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1. Personal Summary

I received my B.Sc. in Biochemistry at the Hong Kong University of Science & Technology in 1997 and Ph.D. at the University of Hong Kong in 2003. My PhD study investigated the role and function of peroxiredoxins in oxidative stress (Wong et al. J. Biol. Chem. 2003, 2004). With the support of Croucher Fellowship for Postdoctoral Research, I obtained my postdoctoral training in the laboratory of Dr. Alan G. Hinnebusch (Head of the Program in Cellular Regulation and Metabolism) at National Institutes of Health (NIH) working on the mechanism of eukaryotic transcription termination (Qiu et al, Mol. Cell. Biol. B 2006; Wong et al, Mol. Cell. Biol. 2007).

In 2008, I rejoined my PhD supervisor Prof Dong-Yan Jin's group to explore the role of peroxiredoxin in oxidative defense and genomic stability (Tang et al. PLoS Genet 2009). In 2010, with the funding supports from NIH (USA) and National Natural Science Foundation of China (NSFC) to me, I studied the mechanism of eukaryotic transcription termination and its link in RNA surveillance (Wong et al. Nucleic Acids Res. 2010; Kong et al. Nucleic Acids Res. 2014). I joined the Department of Medicine at HKU as Research Assistant Professor in 2011 and collaborated with Prof Aimin Xu (Director of State Key Lab of Pharmaceutical Biotechnology) to explore new metabolic hormones and factors (Wong et al. J. Biol. Chem. 2014; Lee et al. Diabetology 2016). In 2016, I worked for a Hong Kong government funding agency Health and Medical Research Fund (HMRF) as Senior Executive (Scientific Review) responsible for overseeing the grant review process.

In 2017, I joined the Department of Health Technology and Informatics (HTI) at the Hong Kong Polytechnic University (PolyU) and continued my research in metabolism dysregulation in obese subjects (Huang et al. Cell Metabolism 2017; Yeung et al. Front Pharmacol. 2022; Xu et al. Theranostics 2022). I am also actively participating in various teaching and service activities such as development of undergraduate research and setup protein purification and analysis platforms.

2. Teaching philosophy

Educational psychologist Jerome Bruner's stated that "*Learning is a process, not a product*". I also believe *research experience can empower learning*. Recent studies have demonstrated that hands-on research in the undergraduate curriculum creates more effective learning, especially when theories meet real-world applications. I believe that by adding research elements into the undergraduate curriculum, I have provided my students with opportunities to develop academically and cognitively beyond what they can normally do through traditional lectures. By engaging students in research early in the undergraduate programme, I have expanded their horizons for disciplinary knowledge acquisition, while introducing them to a culture of critical enquiry and a progressive development of critical thinking skills.

My goal is to imbue my undergraduate students with the same "research mindset" as the postgraduate students.

This is particularly important for our students who will become health care professionals' (HCPs) after graduation. Research training can equip them to advance their observation skills to identify relevant

information and the relationships among elements through reasoning and judgement. I have formulated my teaching philosophy for "research-based teaching" based on learning has to be experienced through reflection. I can nurture my students' research skills and interests *"to learn and to apply, for the benefit of mankind"* (my university PolyU motto).

3. Qualifications

2003 Doctor of Philosophy, The University of Hong Kong, Hong Kong

1999 Master of Science in Biotechnology, The University of Science and Technology, Hong Kong

1997 Bachelor of Science in Biochemistry, The University of Science and Technology, Hong Kong

4. Working Experience

7/2019 – Present: Assistant Professor, Dept. of Health Technology and Informatics, The Hong Kong Polytechnic University

- My research activities mainly focus on identification and characterization of novel metabolism-related factors
- Subject leader for the courses "Cells in Health and Disease (HTI24001)" for Year-2 undergraduate students and "Research Methods & Biostatistics (HTI5155/6156)" for Full time (FT) and Part time (PT) postgraduate students.

11/2017 – 6/2019: Research Assistant Professor, Dept. of Health Technology and Informatics, The Hong Kong Polytechnic University

- Subject leader for the course "Cells in Health and Disease (HTI24001)" for Year-2 undergraduate students and "Research Methods & Biostatistics (HTI5155/6155)" for FT & PT postgraduate students.

