Kenneth, King-yip CHENG
(Associate Professor)

QUALIFICATIO:

2003	BSc (Hons) Biochemistry, Hong Kong University of Science and Technology
2009	PhD, Department of Medicine, The University of Hong Kong

BRIEF OUTLINE OF EXPERIENCE AND POSTS HELD:

	The Hong Kong Polytechnic University
07/2019-Present	Associate Professor, Department of Health Technology and Informatics.
01/2017-06/2019	Assistant Professor, Department of Health Technology and Informatics.
Position:	**The University of Hong Kong.** Research Assistant Professor, Dept. of Medicine (10/2012 – 12/2016) and Honorary Assistant Professor, Dept. of Pharmacology and Pharmacy (03/2016 – 03-2019)
09/2009-09/2012	***Post-doctoral Fellow***
01/2009-08/2009	***Research Associate***
07/2003-12/2004	***Research Project Assistant***
06/2015–08/2015	**Agency for Science, Technology and Research (A*STAR, Singapore).**
Position:	**Visiting Scientist**
07/2013– present	**The State Key Laboratory of Pharmaceutical Biotechnology (Hong Kong).**
Position:	**Co-investigator**
07/2012– 07/2015	**Shanghai Jiao Tong University (China).**
Position:	**Honorary Associate Research Fellow**

RESEARCH INTERESTS:

- Obesity and its related metabolic disorders including diabetes and cardiovascular diseases
- Mechanism underlying insulin action and secretion
- Adipose tissue and metabolic health

SERVICE TO PROFESSIONAL & SCIENTIFIC BODIES, CONSULTANCY, MEMBERSHIP OF PROFESSIONAL & LEARNED SOCIETIES:

2013-	Editorial Board Member, Journal of Clinical Science
2013-	Editorial Board Member, Journal of Clinical Cardiology
2013-	Co-investigator, The State Key Laboratory of Pharmaceutical Biotechnology
2012-	Member, Research Centre of Heart, Brain, Hormone & Healthy Aging

AWARDS:

2015	Best abstract prize in Nature Medicine Diabetes conference
2014	國家級科技項目先進個人, 深圳市科技創新委員會
2010	Best abstracts in Medical Research Conference, HKU
2009	Best abstracts in Medical Research Conference, HKU
2009	Young scientist award in life science (final 4), Hong Kong Institution of Science
2006	Best abstracts in Medical Research Conference, HKU

SELECTED PUBLICATIONS (FULL LIST IN GOOGLE SCHOLAR-CHENG KING YIP):

1. Low-Density Lipoprotein Receptor-Related Protein 6 Cell Surface Availability Regulates Fuel Metabolism in Astrocytes. Adv Sci (Weinh). 2021 Jun 27:e2004993. Chow HM, Sun JK, Hart RP, **Cheng KK**, Hung CHL, Lau TM, Kwan KM. Impact factor (2020): 16.80. Rank of journal: 18/335 (Top 10 %) in the field of materials Science and multidisciplinary.

2. Deficiency of telomere-associated repressor activator protein 1 precipitates cardiac aging in mice via p53/PPARα signaling. Theranostics. 2021 Mar 4;11(10):4710-4727. **Cai Y**, Liu H, Song E, Wang L, Xu J, He Y, Zhang D, Zhang L, **Cheng KK**, Jin L, Wu M, Liu S, Qi D, Zhang L, Lopaschuk GD, Wang S, Xu A, Xia Z. Impact factor (2020): 11.56. Rank of journal: 9/140 (Top 10 %) in the field of Medicine, Research & Experimental.

3. miR-18a promotes glioblastoma development by down-regulating ALOXE3-mediated ferroptotic and anti-migration activities. Oncogenesis. 2021 Feb 12;10(2):15. Yang X,

Liu J, Wang C, **Cheng KK**, Xu H, Li Q, Hua T, Jiang X, Sheng L, Mao J, Liu Z. Impact factor (2020): 7.49. Rank of journal: 40/242 (Top 20 %) in the field of Oncology.

4. The effect of different measurement modalities in the association of lean mass with mortality: A systematic review and meta-analysis. Li GH, Lee GK, Au PC, Chan M, Li HL, Cheung BM, Wong IC, Lee VH, Mok J, Yip BH, **Cheng KK**, Wu CH, Cheung CL. Osteoporos Sarcopenia. 2021 Mar;7(Suppl 1):S13-S18.

