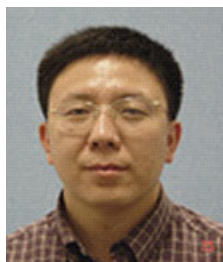


## **A: PERSONAL PROFILE**



*Telephone Number:* (852) 39179754  
*Fax number:* (852) 28162095;  
*Email address:* [amxu@hkucc.hku.hk](mailto:amxu@hkucc.hku.hk)  
*Contact address:* Dept of Medicine, The University of Hong Kong  
L8-40, 21 Sassoon Road, Pokfulam, Hong Kong

Personal website: <http://www.pharma.hku.hk/pharma/staffweb/DrAiminXu/index.php>

## **B: ACADEMIC QUALIFICATIONS**

Bachelor of Clinical Medicine (1989, Anhui Medical University, China),  
Master of Sciences & Doctor of philosophy (2000, University of Auckland, New Zealand)

## **C: PROFESSIONAL APPOINTMENTS**

1. **Chair Professor**, Department of Department of Medicine & Department of Pharmacology, HKU (May 01, 2018-present)
2. **Professor**, Department of Medicine & Department of Pharmacology, HKU (05/2010 to April 2018);
3. **Director**, State Key Laboratory of Pharmaceutical Biotechnology, the University of Hong Kong (06/2013-)
4. **Director**, HKU antibody and immunoassay services (072012-)
5. **Associate professor (tenured) and Assistant Professor**, Department of Medicine, HKU (08/2005-04/2010)
6. **Research Assistant Professor**, Department of Medicine, HKU (08/2002-07/2005)
7. **Research Fellow**, School of Biological Sciences, University of Auckland & *Senior Research Scientist*, Protomix Biotechnology Corporation, New Zealand (01/2001-08/ 2002).
8. **Postdoctoral fellow**, Department of Molecular Medicine, The University of Auckland (10/1999-12/2000)

## **D: AWARDS**

1. Faculty Research Output award, 2016
2. Croucher Senior Fellowship Award, 2015
3. Outstanding Young Researcher, University of Hong Kong, 2006
4. Best doctoral Thesis, University of Auckland, 2000

## **E: RESEARCH HIGHLIGHT**

My research is dedicated to delineate the molecular basis that links obesity with diabetes and cardiovascular disease, with particular focuses on adipokines released from fat and liver tissues. Our team is one of the world leading groups in the field of adiponectin, a major fat-derived insulin-sensitizing adipokine with anti-diabetic, anti-atherosclerotic and anti-inflammatory properties. Our research work contributed substantially to the understanding of the molecular structure, signaling pathways and physiological functions of adiponectin. Several key findings reported from our laboratory, including the posttranslational modification in regulating oligomerization and secretion of adiponectin, the sexual dimorphism of adiponectin, and the protective role of adiponectin against obesity-related fatty liver and vascular dysfunction, have been widely accepted and extensively cited in this field.

My laboratory also identified and characterized several other novel adipokines and hepatokines, including adipocyte fatty acid binding protein (A-FABP), FGF21, Angptl4 and lipocalin-2. In particular, we have discovered the secreted form of A-FABP, and have demonstrated its association with obesity-related metabolic syndrome, diabetes and atherosclerosis in humans. The discovery of these new biomarkers by our group uncovers novel molecular links between obesity and its metabolic and cardiovascular complications, and provides new targets for therapeutic intervention and early diagnosis of diabetes and cardiovascular disease.

### **F: PUBLICATION LISTS**

**Total number: 285 (251 original papers, 34 invited reviews and book chapters)**

**Google Scholar: H-index 79; total citation, ~24,600**

#### **Year 2018**

1. Pan X, Shao Y, Wu F, Wang Y, Xiong R, Zheng J, Tian H, Wang B, Wang Y, Zhang Y, Han Z, Qu A, Xu H, Lu A, Yang T, Li X, **Xu A**, Du J, Lin Z. FGF21 Prevents Angiotensin II-Induced Hypertension and Vascular Dysfunction by Activation of ACE2/Angiotensin-(1-7) Axis in Mice. **Cell Metab.** 2018 Jun 5;27(6):1323-1337. **(IF=20.565)**
2. Zhang F, Hu Z, Li G, Huo S, Ma F, Cui A, Xue Y, Han Y, Gong Q, Gao J, Bian H, Meng Z, Wu H, Long G, Tan Y, Zhang Y, Lin X, Gao X, **Xu A**, Li Y. Hepatic CREBZF couples insulin to lipogenesis by inhibiting insig activity and contributes to hepatic steatosis in diet-induced insulin-resistant mice. **Hepatology.** 2018 Apr 10. **(IF=14.079)**
3. Sun WY, Bai B, Luo C, Yang K, Li D, Wu D, Félétou M, Villeneuve N, Zhou Y, Yang J, **Xu A**, Vanhoutte PM, Wang Y. Lipocalin-2 derived from adipose tissue mediates aldosterone-induced renal injury. **JCI Insight.** 2018 Sep 6; 3(17). **(IF=13.251)**
4. Ji X, Zhou P, Zhong L, **Xu A**, Tsang ACO, Chan PKL. Smart Surgical Catheter for C-Reactive Protein Sensing Based on an Imperceptible Organic Transistor. **Adv Sci (Weinh).** 2018 May 2;5(6):1701053. **(IF=12.441)**
5. Li H, Wu G, Fang Q, Zhang M, Hui X, Sheng B, Wu L, Bao Y, Li P, **Xu A\***, Jia W. Fibroblast growth factor 21 increases insulin sensitivity through specific expansion of subcutaneous fat. **Nat Commun.** 2018 Jan 18;9(1):272. **(IF=12.353)**
6. 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). **(IF=8.749)**
7. Lee CH, Cheung CYY, Woo YC, Lui DTW, Yuen MMA, Fong CHY, Chow WS, **Xu A**, Lam KSL. Circulating Adipocyte Fatty Acid-Binding Protein Concentrations Predict Multiple Mortality Outcomes among Men and Women with Diabetes. **Clin Chem.** 2018 Jul 18. **(IF=8.636)**
8. 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. **(IF=7.273)**
9. Nie T, Zhao S, Mao L, Yang Y, Sun W, Lin X, Liu S, Li K, Sun Y, Li P, Zhou Z, Lin S, Hui X, **Xu A**, Ma CW, Xu Y, Wang C, Dunbar PR, Wu D. The natural compound, formononetin, extracted from *Astragalus membranaceus* increases adipocyte thermogenesis by modulating PPAR $\gamma$  activity. **Br J Pharmacol.** 2018 May;175(9):1439-1450. **(IF=6.81)**
10. Duan L, Wei L, Tian Y, Zhang Z, Hu P, Wei Q, Liu S, Zhang J, Wang Y, Li D, Yang W, Zong R, Xian P, Han C, Bao X, Zhao F, Feng J, Liu W, Cao W, Zhou G, Zhu C, Yu F, Yang W, Meng Y, Wang J, Chen X, Wang Y, Shen B, Zhao B, Wan J, Zhang F, Zhao G, **Xu A**, Zhang X, Liu J, Zuo X, Wang K. Novel Susceptibility Loci for Moyamoya Disease Revealed by a Genome-Wide Association Study. **Stroke.** 2018 Jan;49(1):11-18. **(IF=6.239)**