5/2016 – 10/2017: Senior Executive (Scientific Review), Research Office, Food and Health Bureau

- Review Health Medical Research Fund (HMRF) open call applications
- Monitor the progress of ongoing projects
- Issue the assignment of patent/ intellectual property rights

7/2013 – 4/2016: Co-investigator & Academic Secretary, State Key Laboratory of Pharmaceutical Biotechnology, HKU

- Helped the members to prepare major grant applications such as HK RGC grants (TBRS, AoE, PSKL, CRF), mainland grants (e.g. 973, NSFC and Shenzhen basic research fund) and international grants (e.g. Qatar research grant)
- Organized the scientific events including annual meeting, conferences and seminars
- Managed the research platforms including yeast two-hybrid, virus mediated expression systems and Seahorse metabolic analyzer

4/2011 – 4/2016: Research Assistant Professor & Honorary Assistant Professor, Dept. of Medicine, HKU

- Explored novel hormones/factors and underlying molecular mechanism in the regulation of energy utilization with diet-induced obese mouse model
- Studied the coordination of eukaryotic RNA polymerase II

(RNAPII)-mediated gene expression processes including transcription termination, splicing and RNA surveillance from yeast to mammalian cells

4/2008 – 2/2011: Post-doctoral Fellow, Dept. of Biochemistry, HKU

- Investigated the role of antioxidant enzyme Peroxiredoxin in genome stability
- Studied the molecular mechanism of eukaryotic RNAP II-mediated transcription termination

11/2003 – 4/2008: Post-doctoral Fellow, Laboratory of Gene Regulation and Development, NIH, USA

- Studied the molecular mechanism of eukaryotic transcription termination
- Explored the role of translational initiation factor eIF3 in ribosome biogenesis

5. Awards

2022 : FHSS x KTEO Health Tech Competition - Health Future Challenge (Hong Kong Polytechnic University)
2021-2022 : HTI Team Teaching Award as Team Leader (Hong Kong Polytechnic University)
2021 : Nomination of UGC Teaching Award (Hong Kong Polytechnic University; Limited to three nominations per university per year)
2018-2019 : Faculty Prizes in Teaching (Hong Kong Polytechnic University)
2018-2019 : HTI Teaching Award (Hong Kong Polytechnic University)
2017-2018 : Research Output Prize (The University of Hong Kong)
2012 : 国家级科技项目奖先进个人 (深圳虚拟大学园) "Individual advancement award for national science & tech project: Shenzhen virtual university campus"
2010-2015 : Global Research Initiative Program for New Foreign Investigators (NIH, USA)
2003-2005 : Croucher Fellowships for Postdoctoral Research (Croucher foundation, Hong Kong)

6. Professional organization membership

- National Science Teaching Association (USA)
- National Center for Case Study Teaching in Science (USA)
- Course-based Undergraduate Research Experience (USA)
- State Key Laboratory of Pharmaceutical Biotechnology (HKU)

7. Publications

Remarks: Impact factor (IF) and ranking mainly based on Journal Citation Report (JCR) by Web of Science unless specific other source. Citation is based on Google Scholar.

1. Xu L, Huang Z, Lo TH, Lee JTH, Yang R, Yan X, Ye D, Xu A*, Wong CM*. (2022) Hepatic PRMT1 ameliorates diet-induced hepatic steatosis via induction of PGC1α. Theranostics.;12(6):2502-2518. doi: 10.7150/thno.63824. PMID: 35401831; PMCID: PMC8965489. (IF 11.600; 13/139 Q1 in Medicine, Research & Experimental) (co-corresponding) cited 1 time

2. Wu, M.; Deng, C.; Lo, T.-H.; Chan, K.-Y.; Li, X.; Wong, C.M*. Peroxiredoxin, Senescence, and Cancer. Cells 2022, 11, 1772. https://doi.org/10.3390/cells11111772 (IF 7.666; 51/194 Q2 in Cell Biology) cited 1 time

3. Yeung MHY, Leung KL, Choi LY, Yoo JS, Yung S, So PK, Wong CM*. (2022) Lipidomic Analysis Reveals the Protection Mechanism of GLP-1 Analogue Dulaglutide on High-Fat Diet-Induced Chronic Kidney Disease in Mice. Front Pharmacol. 12:777395. doi: 10.3389/fphar.2021.777395. PMID: 35299724; PMCID: PMC8921774. (IF 5.988; 50/279 Q1 in Pharmacology & Pharmacy)