5. Systematic review and meta-analysis of lean mass and mortality: Rationale and study description. Cheung CL, Lee GK, Au PC, Li GH, Chan M, Li HL, Cheung BM, Wong IC, Lee VH, Mok J, Yip BH, **Cheng KK**, Wu CH. Osteoporos Sarcopenia. 2021 Mar;7(Suppl 1):S3-S12.

6. Sarcopenia and mortality in different clinical conditions: A meta-analysis. Au PC, Li HL, Lee GK, Li GH, Chan M, Cheung BM, Wong IC, Lee VH, Mok J, Yip BH, **Cheng KK**, Wu CH, Cheung CL. Osteoporos Sarcopenia. 2021 Mar;7(Suppl 1):S28-S33.

7. Different definitions of sarcopenia and mortality in cancer: A meta-analysis. Li HL, Au PC, Lee GK, Li GH, Chan M, Cheung BM, Wong IC, Lee VH, Mok J, Yip BH, **Cheng KK**, Wu CH, Cheung CL. Osteoporos Sarcopenia. 2021 Mar;7(Suppl 1):S34-S38.

8. Wang B, Lin H, Li X, Lu W, Xu A, ***Cheng KK.** The adaptor protein APPL2 controls glucose-stimulated insulin secretion via F-actin remodeling in pancreatic β cells. *PNAS*. 2020 Oct 29;202016997. doi: 10.1073/pnas.2016997117. ***Co-corresponding author.*** Impact fact (2020): 11.2. Rank of journal: 8/71 (Top 10 %) in the field of multidisciplinary sciences.

9. Wang P, Liang Y, Chen K, Yau SY, Sun X, **Cheng KKY**, Xu A, So K, Li A. Potential involvement of adiponectin signaling in regulating physical exercise-elicited hippocampal neurogenesis and dendritic morphology in stressed mice. Frontiers in Cellular Neuroscience 14, 189. In press. Impact factor (2019): 3.921. Rank of journal: 91/271 (Top 35 %) in the field of neuroscience.

10. Wu KKL, Cheung SWM and **Cheng KKY**. NLRP3 Inflammasome Activation in Adipose Tissues and Its Implications on Metabolic Diseases. Int J Mol Sci. 2020 Jun 11;21(11):4184. doi: 10.3390/ijms21114184. Impact factor (2019): 4.556. Rank of journal: 74/297 (Top 25 %) in the field of Biochemistry and molecular biology.

11. Gao C, Yan T, Chen X, **Cheng KKY**, Xu A, Shen J. APPL2 Negatively Regulates Olfactory Functions by Switching Fate Commitments of Neural Stem Cells in Adult Olfactory Bulb via Interaction with Notch1 Signaling. Neurosci Bull. 2020 May 28. doi: 10.1007/s12264-020-00514-6. Impact factor (2019): 4.326. Rank of journal: 77/271 (Top 30%) in the field of neuroscience.

12. Liu Z, Ge R, Zhou J, Yang X, **Cheng KK**, Tao J, Wu D, Mao J. Nuclear factor IX promotes glioblastoma development through transcriptional activation of Ezrin Oncogenesis. 2020 Apr 14;9(4):39. doi: 10.1038/s41389-020-0223-2. Impact factor (2019): 6.119. Rank of journal: 34/244 (Top 15 %) in the field of oncology.

13. Yu AP, Ugwu FN, Tam BT, Lee PH, Ma V, Pang S, Chow AS, **Cheng KK**, Lai CW, Wong CS, Siu PM. Obestatin and growth hormone reveal the interaction of central obesity and other cardiometabolic risk factors of metabolic syndrome. Impact factor (2019): 3.998. Rank of journal: 34/244 (Top 25 %) in the field of multidisciplinary sciences.

14. Z Liu, KKL Wu, X Jiang, A Xu, **KKY Cheng**. The role of adipose tissue senescence in obesity- and ageing-related metabolic disorders. Clin Sci (Lond). 2020 Jan 31;134(2):315-330. doi: 10.1042/CS20190966. Impact factor (2019): 5.223. Rank of journal: 24/138 (Top 20 %) in the field of Medicine, research and experimental

15. Ma Y, Zhang M, Yu H, Lu J, **Cheng KKY**, Zhou J, Chen H, Jia W. Activation of G0/G1 Switch Gene 2 by Endoplasmic Reticulum Stress Enhances Hepatic Steatosis. Metabolism. 2019 Jul 1. pii: S0026-0495(19)30132-5. Impact factor (2018): 6.513. Rank of journal: 14/145 (Top 10 %) in the field of endocrinology and metabolism.