11. Guo Y, Xu C, We Man A, Bai B, Luo C, Huang Y, **Xu A**, Vanhoutte PM, Wang Y. Endothelial SIRT1 prevents age-induced impairment of vasodilator responses by enhancing the expression and activity of soluble guanylyl cyclase in smooth muscle cells. **Cardiovasc Res.** 2018 Aug 27. (IF=5.878)
12. Ying F, Cai Y, Wong HK, Chen XY, Huang IB, Vanhoutte PM, Xia Z, **Xu A**, Tang EHC. EP4 emerges as a novel regulator of bile acid synthesis and its activation protects against hypercholesterolemia. **Biochim Biophys Acta.** 2018 Sep;1863(9):1029-1040. (IF=5.34)
13. 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. (IF=5.076)
14. Gao C, Du Q, Li W, Deng R, Wang Q, **Xu A**, Shen J. Baicalin Modulates APPL2/Glucocorticoid Receptor Signaling Cascade, Promotes Neurogenesis, and Attenuates Emotional and Olfactory Dysfunctions in Chronic Corticosterone-Induced Depression. **Mol Neurobiol.** 2018 Apr 19. (IF=5.076)
15. Wang Y, Mak JCW, Lee MYK, **Xu A**, Ip MSM. Low-Frequency Intermittent Hypoxia Promotes Subcutaneous Adipogenic Differentiation. **Oxid Med Cell Longev.** 2018 Mar 12; 2018:4501757. (IF=4.593)
16. Huang J, Xiao Y, Zheng P, Zhou W, Wang Y, Huang G, **Xu A**, Zhou Z. Distinct neutrophil counts and functions in patients with newly diagnosed type 1 diabetes, latent autoimmune diabetes in adults, and type 2 diabetes. **Diabetes Metab Res Rev.** 2018 Aug 19:e3064. (IF=3.904)
17. Liu JJ, Liu S, Choo RWM, Wee SL, **Xu A**, Lim SC. Sex modulates the association of fibroblast growth factor 21 with end-stage renal disease in Asian people with Type 2 diabetes: a 6.3-year prospective cohort study. **Diabet Med.** 2018 Jul; 35(7):880-886. (IF=3.132)
18. Zhang C, Li T, Chiu KY, Wen C, **Xu A**, Yan CH. FABP4 as a biomarker for knee osteoarthritis. **Biomark Med.** 2018 Feb; 12(2):107-118. (IF=2.346)
19. Baretella O, **Xu A**, Vanhoutte PM. No Protective Effect of Constitutive Activation of AMPK in Endothelial Cells on Vascular Function in Aged Obese Mice but Augmented  $\alpha$ 1-Adrenergic Contractions in Renal Arteries Reversible by Weight Loss. **J Vasc Res.** 2018 Jul 11; 55(4):189-202. (IF=2.029)

#### Year 2017

20. Huang Z, Zhong L, Lee JTH, Zhang J, Wu D, Geng L, Wang Y, Wong CM, Xu A. The FGF21-CCL11 Axis Mediates Being of White Adipose Tissues by Coupling Sympathetic Nervous System to Type 2 Immunity. **Cell Metabolism**, 2017, 26: 493-508. (IF=20.164)
21. Shu L, Hoo RL, Wu X, Pan Y, Lee IP, Cheong LY, Bornstein SR, Rong X, Guo J, **Xu A\***. A-FABP mediates adaptive thermogenesis by promoting intracellular activation of thyroid hormones in brown adipocytes. **Nat Communications.** 2017 Jan 27;8:14147. doi: 10.1038/ncomms14147. (IF=12.124) (Times Cited: 1)
22. Hui X, Zhang M, Gu P, Li K, Gao Y, Wu D, Wang Y, **Xu A\***. Adipocyte SIRT1 controls systemic insulin sensitivity by modulating macrophages in adipose tissue. **EMBO Rep.** 2017 Apr;18(4):645-657. (IF=8.568) (Times Cited:2)
23. Yang JK, Wang YY, Liu C, Shi TT, Lu J, Cao X, Yang FY, Feng JP, Chen C, Ji LN, **Xu A\***. Urine Proteome Specific for Eye Damage Can Predict Kidney Damage in Patients With Type 2 Diabetes: A Case-Control and a 5.3-Year Prospective Cohort Study. **Diabetes Care.** 2017, Feb;40(2):253-260. (IF=11.857) (Times Cited:1)
24. Jiang X, Zhou Y, Wu KK, Chen Z, **Xu A\***, Cheng KK. APPL1 prevents pancreatic beta cell death and inflammation by dampening NF $\kappa$ B activation in a mouse model of type 1 diabetes. **Diabetologia.** 2017 Mar;60(3):464-474. (IF=6.08)

