Lee, Department of Statistics & Actuarial Science
Wu Liwen	BSc(3)	1	Elucidation of the function of Bre1, an E3 ubiquitin ligase in chromosome segregation	Dr K W Y Yuen, School of Biological Sciences
Xiong Lingyun	BSc(4)	1	Role of miR-142-3p in HTLV-1 infected adult T-cell leukemia	Dr K H Kok, Department of Biochemistry

Yang Fan	BSc(3)	1	Factorial Function for Subsets of the Natural Numbers	Prof K M Tsang, Department of Mathematics
Yang Liu	BSc(3)	1	Establish an ideal world without wars-predicting and managing wars by ensemble learning	Prof S M S Lee, Department of Statistics & Actuarial Science
Yeung Stephanie Wing Ki	BSc(3)	2	Optical-optical Double Resonance Spectroscopy of Scandium Monoxide	Prof A S C Cheung, Department of Chemistry
Zhang Hongyuan	BSc(3)	1	Study of expression of key metabolic enzymes in cultured cancer cells under hypoxia	Dr N S Wong, Department of Biochemistry
Zhang Jinxiao	BSc(3)	1	A dot-blot assay as the first step for the rapid diagnosis of malaria	Dr J A Tanner, Department of Biochemistry
Zhou Jiayuan	BSc(3)	1	Latin Squares and Mutually Orthogonal Latin Squares	Dr K H Law, Department of Mathematics
Zhou Yi	BSc(3)	1	Prediction of Oscar winners using CART	Prof S M S Lee, Department of Statistics & Actuarial Science

## 2011-12

Name	Curriculum	Year	Project Title	Supervisor
Chan Hau Sun	BSc(3)	1	The asymmetric synthesis of 6-7-6 polycyclic core of Cortistatin A by a Transannular (4+3) cycloaddition	Prof P Chiu , Department of Chemistry
Chan Sing Fai	BSc(3)	2	Natural contaminants in Chinese herbal medicine	Dr H El-Nezami, School of Biological Sciences
Chen Zhihua	BSc(3)	1	Laser spectroscopy of transitional metal dimers: analysis of the electronic transition systems	Prof A S C Cheung, Department of Chemistry
Dai Jing	BSc(3)	1	Fixed point theory in metric space	Prof W S Cheung, Department of Mathematics
Dong Yichun	BSc(3)	1	Infinite sets	Dr Y M Chan, Department of Mathematics
Fok Hong Ting	BSc(3)	2	Edge state in monolayer 2-D materials	Dr W Yao, Department of Physics
Jiang Bo	BSc(3)	1	Modeling economic default times for recovery rate estimation and bond pricing	Dr W K Ching, Department of Mathematics
Kulasekara Dulani Anjana*	BSc(3)	1	Elucidating the effect of CSR-1 RNA interference pathway in accurate chromosome segregation	Dr K W Y Yuen, School of Biological Sciences
Lee Chung Yan Joan	BSc(3)	2	Effect of hydrogen peroxide on cell cycle of hep G2 cells and LS 174T cells	Dr J C Y Lee, School of Biological Sciences
Lee Jonghan Peter*#	BSc(3)	1	Chemical synthesis of peptidomimetics: synthesis of a hydrocarbon stapled Cdt1 peptides through ruthenium (II) catalyzed ring closing metathesis	Dr X C Li, Department of Chemistry
Leung Kin Sum	BSc(3)	2	The effect of hydrogen peroxide on the cell cycle of jurkat cells	Dr J C Y Lee, School of Biological Sciences
Li Wing Yeung	BSc(3)	2	A market survey of food contaminant in foods in Hong Kong - deoxynivalenol	Dr H El-Nezami, School of Biological Sciences
Li Yu	BSc(3)	1	Smale's and Sendov's conjectures for polynomials	Dr T W Ng, Department of Mathematics
Liang Ruochen	BSc(3)	1	Minimum merging in undirected graphs	Dr G Han, Department of Mathematics
Luo Jie	BSc(3)	1	Computational investigation of electron transport	Prof J Wang, Department of Physics
Ma Yik Ki	BSc(3)	2	The radio magnetosphere of chemically peculiar Bp/Ap stars	Dr J Lim, Department of Physics