16. Suen L, Wang W, **Cheng KKY**, Chua MCH, Yeung JWF, Koh WK, Yeung SKW, Ho JYS. Self-Administered Auricular Acupressure Integrated With a Smartphone App for Weight Reduction: Randomized Feasibility Trial. JMIR Mhealth Uhealth. 2019 May 29;7(5):e14386. Impact factor (2018): 4.30. Rank of journal: 2/26 (Top 10 %) in the field of medical informatics.

17. Wang B and **Cheng KKY**. Hypothalamic AMPK as a Mediator of Hormonal Regulation of Energy Balance. Int J Mol Sci. 2018 Nov 11;19(11). pii: E3552. **Co-corresponding author**. Impact factor (2018): 4.183. Rank of journal: 78/299 (Top 26.25 %) in the field of biochemistry and molecular biology.

18. Liu Z, Jin L, Yang JK, Wang B, Wu KK, Hallenborg P, Xu A, **Cheng KK**. The Dysfunctional MDM2-p53 Axis in Adipocytes Contributes to Ageing Related Metabolic Complications by Induction of Lipodystrophy. Diabetes. 2018 Aug 21. pii: db180684. doi: 10.2337/db18-0684. **Co-corresponding author**. Impact factor (2018): 7.19. Rank of journal: 8/128 (Top 6.25 %) in the field of endocrinology and metabolism.

19. Supriya R, Tam BT, Yu AP, Lee PH, Lai CW, **Cheng KK**, Yau SY, Chan LW, Yung BY, Sheridan S, Siu PM. Adipokines demonstrate the interacting influence of central obesity with other cardiometabolic risk factors of metabolic syndrome in Hong Kong Chinese adults. PLoS One. 2018 Aug 16;13(8):e0201585. Impact factor (2018): 2.766.

20. Wang B, Li A, Li X, Ho PW, Wu D, Wang X, Liu Z, Wu KK, Yau SS, Xu A, **Cheng KK**. Activation of hypothalamic RIP-Cre neurons promotes beiging of WAT via sympathetic nervous system. EMBO Rep. 2018 Apr;19(4). pii: e44977. ***Co-corresponding author.*** **(Selected for commentary)**. Impact factor: 8.57. Rank of journal: 20/292 (Top 10 %) in the field of biochemistry & molecular biology.
21. Gao C, Chen X, Xu A, **Cheng K**, Shen J. Adaptor Protein APPL2 Affects Adult Antidepressant Behaviors and Hippocampal Neurogenesis via Regulating the Sensitivity of Glucocorticoid Receptor. Mol Neurobiol. 2018 Jul;55(7):5537-5547. Impact factor: 5.08. Rank of journal: 44/261 (Top 17 %) in the field of neuroscience.

22. Supriya R, Yung BY, Yu AP, Lee PH, Lai CW, **Cheng KK**, Yau SY, Chan LWC, Sheridan S, Siu PM. Adipokine Profiling in Adult Women With Central Obesity and Hypertension. Front Physiol. 2018 Mar 27;9:294. Impact factor: 3.39. Rank of journal: 20/83 (Top 25 %) in the field of neuroscience.
23. Supriya R, Yu AP, Lee PH, Lai CW, **Cheng KK**, Yau SY, Chan LW, Yung BY, Siu PM. Yoga training modulates adipokines in adults with high-normal blood pressure and metabolic syndrome. Scand J Med Sci Sports. 2018 Mar;28(3):1130-1138. Impact factor: 3.62. Rank of journal: 9/81 (Top 12 %) in the field of neuroscience.
24. Guo VY, Cao B, Cai C, **Cheng KK**, Cheung BMY. Fetuin-A levels and risk of type 2 diabetes mellitus: a systematic review and meta-analysis. Acta Diabetol. 2018 Jan;55(1):87-98. Impact factor: 3.39. Rank of journal: 68/143 (Top 50 %) in the field of endocrinology and metabolism.
25. Jiang X, Zhou Y, Wu KK, Chen Z, Xu A, **Cheng KK**. APPL1 prevents pancreatic beta cell death and inflammation by dampening NFκB activation in a mouse model of type 1 diabetes. Diabetologia. 2017 Mar;60(3):464-474. ***Co-corresponding author.*** Impact factor: 6.32. Rank of journal: 12/133 (Top 10 %) in the field of Endocrinology and Metabolism.
26. Hoo RL, Shu L, **Cheng KK**, Wu X, Liao B, Wu D, Zhou Z, Xu A. Adipocyte Fatty Acid Binding Protein Potentiates Toxic Lipids-Induced Endoplasmic Reticulum Stress in Macrophages via Inhibition of Janus Kinase 2-dependent Autophagy. Sci Rep. 2017 Jan 17;7:40657. Impact factor: 4.12. Rank of journal: 12/64 (Top 20 %) in the field of multidisciplinary sciences.