25. Mao L, Nie B, Nie T, Hui X, Gao X, Lin X, Liu X, Xu Y, Tang X, Yuan R, Li K, Li P, Ding K, Wang Y, **Xu A**, Fei J, Han W, Liu P, Madsen L, Kristiansen K, Zhou Z, Ding S, Wu D. Visualization and Quantification of Browning Using a Ucp1-2A-Luciferase Knock-in Mouse Model. **Diabetes**. 2017 Feb;66(2):407-417. (IF=8.684)
26. Chen J, Li J, Yiu JHC, Lam JKW, Wong CM, Dorweiler B, **Xu A**,\* Woo CW. TRIF-dependent Toll-like receptor signaling suppresses Scd1 transcription in hepatocytes and prevents diet-induced hepatic steatosis. **Science Signal**. 2017 Aug 8;10(491). (IF=6.496)
27. Cheang WS, Wong WT, Zhao L, Xu J, Wang L, Lau CW, Chen ZY, Ma RC, **Xu A**, Wang N, Tian XY, Huang Y. PPAR $\delta$  Is Required for Exercise to Attenuate Endoplasmic Reticulum Stress and Endothelial Dysfunction in Diabetic Mice. **Diabetes**. 2017 Feb;66(2):519-528. doi: 10.2337/db15-1657. (IF=8.684) (Times Cited: 4)
28. Cheung CY, Tang CS, Xu A, Lee CH, Au KW, Xu L, Fong CH, Kwok KH, Chow WS, Woo YC, Yuen M, Cherny SS, Hai J, Cheung BM, Tan K, Lam TH, Tse HF, Sham PC, Lam KS. An Exome-Chip Association Analysis in Chinese Reveals a Functional Missense Variant of Gckr that Regulates Fgf21 Levels. **Diabetes**. 2017 Apr 6. pii: db161384. doi: 10.2337/db16-1384 (IF=8.684)
29. Nie B, Nie T, Hui X, Gu P, Mao L, Li K, Yuan R, Zheng J, Wang H, Li K, Tang S, Zhang Y, Xu T, **Xu A**\*, Wu D, Ding S. Brown Adipogenic Reprogramming Induced by a Small Molecule. **Cell Rep**. 2017 Jan 17;18(3):624-635. (IF=8.282) (Times cited: 1)
30. 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. doi: 10.1038/srep40657. (IF=4.259)
31. Cheung CY, Tang CS, **Xu A**, Lee CH, Thomas GN, Cheng KK, Jiang CQ, Lam TH, Tse HF, Sham PC, Lam KS. Exome-chip association analysis reveals an Asian-specific missense variant in PAX4 associated with type 2 diabetes in Chinese individuals. **Diabetologia**. 2017 Jan;60(1):107-115. (IF=6.08) (Times cited: 1)
32. Wang XQ, Lo CM, Chen L, Ngan ES, **Xu A**, Poon RY. CDK1-PDK1-PI3K/Akt signaling pathway regulates embryonic and induced pluripotency. **Cell Death Differ**. 2017 Jan;24(1):38-48. doi: 10.1038/cdd.2016.84. (IF=8.339) (Times cited: 3)
33. Woo YC, Lee CH, Fong CH, **Xu A**, Tso AW, Cheung BM, Lam KS. Serum fibroblast growth factor 21 is a superior biomarker to other adipokines in predicting incident diabetes. **Clin Endocrinol (Oxf)**. 2017 Jan;86(1):37-43. doi: 10.1111/cen.13229. (IF=5.455) (Times cited: 8)
34. von Loeffelholz C, Bornstein SR, Lau G, **Xu A**, Schulz-Menger J, Exner L, Haufe S, Jordan J, Engeli S, Birkenfeld AL. ANGPTL8 (Betatrophin) is Expressed in Visceral Adipose Tissue and Relates to Human Hepatic Steatosis in Two Independent Clinical Collectives. **Horm Metab Res**. 2017 Mar 28. doi: 10.1055/s-0043-102950. [Epub ahead of print] (IF=2.268)
35. Chen DL, Brown R, Liess C, Poljak A, **Xu A**, Zhang J, Trenell M, Jenkins A, Chisholm D, Samocha-Bonet D, Macefield VG, Greenfield JR. Muscle Sympathetic Nerve Activity Is Associated with Liver Insulin Sensitivity in Obese Non-Diabetic Men. **Front Physiol**. 2017 Feb 28;8:101. doi: 10.3389/fphys.2017.00101. (IF=4.134)
36. Jo E, Li S, Liang Q, Zhang X, Wang H, Herbert TP, Jenkins TA, **Xu A**, Ye JM.. Chronic activation of PPAR $\alpha$  with fenofibrate reduces autophagic proteins in the liver of mice independent of FGF21. **PLoS One**. 2017 Apr 19;12(4):e0173676. (IF=2.806) (Times cited: 1)