4. Cheng Y, Kang XZ, Cheng T, Ye ZW, Tipoe GL, Yu CH, Wong CM, Liu B, Chan CP, Jin DY. (2022) FACI Is a Novel CREB-H-Induced Protein That Inhibits Intestinal Lipid Absorption and Reverses Diet-Induced Obesity. Cell Mol Gastroenterol Hepatol.13(5):1365-1391. doi: 10.1016/j.jcmgh.2022.01.017. Epub 2022 Jan 28. PMID: 35093589; PMCID: PMC8938335. (IF 8.797; 17/93 Q1 in Gastroenterology & Hepatology) cited 2 times

5. Chan HC, Lau YT, Ding Q, Li CK, Wong CM, Shaw PC, Waye MMY, Tsang SY. Novel PinX1 Transcript Variant, Positively Regulates Cardiogenesis of Embryonic Stem Cells. J Am Heart Assoc. 2020 Mar 17;9(6): e010240. doi: 10.1161/JAHA.118.010240. Epub 2020 Mar 11. (IF 6.106; 38/207 Q1 in Cardiac & cardiovascular systems) cited 3 times

6. Lui PPY, Wong CM. (2020) Biology of Tendon Stem Cells and Tendon in Aging. Front Genet. 2020 Jan 16;10:1338. doi: 10.3389/fgene.2019.01338. (Invited review) (IF 4.772; 43/175 Q1 in Genetics & Heredity) cited 14 times

7. Kumar R, Mohammad A, Saini RV, Chahal A, Wong CM, Sharma D, Kaur S, Kumar V, Winterbourn CC, Saini AK. (2019) Deciphering the in vivo redox behavior of human peroxiredoxins I and II by expressing in budding yeast. *Free Radic Biol Med*. 145:321-329. (IF 8.101; 45/296 Q1 in Biochemistry & Molecular Biology) cited 5 times

8. Xu L, Yeung MHY, Yau MYC, Lui PPY*, Wong CM* (2019) Role of Histone Acetylation and Methylation in Obesity. *Current Pharmacology Reports*, 1-8. (Invited review; Not found by JCR, IF 4.549 by Scopus) cited 5 times

9. Yau MY, Xu L, Huang CL, Wong CM* (2018) Long Non-Coding RNAs in Obesity-Induced Cancer. *Noncoding RNA*. 4(3). (Invited review; Not found by JCR, IF 6.845 by Scopus) cited 18 times

10. Wong CM*, Xu L, Yau MYC (2018) Alternative mRNA Splicing in the Pathogenesis of Obesity. *Int J Mol Sci*. 19 (2), 632 (invited review; IF 6.208; 69/296 Q1 in biochemistry & molecular biology) cited 21 times

11. Huang Z, Zhong L, Lee JTH, Zhang J, Wu D, Geng L, Wang Y, Wong CM* and Xu A* (2017) The FGF21-CCL11 Axis Mediates Cold-Induced Beiging of White Adipose Tissues by Recruitment of Eosinophils. *Cell Metabolism* 26:493-508.e4. [*co-corresponding author] (IF 31.373; 8/194 Q1 in cell biology) cited 99 times

12. Chen J, Li J, Yiu JHC, Lam JKW, Wong CM, Dorweiler B, Xu A, Woo CW (2017) TRIF-dependent Toll-like Receptor Signaling Suppresses SCD1 Transcription in Hepatocytes and Prevents Diet-induced Hepatic Steatosis. *Science Signaling* 10 (491). pii: eaal3336. (IF 9.579; 32/296 Q1 in biochemistry & molecular biology) cited 11 times

13. Cheng Y, Gao W, Tang HM, Deng J, Wong CM, Chan CP, Jin DY (2016) β-TrCP-1 mediated ubiquitination and degradation of liver-enriched transcription factor CREB-H. *Scientific reports*. 6:23938. (IF 4.996; 19/73 Q2 multidisciplinary sciences) cited 19 times

14. Ye D, Li H, Wang Y, Jia W, Zhou J, Fan J, Man K, Lo CM, Wong CM, Wang Y, Lam KSL, Xu A (2016) Circulating Fibroblast Growth Factor 21 Is A Sensitive Biomarker for Severe Ischemia/reperfusion Injury in Patients with Liver Transplantation. *Scientific reports*. **6**:19445. (IF 4.996; 19/73 Q2 multidisciplinary sciences) cited 23 times