27. Ng RC, Cheng OY, Jian M, Kwan JS, Ho PW, **Cheng KK**, Yeung PK, Zhou LL, Hoo RL, Chung SK, Xu A, Lam KS, Chan KH. Chronic adiponectin deficiency leads to Alzheimer's disease-like cognitive impairments and pathologies through AMPK inactivation and cerebral insulin resistance in aged mice. Mol Neurodegener. 2016 Nov 25;11(1):71. Impact factor: 6.51. Rank of journal: 12/133 (Top 10 %) in the field of neuroscience.
28. Li X, **Cheng KK,** Liu Z, Wang B, Jiang X, Zhou Y, Hallenborg P, Hoo RLC, Lam KS, Ikeda Y, Gao X, Xu A. The MDM2-p53-Pyruvate Carboxylase Axis Couples Mitochondrial Metabolism To Glucose-stimulated Insulin Secretion In Pancreatic β Cells. *Nat Commun. 2016 Jun 6;7:11740. doi: 10.1038/ncomms11740.* (***Co-first and co-corresponding author).*** Impact factor: 11.47. Rank of journal: 3/57 (Top 5.3 %) in the field of multidisciplinary sciences.
29. Jang H, Lee GY, Selby C, Lee G, Jeon YG, Lee JH, **Cheng KK**, Titchenell P, Birnbaum M, Xu A, Sanca A, Kim JB. Hyperglycemia is exacerbated by dysregulation of hepatic SREBP1c-CRY1 signaling pathway. *Nature Communications 2016 Jul 14;7:12180.* Impact factor: 11.47. Rank of journal: 3/57 (Top 5.3 %) in the field of multidisciplinary sciences.
30. Kwok KH, **Cheng KK**, Hoo RL, Ye D, Xu A and Lam KS. Adipose-Specific Inactivation of JNK Alleviates Atherosclerosis in ApoE-deficient Mice. *Clinical Sciences 2016 Aug 10.* Impact factor: 5.598. Rank of journal: 13/128 (Top 10.5%) in the field of medicine, research and experimental**.**
31. **Cheng KK**, Zhu W, Chen B, Wang Y, Wu D, Sweeney G, Wang B, Lam KS, **Xu A**. The adaptor protein APPL2 inhibits insulin-stimulated glucose uptake by interacting

with TBC1D1 in skeletal muscle. *Diabetes*. 2014 May 30. pii: DB_140337. (***Co-first and co-corresponding author)*.** Impact factor: 8.095, Rank of journal: 8/128 (Top 6.25 %) in the field of endocrinology and metabolism.