On Sai Wun	BSc(3)	2	Functional and evolutionary insights into secretin receptor superfamily from studies of cephalochordate	Prof B K C Chow, School of Biological Sciences
Pan Wenqi	BSc(3)	1	Roles of Sufu in controlling mouse hindbrain ventral neural tube development	Dr M H Sham, Department of Biochemistry
Shah Akansha Mahavir*	BSc(3)	1	The role of kinesin motor protein (KIF5B) in maintaining epithelial cell polarity	Dr J D Huang, Department of Biochemistry
Tsui Kong Tai	BSc(3)	2	Theory behind topological insulator classification	Prof S Q Shen, Department of Physics
Wang Jin	BSc(ActuarSc)(3)	1	Valuing equity linked insurance using the discounted density approach	Prof H Yang, Department of Statistics and Actuarial Science
Wang Zeren Simon	BSc(3)	2	Anomalous stokes scattering by an atomic ensemble	Dr W Yao, Department of Physics
Wong Po Yu	BSc(3)	2	The effects of cadmium, sodium selenite and arsenite on GFP expression	Dr N S Wong, Department of Biochemistry
Xu Yao*	BSc(3)	1	Synthesizing Byetta® through salicylaldehyde induced serine/threonine ligation	Dr X C Li, Department of Chemistry
Yu Kexin	BSc(3)	1	Modeling and predicting the popularity of social media content	Prof S M S Lee, Department of Statistics and Actuarial Science
Zeng Ruochen	BSc(3)	2	Tests for homogeneity in beta mixture models	Dr T S T Wong, Department of Statistics and Actuarial Science
Zhang Qichen	BSc(3)	1	Characterizing metallome in living systems: bifunctional protein tags for SDS-PAGE and ICP-MS strategies	Prof H Sun, Department of Chemistry
Zhang Yumin	BSc(3)	1	Group theory and symmetries of platonic solids	Dr Y M Chan, Department of Mathematics