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37. Ong KL, O'Connell R, Jenkins AJ, **Xu A**, Sullivan DR, Barter PJ, Scott RS, Taskinen MR, Waldman B, Colman PG, Best JD, Simes JR, Rye KA, Keech AC; FIELD study investigators. Baseline Circulating FGF21 Concentrations and Increase after Fenofibrate Treatment Predict More Rapid Glycemic Progression in Type 2 Diabetes: Results from the FIELD Study. **Clinical Chemistry**. 2017 Jul;63(7):1261-1270. (IF=8.008)
38. Lee CH, Woo YC, Chow WS, Cheung CYY, Fong CHY, Yuen MMA, **Xu A**, Tse HF, Lam KSL. Role of Circulating Fibroblast Growth Factor 21 Measurement in Primary Prevention of Coronary Heart Disease Among Chinese Patients With Type 2 Diabetes Mellitus. **J Am Heart Assoc**. 2017 Jun 6;6(6). (IF=5.117)
39. Cheung AKL, Kwok HY, Huang Y, Chen M, Mo Y, Wu X, Lam KS, Kong HK, Lau TCK, Zhou J, Li J, Cheng L, Shang H, Zhou B, Wu H, **Xu A**, Yuen KY, Chen Z. Gut-homing  $\Delta 42$ PD1+V $\delta$ 2 T cells promote innate mucosal damage via TLR4 during acute HIV type 1 infection. **Nature Microbiology**. 2017 Oct;2(10):1389-1402
40. Baretella O, Chung SK, **Xu A**, Vanhoutte PM. Paradoxical lack of increase in endothelin-1 levels in obese mice - possible role of endothelin-B receptors. **Acta Pharmacol Sin**. 2017 Dec; 38(12):1699-1700. (IF=3.562)
41. Yang K, Deng HB, Man AWC, Song E, Zhang J, Luo C, Cheung BMY, Yuen KY, Jensen PS, Irmukhamedov A, Elie AGIM, Vanhoutte PM, **Xu A**, De Mey JGR, Wang Y. Measuring non-polyaminated lipocalin-2 for cardiometabolic risk assessment. **ESC Heart Fail**. 2017 Nov; 4(4):563-575. (IF=1.14)
42. Zhu C, Zhang W, Liu J, Mu B, Zhang F, Lai N, Zhou J, **Xu A**, Li Y. Marine collagen peptides reduce endothelial cell injury in diabetic rats by inhibiting apoptosis and the expression of coupling factor 6 and microparticles. **Mol Med Rep**. 2017 Oct; 16(4):3947-3957. (IF=1.922)
43. Zhang K, Guo Y, Ge Z, Zhang Z, Da Y, Li W, Zhang Z, Xue Z, Li Y, Ren Y, Jia L, Chan KH, Yang F, Yan J, Yao Z, **Xu A**, Zhang R. Adiponectin Suppresses T Helper 17 Cell Differentiation and Limits Autoimmune CNS Inflammation via the SIRT1/PPAR $\gamma$ /ROR $\gamma$ t Pathway. **Mol Neurobiol**. 2017 Sep; 54(7):4908-4920. (IF=5.076)
44. Wu CX, **Xu A**, Zhang CC, Olson P, Chen L, Lee TK, Cheung TT, Lo CM, Wang XQ. Notch Inhibitor PF-03084014 Inhibits Hepatocellular Carcinoma Growth and Metastasis via Suppression of Cancer Stemness due to Reduced Activation of Notch1-Stat3. **Mol Cancer Ther**. 2017 Aug; 16(8):1531-1543. (IF=5.365)
45. Zhang J, Li H, Zhou H, Fang L, Xu J, Yan H, Chen S, Song Q, Zhang Y, **Xu A**, Fang Q, Ye Y, Jia W. Lowered fasting chenodeoxycholic acid correlated with the decrease of fibroblast growth factor 19 in Chinese subjects with impaired fasting glucose. **Sci Rep**. 2017 Jul 20; 7(1):6042. (IF=4.122)
46. Zhu C, Zhang W, Mu B, Zhang F, Lai N, Zhou J, **Xu A**, Liu J, Li Y. Effects of marine collagen peptides on glucose metabolism and insulin resistance in type 2 diabetic rats. **J Food Sci Technol**. 2017 Jul; 54(8):2260-2269. (IF=1.797)
47. Cao G, Wang Q, Huang W, Tong J, Ye D, He Y, Liu Z, Tang X, Cheng H, Wen Q, Li D, Chau HT, Wen Y, Zhong H, Meng Z, Liu H, Wu Z, Zhao L, Flavell RA, Zhou H, **Xu A**, Yang H, Yin Z. Long-term consumption of caffeine-free high sucrose cola beverages aggravates the pathogenesis of EAE in mice. **Cell Discov**. 2017 Jun 20; 3: 17020. (IF=4.462)
48. Song E, Jahng JW, Chong LP, Sung HK, Han M, Luo C, Wu D, Boo S, Hinz B, Cooper MA, Robertson AA, Berger T, Mak TW, George I, Schulze PC, Wang Y, **Xu A**, Sweeney G. Lipocalin-2 induces NLRP3 inflammasome activation via HMGB1 induced TLR4 signaling in heart tissue of mice under pressure overload challenge. **Am J Transl Res**. 2017 Jun 15; 9(6):2723-2735. (IF=3.061)

49. Jo E, Li S, Liang Q, Zhang X, Wang H, Herbert TP, Jenkins TA, **Xu A**, Ye JM. Chronic activation of PPAR $\alpha$  with fenofibrate reduces autophagic proteins in the liver of mice independent of FGF21. **PLoS One**. 2017 Apr 19; 12(4):e0173676. (IF=2.766)
50. Baretella O, Chung SK, **Xu A**, Vanhoutte PM. Endothelial overexpression of endothelin-1 modulates aortic, carotid, iliac and renal arterial responses in obese mice. **Acta Pharmacol Sin**. 2017 Apr; 38(4):498-512. (IF=3.562)
51. Cheng M, Liu X, Yang M, Han L, **Xu A**, Huang Q. Computational analyses of type 2 diabetes-associated loci identified by genome-wide association studies. **J Diabetes**. 2017 Apr; 9(4):362-377. (IF=3.213)
52. Chan JS, Li A, Ng SM, Ho RT, **Xu A**, Yao TJ, Wang XM, So KF, Chan CL. Adiponectin Potentially Contributes to the Antidepressive Effects of Baduanjin Qigong Exercise in Women With Chronic Fatigue Syndrome-Like Illness. **Cell Transplant**. 2017 Mar 13; 26(3):493-501. (IF=2.885)
53. Ye D, Yang K, Zang S, Lin Z, Chau HT, Wang Y, Zhang J, Shi J, **Xu A\***, Lin S, Wang Y. Corrigendum to "Lipocalin-2 mediates non-alcoholic steatohepatitis by promoting neutrophil-macrophage crosstalk via the induction of CXCR2". **J Hepatol**. 2017 Mar; 66(3):669. (IF=14.911)
54. Hua Y, Liang C, Zhu J, Miao C, Yu Y, **Xu A**, Zhang J, Li P, Li S, Bao M, Yang J, Qin C, Wang Z. Expression of lactate dehydrogenase C correlates with poor prognosis in renal cell carcinoma. **Tumour Biol**. 2017 Mar; 39(3):1010428317695968. (IF=3.65)