32. **Cheng KK,** Lam KS, Wang B, Xu A. Signaling mechanisms underlying the insulin-sensitizing effects of adiponectin. *Best Practice & Research Clinical Endocrinology & Metabolism*. 2014 Jan;28(1):3-13. Invited review. Impact factor: 4.602, Rank of journal: 25/128 (Top 19.5 %) in the field of endocrinology and metabolism.
33. **Cheng KK,** Lam KS, Wang Y, Wu D, Zhang M, Wang B, Li X, Hoo RL, Huang Z, Sweeney G, Xu A. TRAF6-mediated ubiquitination of APPL1 enhances hepatic actions of insulin by promoting the membrane translocation of Akt. *Biochem Journal*. 2013 Oct 15;455(2):207-16. **(Highlighted with a podcast)**. Impact factor: 4.396, Rank of journal: 67/290 (Top 23.1 %) in the field of biochemistry & molecular biology.
34. **Cheng KK,** Lam KS, Wu D, Wang Y, Sweeney G, Hoo RL, Zhang J, Xu A. APPL1 potentiates insulin secretion in pancreatic β cells by enhancing protein kinase Akt-dependent expression of SNARE proteins in mice. *PNAS*. 2012 Jun 5;109(23):8919-24. **(Selected for commentary)**. **(IF: 9.74).** Impact factor: 9.64, Rank of journal: 4/57 (Top 7 %) in the field of multidisciplinary sciences.
35. *Wang Y and ***Cheng KK**, Lam KS, Wu D, Wang Y, Huang Y, Vanhoutte PM, Sweeney G, Li Y, Xu A. APPL1 Counteracts Obesity-Induced Vascular Insulin Resistance and Endothelial Dysfunction by Modulating the Endothelial Production of Nitric Oxide and Endothelin-1 in Mice. *Diabetes*. 2011 Nov;60(11):3044-54. ***Co-first author.*** Impact factor: 8.095, Rank of journal: 8/128 (Top 6.25 %) in the field of endocrinology and metabolism.
36. **Cheng KK,** Iglesias MA, Lam KS, Wang Y, Sweeney G, Zhu W, Vanhoutte PM, Kraegen EW, Xu A. APPL1 potentiates insulin-mediated inhibition of hepatic glucose production and alleviates diabetes via Akt activation in mice. *Cell Metabolism***.** 2009 May;9(5):417-27. (Featured article). Impact factor: 17.57. Rank of Journal 2/128 (Top 2 %) in the field of Endocrinology and Metabolism.
37. **Cheng KK** Lam KS, Wang Y, Huang Y, Carling D, Wu D, Wong C, Xu A. Adiponectin-induced endothelial nitric oxide synthase activation and nitric oxide production are mediated by APPL1 in endothelial cells. *Diabetes*. 2007 May;56(5):1387-94. Impact factor: 8.095, Rank of journal: 8/128 (Top 6.25 %) in the field of endocrinology and metabolism.
38. **Cheng KK** Lam KS, Xu A. Adiponectin as a key player in inflammation. *Biomedical Review*. 2006 Nov.
39. Qiu B, Shi X, Wong ET, Lim J, Bezzi M, Low D, Zhou Q, Akıncılar SC, Lakshmanan M, Swa HL, Tham JM, Gunaratne J, **Cheng KK**, Hong W, Lam KS, Ikawa M, Guccione E, Xu A, Han W, Tergaonkar V. NUCKS Is a Positive Transcriptional Regulator of Insulin Signaling. *Cell Rep*. 2014 Jun 26;7(6):1876-86. Impact factor: 8.38. Rank of Journal 27/184 (Top 15 %) in the field of cell biology.
40. Li H, Wei S, **Cheng K**, Gounko NV, Ericksen RE, Xu A, Hong W, Han W. BIG3 inhibits insulin granule biogenesis and insulin secretion. *EMBO Rep*. 2014 Jun;15(6):714-22. Impact factor: 9.055, Rank of journal: 22/290 (Top 7.5 %) in the field of biochemistry & molecular biology.
41. Park M, Wu D, Park T, Choi CS, Li RK, **Cheng KK**, Xu A, Sweeney G. APPL1 transgenic mice are protected from high-fat diet-induced cardiac dysfunction. *Am J*

Physiol Endocrinol Metab. 2013 Oct;305(7):E795-804. Impact factor: 3.78, Rank of journal: 18/83 (Top 22.2 %) in the field of biochemistry & molecular biology.