**2010-11**

Name	Curriculum	Year	Project Title	Supervisor
Bao Chenfeng	BSc(3)	1	Simulation of Quantum Hall Effect	Prof J Wang, Department of Physics
Bui Huyen Trang	BSc(3)	2	Partial Genome Sequencing and Phylogenetic Analysis of 4 Hong Kong Newcastle Disease Virus Isolates	Prof F C Leung, School of Biological Sciences
Chao Ailun	BSc(3)	1	Convergent synthesis of $\beta$ -amyloid with chemical ligation	Dr X Li, Department of Chemistry
Choi Chek Hin	BSc(ActuarSc)(3)	2	Regime switching model in Finance	Prof H Yang, Department of Statistics and Acturial Science
Chung Ming Long	BSc(3)	2	Molecular cloning of adiponectin and structural analysis of adiponectin receptor in fish model	Prof A O L Wong, School of Biological Sciences
Fu Chuyuan	BSc(3)	1	Linear Geometry in Euclidean 4-space	Dr Y K Lau, Department of Mathematics
Guan Xinyu	BSc(3)	1	Synthesis of terpyridine derivatives from 2, 6-bis (2'-pyridyl)-4-pyridone for photosensitive polymers	Prof W K Chan, Department of Chemistry
Ho Sze Hang	BSc(3)	2	Investigating the role of Fgf signaling in the regulation of Sox9 expression in the developing chick neural tube	Dr M Cheung, Department of Biochemistry
Hung Oi Ying	BSc(3)	1	Investigation of the impact of post-translational modifications on Sox9 transcriptional activity	Dr M Cheung, Department of Biochemistry
Kala Shashwati*#	BSc(3)	2	Elucidation of PAMAM dendrimers as nanovectors for efficient siRNA delivery and potent gene silencing	Dr A S Wong, School of Biological Sciences
Kew Chun	BSc(3)	2	Molecular cloning, tissue distribution and functional characterization of membrane estrogen receptor GPER1	Prof A O L Wong, School of Biological Sciences
Lai Tsz Pui*	BSc(3)	2	X-ray Crystallographic Study of Metal-Protein Interactions in Hen-Egg White Lysozyme Crystals	Dr S S Y Chui, Department of Chemistry
Lee Chi Hang*	BSc(3)	2	Targeting cargo localization by kinesin-1 using rapamycin-FKBP-FRB system	Dr J D Huang, Department of Biochemistry
Li Fangzhou	BSc(ActuarSc)(3)	1	A study on Google PageRank Algorithm - In association with Markov chain theory and its application on small network	Dr J J F Yao, Department of Statistics and Acturial Science
Li Tin Lok	BSc(3)	1	Studies in the synthesis of substituted BINOL Phosphoric Acids	Dr P Chiu, Department of Chemistry
Li Yu Ting Stephen	BSc(3)	1	Molecular Cloning and Characterization of Claudin-11 in Oryzias melastigma	Dr W Y Lui, School of Biological Sciences
Mok Yi Yun	BSc(3)	2	Photocatalytic Properties of Zinc Oxide Nanostructures	Dr A B Djurišić, Department of Physics
Mung Kwan Long	BSc(3)	2	Characterisation of hypoxic stress response in Hela cells	Dr N S Wong, Department of Biochemistry
Parikh Disha Ragnesh	BSc(3)	1	Sequencing of Phylogenetic Analysis of 3A-B non-structural protein genes from Foot and Mouth Disease Virus Hong Kong Isolate 408	Prof F C Leung, School of Biological Sciences
Shen Yuanyuan*	BSc(3)	1	Is Cao the author? An application of statistics to redology	Prof S M S Lee, Department of Statistics and Actuarial Science
Tang Yunfan	BSc(ActuarSc)(3)	1	Polynomial approximation to option prices under regime switching	Prof H Yang, Department of Statistics and Acturial Science

Wong Che Fai Alex	BSc(3)	2	A new Gene Marker for Anaerobic Ammonium Oxidizing Bacteria	Dr J D Gu, School of Biological Sciences
Wong Wang William	BSc(3)	2	The study of intracellular transport mechanism powered by kinesin, KIF5B in MDCK Cell	Dr J D Huang, Department of Biochemistry
Wong Yat Sing	BSc(3)	2	Laser induced fluorescence spectroscopy of Platinum Boride	Prof A S C Cheung, Department of Chemistry
Wu Qihang	BSc(3)	1	Multiphase Deformation of the Chinese Altai: Implications for Tectonic Evolution of the Central Asian Orogenic Belt	Prof M Sun, Department of Earth Science
Wu Xiyuan*	BSc(3)	1	Analysis: a possible revision on China one-child policy	Prof S M S Lee, Department of Statistics and Actuarial Science
Xu Wanting	BSc(3)	1	A Hierarchical Model with Detection Limits for Regression Analyses of Antibody Response to Vaccine	Dr K F Lam, Department of Statistics and Actuarial Science
Yu Chau Lam*	BSc(3)	2	Bose Einstein Condensate and its Quantum Phase Transition	Prof F Zhang, Department of Physics