15. Lee JTH, Huang Z, Pan K, Zhang HJ, Woo CW, Xu A, Wong CM* (2016) Adipose-derived lipocalin 14 alleviates hyperglycemia by suppressing both adipocyte glycerol efflux and hepatic gluconeogenesis in mice. Diabetologia **59**:604-13. [*corresponding author] (IF 10.460; 11/146 Q1 in endocrinology & metabolism) cited 11 times

16. Pan K, Lee ZH, Huang Z and Wong CM* (2015) Coupling and coordination in gene expression processes with pre-mRNA splicing. *Int J Mol Sci.* **16**:5682-96. (invited review for special issue "Pre-mRNA Splicing 2015") (IF 6.208; 69/296 Q1 in biochemistry & molecular biology) cited 10 times

17. Pan K, Huang Z, Lee ZH and Wong CM* (2015) Current perspectives on the role of TRAMP in nuclear RNA surveillance and quality control. *Research and Reports in Biochemistry*. **5**:111-117 (invited review; no impact factor) cited 4 times

18. Tang HMV, Pan K, Kong KYE, Hu L, Chan LC, Siu KL, Sun H, Wong CM* and Jin DY* (2015) Loss of APD1 in Yeast Confers Hydroxyurea Sensitivity Suppressed by Yap1p Transcription Factor. *Scientific reports*. **5**:7897. [*co-corresponding author] (IF 4.996; 19/73 Q2 multidisciplinary sciences) cited 12 times

19. Wong CM*, Wang YD, Lee ZH, Huang Z, Wu D, Xu A* and Lam SL. (2014) Adropin is a brain membrane-bound protein regulating physical activity via NB-3/Notch signaling pathway in mice. *J. Biol. Chem*. 289:25976-86. [*co-corresponding author] (IF 5.486; 94/296 Q2 in biochemistry & molecular biology) cited 89 times

20. Kong KYE, Tang HMV, Pan K, Huang Z, Lee THJ, Hinnebusch AG, Jin DY* and Wong CM* (2014) Cotranscriptional recruitment of yeast TRAMP complex to intronic sequences promotes optimal pre-mRNA splicing. *Nucleic Acids Res*. 42:643-660. [*co-corresponding author] (IF 19.160; 8/296 Q1 in biochemistry & molecular biology) cited 38 times

21. Chan CP, Kok KH, Tang HMV, Wong CM* and Jin DY*. (2013) Internal ribosome entry site-mediated translational regulation of ATF4 splice variant in mammalian unfolded protein response. *Biochim Biophys Acta - MOLECULAR CELL RESEARCH.* 1833:2165-75. [*co-corresponding author] (IF 5.011; 110/296 Q2 in biochemistry & molecular biology) cited 56 times

22. Tang HMV, Gao WW, Chan CP, Siu YT, Wong CM, Kok KH, Ching YP, Takemori H and Jin DY. (2013) LKB1 tumor suppressor and salt-inducible kinases negatively regulate human T-cell leukemia virus type 1 transcription. *Retrovirology*. 11; 10:40. (IF 3.768; 21/37 Q3 in virology) cited 23 times

23. Gaur NA, Hasek J, Brickner DG, Qiu H, Zhang F, Wong CM, Malcova I, Vasicova P, Brickner JH and Hinnebusch AG. (2013) Vps factors are required for efficient transcription elongation in budding yeast. *Genetics.* 193:829-51 (IF 4.402; 56/175 in genetics & heredity) Cited 22 times

24. Wong CM*, Tang, HMV, Kong KYE, Wong GWO, Qiu H, Jin DY and Hinnebusch AG (2010) Yeast arginine methyltransferase Hmt1p regulates transcription elongation and termination by methylating Npl3p. *Nucleic Acids Res*. 38:2217-2228. [*corresponding author] Feature article 2010)

(IF 19.160; 8/296 Q1 in biochemistry & molecular biology) cited 42 times

25. Tang HMV, Siu, KL, Wong CM* and Jin DY* (2009) Loss of yeast peroxiredoxin Tsa1p induces genome instability through activation of DNA damage checkpoint and elevation of dNTP levels. *PLoS Genet*. 5:e1000697. [*co-corresponding author] (IF 6.020; rank 27/175 Q1 in genetics & heredity) cited 46 times