42. Cao M, Mao Z, Kam C, Xiao N, Cao X, Shen C, **Cheng KK,** Xu A, Lee KM, Jiang L, Xia J. PICK1 and ICA69 control insulin granule trafficking and their deficiencies lead to impaired glucose tolerance. *PLoS Biol*. 2013;11(4): e1001541. **(Selected for commentary)**. Impact factor: 9.34, Rank of journal: 2/85 (Top 2.2 %) in the field of biology.
43. Chan KH, Lam KS, Cheng OY, Kwan SC, Ho WL, **Cheng KK**, Chung SK, Ho WM, Guo Y. and Xu A. Adiponectin is protective against oxidative stress induced cytotoxicity in amyloid-beta neurotoxicity, PLOS ONE. 2012, 7(12): e52354. Impact factor: 3.23, Rank of journal: 2/85 (Top 15.7 %) in the field of multidisciplinary sciences.
44. Chang J, Li Y, Huang Y, Lam KS, Hoo RL, Wong WT, **Cheng KK,** Wang Y, Vanhoutte PM, Xu A. Adiponectin prevents diabetic premature senescence of endothelial progenitor cells and promotes endothelial repair by suppressing the p38 MAP kinase/p16INK4A signaling pathway. *Diabetes*. 2010 Nov;59(11):2949-59. Impact factor: 8.095, Rank of journal: 8/128 (Top 6.25 %) in the field of endocrinology and metabolism
45. Li FYL, **Cheng KK**, Lam KS, Vanhoutte PM and Xu A. Cross-talk Between Adipose Tissue And Vasculature: Role Of Adiponectin, Acta Physiologica. 2010. Impact factor: 4.38, Rank of journal: 10/83 (Top 12.0 %) in the field of physiology.
46. Zhu W, **Cheng KK**, Vanhoutte PM, Lam KS and Xu A. Vascular effects of adiponectin: molecular mechanisms and potential therapeutic intervention. Clinical Science. 2008, 114: 361-374. Impact factor: 5.598. Rank of journal: 13/128 (Top 10.5%) in the field of medicine, research and experimental**.**
47. Yang YH, Wang Y, Lam KS, Yau MH, **Cheng KK**, Zhang J, Zhu W, Wu D and Xu A. Suppression Of The Raf/mek/erk Signaling Cascade And Inhibition Of Angiogenesis By The Carboxyl Terminus Of Angiopoietin-like Protein 4. Arteriosclerosis, Thrombosis, and Vascular Biology. USA, American Heart Association, 2008, 28: 835-840. Impact factor: 6.00. Rank of journal: 13/128 (Top 6.66%) in the field of peripheral vascular disease.

GRANT RECORD

External competitive grants (since 2013-now; eleven as principal investigator including five GRF, three HMRF and three NSFC**)**:

1. 2022-2023. General Research Fund (HK-RGC). PPM1K restricts macrophage inflammation by integrating BCAA catabolism and mitochondrial metabolism in obesity. (HKD 1,174,432). Principal investigator.
2. 2020-2022. General Research Fund (HK-RGC). Adipocyte FMO3 and its metabolic product TMAO as new mediators of adipose tissue inflammation and metabolic disorders in ageing. (HKD 1,096,303). Principal investigator.

3. 2020-2023. 國家自然科學基金-面上項目 (China). 支链氨基酸代谢障碍致胰岛β细胞功能障碍及2型糖尿病的机制探究(RMB: 590,000). Principal investigator.
4. 2019-2021. National Natural Science Foundation of China (China)- 重大研究計畫. 脂肪组织与肠道系统的“时空对话”调控糖代谢的作用与机制研究. (RMB 750,000). Principal investigator.
5. 2019-2027. Area of Excellence (HK-RGC). Institute of Metabolic Medicine. (HKD ~1,500,000). Co-investigator.
6. 2020-2022. General Research Fund (HK-RGC). The Single Transmembrane Protein β-klotho as a Novel Regulator of Insulin Secretion in Pancreatic β-cells. (HKD 1,684,895). Co-investigator.
7. 2019-2021. General Research Fund (HK-RGC). Neutrophil serine proteases as the endogenous suppressors of white adipose tissue browning and adaptive thermogenesis. (HKD 775,656). Co-investigator.
6. 2017-2019. Health Medical Research Fund (HK). Adipocyte MDM2 as a key determinant of metabolic homeostasis. (HKD 1,199,856). Principal investigator.
7. 2018-2020. General Research Fund (HK). The E3 ubiquitin ligase MDM2 regulates adipose tissue macrophage inflammation via metabolic reprogramming in obesity. (HKD 1,345,440). Principal investigator.
8. 2018-2020. Health Medical Research Fund (HK). The Oncogene MDM2 as A New Mediator of Obesity-Induced Nonalcoholic Fatty Liver Disease. (HKD 1,191,000). Principal investigator.
9. 2018-2021: RGC Collaborative Research Fund (CRF): Conversion of white into brown adipocytes as a therapeutic strategy for obesity-related metabolic and vascular complications. (HKD 7,439,996).Co-principal investigator.
10. 2019-2021. General Research Fund (HK). Neutrophil serine proteases as the endogenous suppressors of white adipose tissue browning and adaptive thermogenesis. Co-investigator. (HKD 720,000)
11. 2015-2017: General Research Fund (HK): The MDM2-p53 pathway as a novel regulator of glucose-stimulated insulin secretion in pancreatic beta cells (HKD 716,548). Principal investigator.
12. 2015-2018: National Natural Science Foundation of China (China): 衔接蛋白APPL2对胰岛β细胞生理功能的分子调节机制研究 (RMB 730,000). Principal investigator.
13. 2015-2017: Health Medical Research Fund (HK): Hypothalamic APPL2 combats against obesity by promoting adaptive thermogenesis in adipose tissues. (HKD 970,000). Principal investigator.
14. 2016-2018: General Research Fund (HK): The novel role of hematopoietic APPL1 in regulating adipose tissue inflammation and insulin resistance in obesity (HKD 1,032,327). Principal investigator.
15. 2014-2017: General Research Fund (HK): Fibroblast growth factor 21 maintains glucose homeostasis during fasting by mediating the crosstalk between liver and brain (HKD 866,032). Co-investigator.
16. 2015-2018: RGC Collaborative Research Fund (CRF): A Multi-disciplinary Approach to Investigate Vascular Dysfunction in Obesity and Diabetes: From Molecular Mechanism to Therapeutic Intervention. (HKD 8,780,850) Co-principal investigator.