### **2009-10**

<b>Name</b>	<b>Curriculum</b>	<b>Year</b>	<b>Project Title</b>	<b>Supervisor</b>
Au Tung Kin	BSc(3)	1	Studying the Attenuation Length of Linear alkyl benzene (LAB) for Calibration of Experiments in Underground Laboratory	Dr J C S Pun, Department of Physics
Chan Chiu Yin	BSc(3)	2	Coastal Carbonate System Dynamics under Changing Climate: A Hong Kong Perspective	Dr T Vengatesen, School of Biological Sciences
Choi Fung Sing	BSc(3)	1	Reconstruction of Tracks of Muons in Aberdeen Tunnel Experiment	Dr J C S Pun, Department of Physics
Chong Tsz Yat Ian*#	BSc(3)	2	FMDV Outbreak: Sequence Analysis of a New Strain	Professor F C Leung, School of Biological Sciences
Chu Tsz Long	BSc(3)	2	Studying the Early Senescence Progeroid Cells under Low Oxidative Stress	Dr Z Zhou, Department of Biochemistry
Fu Zhixuan	BSc(3)	2	Poverty and Inequality in Hong Kong	Professor T W K Fung, Department of Statistics & Actuarial Sciences
He Peng	BSc(3)	1	Determination of the Cleavage Sites on ADAM9 by MT1-MMP	Dr Z Zhou, Department of Biochemistry
Hu Wenqi	BSc(ActuarSc)(3)	2	Behavioral Optimal Insurance Design with Risk Loading	Professor H L Yang, Department of Statistics & Actuarial Sciences
Lam So Ngo	BSc(3)	2	The Role of Estrogen-related Receptor in Ovarian Carcinogenesis	Dr A S T Wong, School of Biological Sciences
Leung Chun Kwan	BSc(3)	1	Testing the Neutron Detector Event Reconstruction Program in the Aberdeen Tunnel Experiment	Dr J C S Pun, Department of Physics
Li Jie*	BSc(ActuarSc)(3)	2	Analyzing Daily Gold Prices with ARMAX-GARCH Models	Dr G D Li, Department of Statistics & Actuarial Sciences
Liu Fangzhou	BSc(3)	2	Photocatalytic Properties and Native Defects of Zinc Oxide Nanostructures	Dr A B Djurišić, Department of Physics
Liu Junyan	BSc(3)	2	Genetic Engineering of the E.coli Global Transcription Factor FNR to Promote and Stabilize Its Dimerization	Dr A Yan, School of Biological Sciences

Lo Ho Yee	BSc(3)	1	Identification of Glucagon (GCG), Glucagon-like Peptides (GLP-1, GLP-2) and their Receptors in Inshore Hagfish (Eptatretus burger)	Professor B K C Chow, School of Biological Sciences
Ng Kwok Hin*	BSc(3)	2	Dimerization of Mouse Secretin and Vasopressin Receptors	Professor B K C Chow, School of Biological Sciences
Qi Wendi	BSc(3)	2	Simplest Model for Topological Insulator	Professor S Q Shen, Department of Physics
Sang Jiajun	BSc(3)	2	Estimate the Largest Eigenvalue of a Non-negative Matrix	Dr J T Chan, Department of Mathematics
Shi Yuan	BSc(3)	1	Combined Density-Functional and Electrodynamical Scheme for Time Domain Electronic Device Simulation	Professor G H Chen, Department of Chemistry
Sun Ka Hei Murphy	BSc(3)	1	Proteolytic Cleavage of DLL3 by A Disintegrin and Metalloprotease (ADAMS) Family	Dr Z Zhou, Department of Biochemistry
Tam Chin Pang	BSc(3)	2	Central Osmoregulatory Regions Mediating the Action of Secretin on Water Homeostasis during Cellular Dehydration	Professor B K C Chow, School of Biological Sciences
Tian You	BSc(ActuarSc)(3)	1	Applications of Likelihood Ratio Test to Preference Detection	Professor S M S Lee, Department of Statistics & Actuarial Sciences
Tsang Chi Ching	BSc(3)	1	Closing the Gaps of the Scaffolds of Burkholderia caribensis MBA4	Dr J S H Tsang, School of Biological Sciences
Wong Chun Lung	BSc(3)	2	Exploring the Developmental Potential of induced Pluripotent Stem (iPs) Cells in the Developing Chick Embryo	Dr M C H Cheung, Department of Biochemistry
Wong Ho Yin Bosco	BSc(3)	2	Development of a Tool to Study the Virulence of Samonella Typhi	Dr J D Huang, Department of Biochemistry
Yip Ka Ho Raymond*	BSc(3)	2	Studying the Role of Extracellular Matrix Niche of Stem Cells during Stem Cell Repopulation in Planarian	Dr D Chan, Department of Biochemistry
Zhang Jianqiao	BSc(3)	2	Computer Simulation of graphene-nanoribbon-based Electronic Devices	Professor G H Chen, Department of Chemistry
Zheng Yao*	BSc(ActuarSc)(3)	1	Health Care Costs of Five Types of Cancer for Elderly Americans: The Patient Perspective	Dr L F K Ng, Department of Statistics & Actuarial Sciences
Zhou Wanqing	BSc(3)	2	Development of SSR Markers for Rhodomyrtus tomentosa	Dr M Sun, School of Biological Sciences