26. Dong J, Nanda J, Rahman H, Pruitt M, Shin BS, Wong CM, Lorsch JR and Hinnebusch AG (2008) Genetic identification of yeast 18S rRNA residues required for efficient recruitment of initiator $tRNA^{Met}$ and AUG selection. *Genes & Dev*. 22:2242-2255. (IF 12.890; 23/197 Q1 in cell biology) cited 46 times

27. Wong CM, Qiu H, Hu C, Dong J and Hinnebusch AG (2007) Yeast cap binding complex impedes recruitment of cleavage factor IA to weak termination sites. *Mol. Cell. Biol.* 27: 6520-6531. (IF 5.124; 107/296 Q2 in biochemistry & molecular biology) cited 56 times

28. Qiu H, Hu C, Wong CM, and Hinnebusch AG (2006) The Spt4p Subunit of Yeast DSIF Stimulates Association of the Paf1 Complex with Elongating RNA Polymerase II. *Mol. Cell. Biol*. 26:3135-3148. (IF 5.124; 107/296 Q2 in biochemistry & molecular biology) cited 100 times

29. Wong CM, Siu KL and Jin DY (2004) Peroxiredoxin-null yeast cells are hypersensitive to oxidative stress and are genomically unstable. *J. Biol. Chem.* 279: 23207-23213. (IF 5.486; 94/296 Q2 in biochemistry & molecular biology) cited 140 times

30. Ching YP, Leong VY, Wong CM and Kung HF (2003) Identification of an autoinhibitory domain of p21-activated protein kinase 5. *J. Biol. Chem.* 278:33621-33624. (IF 5.486; 94/296 Q2 in biochemistry & molecular biology) cited 104 times

31. Wong CM, Ching YP, Zhou Y, Kung HF and Jin DY (2003) Transcriptional regulation of yeast peroxiredoxin gene *TSA2* through Hap1p, Rox1p and Hap2/3/5p. *Free Rad. Biol. Med*. 34: 585-597. (IF 8.108; 42/296 Q1 in biochemistry & molecular biology) cited 30 times

32. Wong CM, Zhou Y, Ng RW, Kung HF and Jin DY (2002) Cooperation of yeast peroxiredoxins Tsa1p and Tsa2p in the cellular defense against oxidative and nitrosative stress. *J. Biol. Chem*. 277: 5385-5394. (cited over 180 times) (IF 5.486; 94/296 Q2 in biochemistry & molecular biology) cited 184 times

33. Zhou HJ, Wong CM, Chen JH, Qiang BQ, Yuan JG and Jin DY (2001) Inhibition of LZIP-mediated transcription through direct interaction with a novel host cell factor-like protein. *J. Biol. Chem*. 276:28933-8. (IF 5.486; 94/296 Q2 in biochemistry & molecular biology) cited 20 times

34. Wong CM, Chun AC, Kok KH, Zhou Y, Fung PC, Kung HF, Jeang KT and Jin DY. (2000) Characterization of human and mouse peroxiredoxin IV: evidence for inhibition by Prx-IV of epidermal growth factor- and p53-induced reactive oxygen species. *Antioxid. Redox Signal.* 2: 507-518. (IF 7.468; 53/296 Q1 in biochemistry & molecular biology) cited 86 times

35. Zhou Y, Kok KH, Chun AC, Wong CM, Wu HW, Lin MC, Fung PC, Kung H and Jin DY. (2000) Mouse peroxiredoxin V is a thioredoxin peroxidase that inhibits p53-induced apoptosis. *Biochem Biophys Res Commun*. 268:921-7. (IF 3.322; 196/296 Q3 in biochemistry & molecular biology) cited 203 times

8. **External Grants**: (on-going grants are italicized)

As principal investigator,

1. *"Deciphering the Mechanisms of Arsenic-Induced Diabetes Mellitus" Health and Medical Research Fund 08191616; HK$1,500,000; 1 Feb 2022 - 31 Jan 2025*

2. *"Decipher the role of Protein Tyrosine Phosphatase Receptor Type D (PTPRD) in pathogenesis and progression of nonalcoholic fatty liver disease" General research fund 15101520; HK$996,285; 1/1/2021-31/12/2023*