#### Year 2016

55. Li J, Lin S, Vanhoutte PM, Woo CW, **Xu A\***. Akkermansia Muciniphila Protects Against Atherosclerosis by Preventing Metabolic Endotoxemia-Induced Inflammation in Apoe<sup>-/-</sup> Mice. **Circulation**. 2016 Jun 14;133(24):2434-46. (IF=19.309) (Times cited: 40)
56. Li X, Cheng KK, Liu Z, Yang JK, Wang B, Jiang X, Zhou Y, Hallenborg P, Hoo RL, Lam KS, Ikeda Y, Gao X, **Xu A\***. The MDM2-p53-pyruvate carboxylase signalling axis couples mitochondrial metabolism to glucose-stimulated insulin secretion in pancreatic  $\beta$ -cells. **Nature Communications**. 2016 Jun 6;7:11740. doi: 10.1038/ncomms11740. (IF=12.124) (Times cited: 4)
57. Ye D, Yang K, Zang S, Lin Z, Chau HT, Wang Y, Zhang J, Shi J, **Xu A\***, Lin S, Wang Y. Lipocalin-2 Mediates Nonalcoholic Steatohepatitis by Promoting Neutrophil-Macrophage Crosstalk via The Induction of CXCR2. **Journal of Hepatol**. 2016 Nov;65(5):988-997.. (IF=12.486) (Times cited: 1)
58. Li CX, Ling CC, Shao Y, **Xu A**, Li XC, Ng KT, Liu XB, Ma YY, Qi X, Liu H, Liu J, Yeung OW, Yang XX, Liu QS, Lam YF, Zhai Y, Lo CM, Man K. CXCL10/CXCR3 signaling mobilized-regulatory T cells promote liver tumor recurrence after transplantation. **J Hepatol**. 2016 2016 Nov;65(5):944-952 (IF=12.486) (Times cited: 5)
59. Zhao Y, Gao P, Sun F, Li Q, Chen J, Yu H, Li L, Wei X, He H, Lu Z, Wei X, Wang B, Cui Y, Xiong S, Shang Q, **Xu A**, Huang Y, Liu D, Zhu Z. Sodium Intake Regulates Glucose Homeostasis through the PPAR $\delta$ /Adiponectin-Mediated SGLT2 Pathway. **Cell Metabolism**. 2016 Apr 12;23(4):699-711 (IF=18.164) (Times cited: 13)
60. Gong Q, Hu Z, Zhang F, Cui A, Chen X, Jiang H, Gao J, Chen X, Han Y, Liang Q, Ye D, Shi L, Chin YE, Wang Y, Xiao H, Guo F, Liu Y, Zang M, **Xu A**, Li Y. Fibroblast growth factor 21 improves hepatic insulin sensitivity by inhibiting mammalian target of rapamycin complex 1 in mice. **Hepatology**. 2016 Feb 29. doi: 10.1002/hep.28523. (IF=13.246) (Times cited: 20)

61. Jang H, Lee GY, Selby CP, Lee G, Jeon YG, Lee JH, Cheng KK, Titchenell P, Birnbaum MJ, **Xu A**, Sancar A, Kim JB. SREBP1c-CRY1 signalling represses hepatic glucose production by promoting FOXO1 degradation during refeeding. **Nat Communications**. 2016 Jul 14;7:12180. doi: 10.1038/ncomms12180. (IF=12.124) (Times cited: 9)
62. Li H, Yao W, Liu Z, **Xu A**, Huang Y, Ma XL, Irwin MG, Xia Z. Hyperglycemia Abrogates Ischemic Postconditioning Cardioprotection by Impairing AdipoR1/Caveolin-3/STAT3 Signaling in Diabetic Rats. **Diabetes**. 2016 Apr;65(4):942-55 (IF=8.684) (Times cited: 21)
63. Tonks KT, Coster AC, Christopher MJ, Chaudhuri R, **Xu A**, Gagnon-Bartsch J, Chisholm DJ, James DE, Meikle PJ, Greenfield JR, Samocha-Bonet D. Skeletal muscle and plasma lipidomic signatures of insulin resistance and overweight/obesity in humans. **Obesity** (Silver Spring). 2016 Apr;24(4):908-16. (IF=6.3) (Times cited: 17)
64. Ye D, Li H, Wang Y, Jia W, Zhou J, Fan J, Man K, Lo C, Wong C, Wang Y, Lam KS, **Xu A\***. Circulating Fibroblast Growth Factor 21 Is A Sensitive Biomarker for Severe Ischemia/reperfusion Injury in Patients with Liver Transplantation. **Scientific Reports**. 2016 Jan 25;6:19776. doi: 10.1038/srep19776. (IF=4.259) (Times cited: 1)
65. Lee JT, Huang Z, Pan K, Zhang HJ, Woo CW, **Xu A**, Wong CM. Adipose-derived lipocalin 14 alleviates hyperglycaemia by suppressing both adipocyte glycerol efflux and hepatic gluconeogenesis in mice. **Diabetologia**. 2016 Mar;59(3):604-13. (IF=6.08) (Times cited: 2)
66. Kwok KH, Cheng KK, Hoo RL, Ye D, **Xu A\***, Lam KS. Adipose-specific inactivation of JNK alleviates atherosclerosis in apoE-deficient mice. **Clin Sci (Lond)**. 2016 Nov 1;130(22):2087-2100. (IF=4.936) (Times cited: 2)
67. Detremmerie CM, Chen Z, Li Z, Alkharfy KM, Leung SW, **Xu A**, Gao Y, Vanhoutte PM. Endothelium-Dependent Contractions of Isolated Arteries to Thymoquinone Require Biased Activity of Soluble Guanylyl Cyclase with Subsequent Cyclic IMP Production. **J Pharmacol Exp Ther**. 2016 Sep;358(3):558-68. (IF=3.867) (Times cited: 4)
68. Kopprasch S, Dheban S, Schuhmann K, **Xu A**, Schulte KM, Simeonovic CJ, Schwarz PE, Bornstein SR, Shevchenko A, Graessler J. Detection of Independent Associations of Plasma Lipidomic Parameters with Insulin Sensitivity Indices Using Data Mining Methodology. **PLoS One**. 2016 Oct 13;11(10):e0164173. (IF=2.806) (Times cited: 5)
69. Elie AG, Jensen PS, Nissen KD, Geraets IM, **Xu A**, Song E, Hansen ML, Irmukhamedov A, Rasmussen LM, Wang Y, De Mey JG. Adipokine Imbalance in the Pericardial Cavity of Cardiac and Vascular Disease Patients. **PLoS One**. 2016 May 3;11(5):e0154693. (IF=2.806) (Times cited: 3)
70. Zhang Y, Yu Z, Jiang D, Liang X, Liao S, Zhang Z, Yue W, Li X, Chiu SM, Chai YH, Liang Y, Chow Y, Han S, **Xu A**, Tse HF, Lian Q. iPSC-MSCs with High Intrinsic MIRO1 and Sensitivity to TNF- $\alpha$  Yield Efficacious Mitochondrial Transfer to Rescue Anthracycline-Induced Cardiomyopathy. **Stem Cell Reports**. 2016 Oct 11;7(4):749-763. (IF=7.338) (Times cited: 11)
71. 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. (IF=6.78) (Times cited: 12)