## 2008-09

Name	Curriculum	Year	Project Title	Supervisor
Au Wing Man	BSc(3)	1	The Anti-inflammatory Effect of Danshen and Yun- zhi	Dr J M F Wan, School of Biological Sciences
Chan Ka Ho	BSc(3)	2	Studying the H I Radio Signal of the Sun and the Sky with HKU Small Radio telescope	Dr J C S Pun, Department of Physics
Chi Chengzhan	BSc(3)	2	Some Experiments with Volatility Modeling	Professor W K Li , Department of Statistics & Actuarial Sciences
Chu Chun Kit	BSc(3)	2	Sulfonylated Dipolarophiles in the Carbene Cyclization Cycloaddition Cascade Reaction	Dr P Chiu, Department of Chemistry
Dong Xiaouu	BSc(3)	2	Analysis of Functional Regions of Junctional Adhesion Molecule-A (JAM-A) Promoter	Dr W Y Lui, School of Biological Sciences

Fu Zhong Zheng	BSc(3)	1	The Physical Properties of the mixture of Polyethylene Glycol and Self-Assembling Peptide	Dr R G Ellis-Behnke, Department of Anatomy
Guo Cheng	BSc(ActuarSc)(3)	2	Regime-Switching Lognormal Model and Option Pricing	Professor H L Yang, Department of Statistics & Actuarial Sciences
Jiang Qinqin	BSc(3)	1	Expression of Hemagglutinin on the External Surface of a Live Salmonella Vaccine Vector	Dr J Huang, Department of Biochemistry
Lam Ho Yan	BSc(3)	1	Crude Extract and Active Traction of Artocarpus Heterophyllus as Antibiozoning Agent	Dr M Wang, School of Biological Sciences
Lam Pui Ying	BSc(3)	1	Function Characterization of Flavonoid Genes in Rice	Dr C S C Lo, School of Biological Sciences
Law Chun Hin	BSc(3)	2	Polymer supported N,N'-ditosylhydrazine in the synthesis of diazoacetates	Dr P H Toy, Department of Chemistry
Leung Yan Yu Christy*	BSc(3)	1	Studying the Night Sky Spectrum of Hong Kong	Dr J C S Pun, Department of Physics
Lo Kin Cheung	BSc(3)	2	Synthesis of Block Copolymers for Organic Photovoltaic Cells	Professor W K Chan, Department of Chemistry
Qi Yichen	BSc(3)	2	Shortest Superstring Problem	Dr W Zang, Department of Mathematics
Ren Yi	BSc(3)	2	Substrate Preference by Barnacle Larvae in CO <sub>2</sub> - Acidified Seawater	Dr T Vengatesen, School of Biological Sciences
So Hon Fai*	BSc(3)	2	Molecular Cloning and Functional Characterization of Pituitary Adenylate Cyclase-Activating Polypeptide Type 1 Receptor In Surgeon Acipenser Schrenckii	Professor B K C Chow, School of Biological Sciences
Song Mengqiong*	BSc(ActuarSc)(3)	2	Study of Hong Kong Mandatory Provident Fund Fees and Expenses	Professor T W K Fung, Department of Statistics & Actuarial Sciences
Sun Liang	BSc(3)	2	Building a Markov Chain Model for Default Risk in a Network of Sectors	Dr W K Ching, Department of Mathematics
To Kit Yan	BSc(3)	2	Characterization of the Nuclear Localization Signal of the Human p70 S6 kinase	Dr A S T Wong, School of Biological Sciences
Wang Yang	BSc(ActuarSc)(3)	2	The Digits of the Financial Crisis	Dr K C Cheung, Department of Statistics & Actuarial Sciences
Wu Mong Sin	BSc(3)	2	Wu MSC Plotting and Analysis of Survey Data from the Pos Selim Landslide	Professor A W Malone, Department of Earth Sciences
Zhong Xing Xin*	BSc(3)	1	Eigenface and its Application in Face Recognition	Dr N K Tsing, Department of Mathematics
Zhu Yuanyuan*	BSc(3)	2	Modeling for Rank Data with Ties	Dr P L H Yu, Department of Statistics & Actuarial Sciences