3. *"Role of a novel protein CYSTM1 in the regulation of metabolism" General research fund 15104419; HK$ 1,046,148; 1/1/2020-31/12/2022*

4. *"Deciphering the role of Placenta Specific 9 (PLAC9) in obesity" Health and Medical Research Fund 06173266; HK$1,190,444; 1/9/2019-31/8/2022.*

5. *"G蛋白偶联受体GPR110作为肥胖相关并发症新治疗靶点的机制研究 G-protein couple receptor GPR110 as new therapeutic target for obesity-related complications" National Natural Science Foundation of China 81870586; RMB$570,000; 1/2019-12/2022.*

6. "Deciphering the role of B lymphocytes in liver metabolic homeostasis" General research fund 15103418; HK$ 972,000; 1/2019-2/2022.

7. "Deciphering the molecular mechanism of Protein Arginine Methyltransferase (PRMT) 1 in the regulation of hepatic glucose and lipid metabolism" Health and Medical Research Fund 03143966; HK$919,296; 6/2016-5/2018 (Transferred to my collaborator Prof Aimin Xu as I would work at this funding agency.)

8. "Coupling of nuclear RNA surveillance with splicing" *National Natural Science Foundation of China* 31271361; RMB$800,000; 1/2013-12/2016.

9. "Regulation of transcription termination and its link in mRNA surveillance" *National Institutes of Health* 1R01TW008298; US$270,000; 12/2010-11/2015.

As Co-principal Investigator/ Co-investigator,

1. *"Fabrication of a Bioactive Decellularized Tendon-Derivrd Stem Cell Sheet (dTDSC Sheet) for Tissue Repair" ITSP-platform; HK$1,995,326.96; 1/1/23-31/12/24 PI: Dr Pauline Lui (CUHK)*

2. *"Institute of Metabolic Medicine" Area of Excellence AoE/M-707/18; HK$1,588,000 to me; 5/2019-4/2027 PI: Prof Aimin Xu (HKU)*

3. *"Roles of a novel CREB-H-regulated phospholipid-binding endosomal protein (PLBEP) in cholesterol homeostasis" Health and Medical Research Fund 08193856; HK$1,500,000; 1/2022-12/2024 PI: Prof Dong Yan Jin (HKU)*

4. "TLR5 controls adaptive thermogenesis by posttranscriptional regulation of UCP1" General research fund 17101118. HK$ 742,233. 1/2019-12/2022.

5. "To Establish a Metabolic Study Centre in Hong Kong: Focusing on the Emerging Metabolic Hormones" Collaborative Research Fund (HKU2/CRF/12R) HK$8,000,000; 5/2013-5/2016.

9. **Internal Competitive Research Grants**: (on-going grants are italicized)

As principal investigator,

1. *FHSS x KTEO Health Tech Competition - Health Future Challenge. HK$500,000 1 Jan 2023-21 Dec 2023*

2. "Shared Infrastructure for Biomolecule Purification and Analysis (HTI-2)" The Hong Kong Polytechnique University. HK$1,100,000. 21 June 2021- 30 June 2022

10. Internal Competitive Teaching or equipment-related grants:

As principal investigator

1. *Using a course-based undergraduate research experiences (CURE) model to enhance the research interest of health professional and biomedical science students (PolyU-lead) TDG/IICA grant for 2022-25 ($450,000 from PolyU)*

2. *"香港醫學生研究經驗和研究興趣提升研習"PRC Ten Thousand People's Scheme 2022 by Ministry of Education (Mainland) to promote CURE teaching approach in health professional education programs*

3. "Use CUREs model to enhance research interest of health professional students" The Hong Kong Polytechnique University. HK$194,000. 9/2020- 12/2021

As co-investigator

1. *"Virtual practical sessions for Health-related disciplines". HK$1,200,000. 4/2021-6/2023.*

2. *"Pathogenic pathways underlying adipose tissue dysfunction in ageing and its associated type 2 diabetes: from mechanistic understanding to biomarker discovery" HK$2,000,000. 12/2021-12/2023*

3. *"Multi-parameter flow analyzer Funding Scheme: Large Equipment Fund" HK$3,500,00. 4/2022-4/2023*

4. *"A Cutting-edge Mass Spectrometry-based Platform for Metabolomics (ULS-1)" HK$7,170920 1/2021-12/2022*