**Year 2015**

72. Hui X, Gu P, Zhang J, Nie T, Pan Y, Wu D, Feng T, Zhong C, Wang Y, Lam KS, **Xu A\***, Adiponectin Enhances Cold-Induced Browning of Subcutaneous Adipose Tissue via Promoting M2 Macrophage Proliferation. *Cell Metabolism.* 2015 Aug 4;22(2):279-90 (IF=18.164) (Times cited: 74)
73. Lin Z, Pan X, Wu F, Ye D, Zhang Y, Wang Y, Jin L, Lian Q, Huang Y, Ding H, Triggle C, Wang K, Li X, **Xu A\***. Fibroblast Growth Factor 21 Prevents Atherosclerosis by Suppression of Hepatic Sterol Regulatory Element-Binding Protein-2 and Induction of Adiponectin in Mice. *Circulation*, 2015 May 26;131(21):1861-71. (IF=19.309) (Times cited: 62)
74. Xu A\* and Sweeney G, Emerging role of autophagy in mediating widespread actions of ADIPOQ/adiponectin. *Autophagy.* 2015 Apr 3;11(4):723-4. (IF=8.593) (Times cited: 7)
75. Kim AY, Park YJ, Pan X, Shin KC, Kwak SH, Bassas AF, Sallam RM, Park KS, Alfadda AA, Xu A, Kim JB. Obesity-induced hypermethylation of the adiponectin gene induces insulin resistance. *Nature Communications*, 2015 Jul 3;6:7585. doi: 10.1038/ncomms8585. (IF=12.124)
76. Tang CS, Zhang H, Cheung CY, ..., Xu A, Eugene Chen Y, J, Lam TH, Ganesh SK, Huo Y, Sham PC, Lam KS, Willer CJ, Tse HF, Gao W. Exome-wide association analysis reveals novel coding sequence variants associated with lipid traits in Chinese. *Nature Communications*. 2015 Dec 22;6:10206. doi: 10.1038/ncomms10206. (IF=12.124) (Times cited: 16)
77. Tang EHC, Cai Y, Wong CK, Rocha VZ, Sukhova GK, Shimizu K, Xuan G, Vanhoutte PM, Libby P, **Xu A\***. Activation of prostaglandin e2 -ep4 signaling reduces chemokine production in adipose tissue. *Journal of Lipid Research.* 2015 Feb 1; 56(2):358-368. (IF=4.81) (Times cited: 13)
78. Liu Y, Palanivel R, Rai E, Park M, Gabor TV, Scheid MP, **Xu A**, Sweeney G. Adiponectin stimulates autophagy and reduces oxidative stress to enhance insulin sensitivity during high-fat diet feeding in Mice. *Diabetes.* 2015 Jan 1;64(1):36-48 (IF=8.684) (Times cited: 70)
79. Xu C, Cai Y, Fan P, Bai B, Chen J, Deng HB, Che CM, Xu A, Vanhoutte PM, Wang Y. Calorie Restriction Prevents Metabolic Aging Caused by Abnormal SIRT1 Function in Adipose Tissues. *Diabetes.* 2015 May;64(5):1576-90. (IF=8.684) (Times cited: 10)
80. Lee CH, Hui EYL, Woo YC, Yeung CY, Chow WS, Yuen MMA, Fong CHY, **Xu A\***, Lam KSL. Circulating fibroblast growth factor 21 levels predict progressive kidney disease in subjects with type 2 diabetes and normoalbuminuria. *Journal of Clinical Endocrinology and Metabolism.* 2015 Apr 1; 100(4):1368-1375. ((IF=5.455) (Times cited: 30)
81. Ong KL, Januszewski AS, O'Connell R, Jenkins AJ, **Xu A**, Sullivan DR, Barter PJ, Hung WT, Scott RS, Taskinen MR, Keech AC, Rye KA. The relationship of fibroblast growth factor 21 with cardiovascular outcome events in the Fenofibrate Intervention and Event Lowering in Diabetes study. *Diabetologia.* 2015 Mar;58(3):464-73. (IF=6.08) (Times cited: 29)
82. Ong KL, Januszewski AS, **Xu A**, Sullivan DR, Barter PJ, Scott RS, Taskinen MR, Rye KA, Keech AC; FIELD study investigators. Relationship of fibroblast growth factor 21 with baseline and new on-study microvascular disease in the Fenofibrate Intervention and Event Lowering in Diabetes study. *Diabetologia.* 2015 Jun 9. [Epub ahead of print] (IF=6.08) (Times cited: 9)
83. Dong Z, Su L, Esmaili S, Iseli TJ, Ramezani-Moghadam M, Hu L, **Xu A**, George J, Wang J.