## 2007-08

Name	Curriculum	Year	Project Title	Supervisor
Chan Man Lok	BSc(3)	2	Secretin and cystic fibrosis transmembrane conductance regulator (CFTR) in kidney	Professor B K C Chow, School of Biological Sciences
Ip Chun Him	BSc(3)	2	Development of Carriers for Drug Delivery to Airways of a Rat Model of Lung Inflammation	Professor D K Y Shum, Department of Biochemistry
Kong Ka Yiu*	BSc(3)	1	Role of Yeast Peroxiredoxins Prx1p in Anti-oxidant Defense	Dr D Jin, Department of Biochemistry

Lam Yan Ting*	BSc(3)	2	Information and Entropy	Dr H F Chau, Department of Physics
Leung Yu Lut	BSc(3)	2	Synthesis, Photophysics and Electrochemistry of Luminescent Trinuclear Copper(I) Alkynyl Complexes With Carbazole Moieties	Professor V W W Yam, Department of Chemistry
Ma Wei	BSc(3)	2	Testing a method for labeling chromosomal coding DNA sequences (CDSs) with fluorescent protein genes in <i>E. coli</i>	Dr J D Huang, Department of Biochemistry
Ng Cheuk Kwong	BSc(3)	2	Study on Richardson-Lucy Deconvoluted Positron Annihilation Coincidence Doppler Broadening Spectra	Professor C D Beling, Department of Physics
Ning Jia	BSc(3)	2	Identification of <i>Campylobacter jejuni</i> in a local poultry farm with study of transmission route	Professor F C C Leung, School of Biological Sciences
Poon Ka Ming Gavin*#	BSc(3)	2	Junctional Adhesion Molecule-C, a cell junction molecule in the testis, is down-regulated by $TNF\alpha$ and $IFN-\gamma$	Professor W W M Lee, School of Biological Sciences
So Hon Fai*	BSc(3)	1	Molecular cloning of Pituitary Adenylate Cyclase-Activating Polypeptide Receptor in a phylogenetically ancient fish – Sturgeon	Professor B K C Chow, School of Biological Sciences
Wang Nuo	BSc(3)	1	The effect of oxidative stress on the activity of Gadd34 gene promoter in mammalian cell	Dr N S Wong, Department of Biochemistry
Wang Xiao	BSc(3)	2	Complete Sequence of plasmid pMP1 from the marine environmental <i>Vibrio vulnificus</i>	Dr J D Gu, School of Biological Sciences
Wu SiQi*	BSc(3)	1	Pricing Equity-linked Products with American-type Option	Professor H L Yang, Department of Statistics & Actuarial Sciences
Yu Hoi Fung*	BSc(3)	2	A Study of Glitch Phenomenon in Neutron Stars	Professor K S Cheng, Department of Physics
Zhao Yue	BSc(3)	2	Opportunity or Fantasy - a Student's Investigation in an Earthquake Precursor Theory	Professor J C Aitchison, Department of Earth Sciences