17. 2016-2019. 国家重大慢病项目 (China). 1型糖尿病的遗传与免疫学发病机制研究. (RMB 1,300,000).骨干成員.

Research Mentor *(2012-present)*

PolyU- Chief supervisor for PhD students (2017-present)

1. Kelvin KL Wu, PhD student (2017-2020-Completed)
2. Huige Lin, PhD student (2017-2020-Comleted)
3. Long Kekao, PhD student (2018-2021-Completed)
4. Chen Xi, PhD student (2019-present)
5. Shama Shama, PhD student (2020-present; Hong Kong PhD fellowship)
6. Thashma P. Ganapathy (2020-present)
7. Kong Mengjie (2021-Present)

PolyU-Chief supervisor for Msc student

HKU (Chief or co-supervisor)

1. Baile Wang, PhD student (2012-2016). (Thesis title: The adaptor protein APPL2 as a novel mediator of the crosstalk between hypothalamus and white adipose tissues in regulating energy homeostasis). Chief supervisor.
2. Zhanrui Chen, MPhil (2013-2015) (Thesis title: Adaptor protein APPL1 counteracts streptozotocin-induced diabetes and beta cells loss in mice). Chief supervisor.
3. Ka Lok Wu, MPhil (2015-2016) (Thesis title: E3 ubiquitin ligase MDM2 is a critical regulator of metabolic reprogramming and macrophage polarization). Chief supervisor.
4. Lee Tze Hang, PhD (2013-2017) (Thesis title: Targeting the Fat-Liver Crosstalk for Therapeutic Intervention of Obesity-Related Metabolic Complications. Co-supervisor.
5. Zhuohao Liu PhD (2014-2018). (Thesis title: The MDM2-p53 Axis Maintains Adipose Tissue Function and Metabolic Homeostasis during Ageing). Co-supervisor.
6. Wang Lin, MPhil, MPhil (2016-2018). (Thesis title: The Role of MDM2 in the Pathogenesis of Obesity-induced Non-alcoholic Fatty Liver Disease). Co-supervisor.
7. Yawen Zhou MPhil (2017-2018). (Thesis title: The Role of Branched-chain Amino Acids and their Catabolism in Regulating Energy Metabolism via Adipose Tissue in Mice). Co-supervisor.
8. Chau Hau Tak, MPhil (HKU) (2016-2019). Co-supervisor.
9. Lee Koon Yee, MPhil (HKU) (2016-2018). Co-supervisor.
10. Hu Xin, MSc (2013-2014). Dissertation title: Pyruvate carboxylase is a downstream target of p53 in regulating insulin secretion. Co-supervised with Professor Aimin Xu.

“I am looking for self-movitated and enthusiastic candidates who are interested in pursuing PhD. studies in the field of metabolic diseases”