- Adiponectin attenuates liver fibrosis by inducing nitric oxide production of hepatic stellate cells. **J Mol Med**. 2015 Jul 9. [Epub ahead of print] (IF=4.686) (Times cited: 13)
84. Xiao Y, Liu L, **Xu A**, Zhou P, Long Z, Tu Y, Chen X, Tang W, Huang G, Zhou Z. Serum fibroblast growth factor 21 levels are related to subclinical atherosclerosis in patients with type 2 diabetes. **Cardiovasc Diabetol**. 2015 Jun 6;14:72. (IF=4.752) (Times cited: 27)
85. Liu Y, Sen S, Wannaiampikul S, Palanivel R, Hoo RL, Isserlin R, Bader GD, Deshaies Y, Xu A, Sweeney G. Metabolomic profiling in liver of adiponectin knockout mice uncovers lysophospholipid metabolism as an important target of adiponectin action. **Biochem J**. 2015 Apr 27. [Epub ahead of print] (IF=3.797) (Times cited: 4)
86. Chan SM, Zeng XY, Sun RQ, Jo E, Zhou X, Wang H, Li S, **Xu A**, Watt MJ, Ye JM. Fenofibrate insulates diacylglycerol in lipid droplet/ER and preserves insulin signaling transduction in the liver of high fat fed mice. **Biochim Biophys Acta**. 2015 Jul;1852(7):1511-9. (IF=5.34) (Times cited: 13)
87. Liu Y, Wu G, Han L, Zhao K, Qu Y, **Xu A**, Huang Q. Association of the FABP2 Ala54Thr polymorphism with type 2 diabetes, obesity, and metabolic syndrome: A population-based case-control study and a systematic meta-analysis. **Genetics and Molecular Research**. 2015 Feb 6; 14(1): 1155-1168. (IF=1.013) (Times cited: 8)
88. Yau SY, Li A, **Xu A\***, So KF. Fat cell-secreted adiponectin mediates physical exercise-induced hippocampal neurogenesis: An alternative anti-depressive treatment? **Neural Regeneration Research**. 2015 Jan 1; 10(1):7-9. (IF=1.769) (Times cited: 9)
89. Zhao Y, Flavahan S, Leung SW, **Xu A**, Vanhoutte PM, Flavahan NA. Elevated pressure causes endothelial dysfunction in mouse carotid arteries by increasing local angiotensin signaling. **Am J Physiol Heart Circ Physiol**. 2015 Feb 15;308(4):H358-63. (IF=3.348) (Times cited: 11)
90. Nie T, Hui X, Gao X, Nie B, Mao L, Tang X, Yuan R, Li K, Li P, **Xu A**, Liu P, Ding S, Han W, Cooper GJ, Wu D. Conversion of non-adipogenic fibroblasts into adipocytes by a defined hormone mixture. **Biochem J**. 2015 May 1;467(3):487-94. doi: 10.1042/BJ20140727. (IF=3.797) (Times cited: 1)
91. Cai Y, Manio MM, Leung GPH, **Xu A**, Tang EHC, Vanhoutte PM. Thyroid hormone affects both endothelial and vascular smooth muscle cells in rat arteries. **Eur J Pharmacol**. 2015 Jan 15;747:18-28. (IF=2.896) (Times cited: 11)
92. Ramezani-Moghadam M, Wang J, Ho V, Iseli TJ, Alzahrani B, Xu A, Van der Poorten D, Qiao L, George J, Hebbard L. Adiponectin reduces hepatic stellate cell migration by promoting tissue inhibitor of metalloproteinase-1 (TIMP-1) secretion. **J Biol Chem**. 2015 Feb 27;290(9):5533-42. (IF=4.125) (Times cited: 17)
93. Peng J, Tsang JY, Ho DH, Zhang R, Xiao H, Li D, Zhu J, Wang F, Bian Z, Lui VC, **Xu A**, Tam PK, Lamb JR, Xia H, Chen Y. Modulatory effects of adiponectin on the polarization of tumor-associated macrophages. **Int J Cancer**. 2015 Feb 18. doi: 10.1002/ijc.29485. [Epub ahead of print] (IF=6.513) (Times cited: 5)

#### Year 2014

1. Ye D, Wang Y, Li H, Jia W, Man K, Lo CM, Wang Y, Lam KSL, **Xu A\***. Fibroblast growth factor 21 protects against acetaminophen-induced hepatotoxicity by potentiating peroxisome proliferator-activated receptor coactivator protein-1 $\alpha$ -mediated antioxidant capacity in mice. **Hepatology**. 2014 Sep;60(3):977-989 (IF=11.246) (Times cited: 41)
2. Yau SY, Li A, Hoo RL, Ching YP, Christie BR, Lee TM, **Xu A\*** (co-corresponding), So KF. Physical exercise-induced hippocampal neurogenesis and antidepressant effects are mediated by the adipocyte hormone adiponectin. **Proc Natl Acad Sci U S A**. 2014 Nov 4;111(44):15810-5.. (IF=9.661) (Times cited: 74)
3. Wang Y, Xiao Y, Zhong L, Ye D, Zhang J, Tu Y, Bornstein SR, Zhou Z, Lam KS, **Xu A\***.

- Increased Neutrophil Elastase and Proteinase 3 and Augmented NETosis Are Closely Associated with  $\beta$ -cell Autoimmunity in Patients with Type 1 Diabetes. **Diabetes**. Dec;63(12):4239-48 . (IF=8.684, selected for commentary) (Times cited: 38)
4. 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 Nov;63(11):3748-58. (IF=8.684) (Times cited: 16)
  5. Liang Q, Zhong L, Zhang J, Wang Y, Bornstein SR, Triggler CR, Ding H, Lam KS, Xu A. FGF21 Maintains Glucose Homeostasis by Mediating the Cross Talk Between Liver and Brain During Prolonged Fasting. **Diabetes**. 2014 Dec;63(12):4064-75 (IF=8.684, selected for commentary) (Times cited: 73)
  6. Lin Z, Wu F, Lin S, Pan X, Jin L, Lu T, Shi L, Wang Y, **Xu A\***. Adiponectin protects against acetaminophen-induced mitochondrial dysfunction and acute liver injury by promoting autophagy in mice. **Journal of Hepatology**, 2014 Oct;61(4):825-31 (IF=12.486) (Times cited: 36)
  7. Wong CM, Wang Y, Lee JTH, Huang Z, Wu D, **Xu A\***, Lam KSL. Adropin is a brain membrane-bound protein regulating physical activity via the NB-3/notch signaling pathway in mice. **Journal of Biological Chemistry**. 2014 Sep 12;289(37):25976-25986. (IF=4.125) (Times cited: 26)
  8. Ng KTP, **Xu A**, Cheng Q, Guo DY, Lim ZXH, Sun CKW, Fung JHS, Poon RTP, Fan ST, Lo CM, Man K. Clinical relevance and therapeutic potential of angiopoietin-like protein 4 in hepatocellular carcinoma. **Molecular Cancer**. 2014 Aug 22;13(1): Article number 196. (IF=6.204) (Times cited: 13)
  9. Xian J, Xing F, Huo J, Fung ML, Liong EC, Ching YP, **Xu A**, Chang RCC, So KF, Tipoe GL. Lycium barbarum polysaccharides therapeutically improve hepatic functions in non-alcoholic steatohepatitis rats and cellular steatosis model. **Scientific Reports**. 2014 Jul 7;4:Article number 5587. (IF=4.259) (Times cited: 37)
  10. Qiu B, Shi X, Wong E, Lim J, Bezzi M, Low D, Zhou Q, Akincilar S, Lakshmanan M, Swa H, Tham J, Gunaratne J, Cheng K, Hong W, Lam K, Ikawa M, Guccione E, **Xu A**, Han W, Tergaonkar. NUCKS Is a Positive Transcriptional Regulator of Insulin Signaling. **Cell Reports**. 2014 Jun 26;7(6):1876-1886. (IF=8.282) (Times cited: 13)
  11. Jullig M, Yip S, **Xu A**, Smith G, Middleditch M, Booth M, Babor R, Beban G, Murphy R. Lower Fetuin-A, retinol binding protein 4 and several metabolites after gastric bypass compared to sleeve gastrectomy in patients with type 2 diabetes. **PLoS ONE**. 2014 May 6;9(5):Article number e96489. (IF=2.806) (Times cited: 19)
  12. Li JP, Chen Y, Ng CHC, Fung ML, **Xu A**, Cheng B, Tsao SW, Leung WK. Differential expression of Toll-like receptor 4 in healthy and diseased human gingiva. **Journal of Periodontal Research**. 2014 Dec 1;49(6):845-854. (IF=2.662) (Times cited: 12)
  13. Palanivel R, Ganguly R, Turdi S, **Xu A**, Sweeney G. Adiponectin stimulates Rho-mediated actin cytoskeleton remodeling and glucose uptake via APPL1 in primary cardiomyocytes. **Metabolism: Clinical and Experimental**. 2014 Oct 1;63(10):1363-1373. (IF=5.777) (Times cited: 18)
  14. Yau SY, Li A, Zhang ED, Christie BR, **Xu A**, Lee TMC, So KF. Sustained running in rats administered corticosterone prevents the development of depressive behaviors and enhances hippocampal neurogenesis and synaptic plasticity without increasing neurotrophic factor levels. **Cell Transplantation**. 2014;23(4-5):481-492. (IF=3.006) (Times cited: 28)
  15. Li H, Hui X, Li K, Tang X, Hu X, **Xu A**, Wu D. High-level expression, purification and characterization of active human C1q and tumour necrosis factor-related protein-1 in Escherichia coli. **Letters in Applied Microbiology**. 2014 Sep;59(3):334-341. (IF=1.575)
  16. Hui E, **Xu A**, Chow WS, Lee PCH, Fong CHY, Cheung SCW, Tse HF, Chau MT, Cheung BMY, Lam KSL. Hypoadiponectinemia as an independent predictor for the progression of

- carotid atherosclerosis: A 5-year prospective study. **Metabolic Syndrome and Related Disorders**. 2014 Dec 1;12(10):517-522. (IF=1.932) (Times cited: 12)
17. Graessler J, Bornstein TD, Goel D, Bhalla VP, Lohmann T, Wolf T, Koch M, Qin Y, Licinio J, Wong ML, Chavakis T, **Xu A**, Shevchenko A, Schuhmann K, Schwarz PEH, Schulte KM, Patel A, Bornstein SR. Lipidomic profiling before and after Roux-en-Y gastric bypass in obese patients with diabetes. **Pharmacogenomics Journal**. 2014 Jun 14(3):201-207. (IF=3.815) (Times cited: 20)
18. Cheung CYY, Hui EYL, Cheung BMY, Woo YC, **Xu A**, Fong CHY, Ong KL, Yeung CY, Janus ED, Tse HF, Sham PC. Adiponectin gene variants and the risk of coronary heart disease: A 16-year longitudinal study. **European Journal of Endocrinology**. 2014 Jul;171(1):107-115. (IF=4.101) (Times cited: 18)
19. Huang B, Cheng X, Wang D, Peng M, Xue Z, Da Y, Zhang N, Yao Z, Li M, **Xu A**, Zhang R. Adiponectin promotes pancreatic cancer progression by inhibiting apoptosis via the activation of AMPK/Sirt1/PGC-1 $\alpha$  signaling. **Oncotarget**. 2014;5(13):4732-4745. (IF=5.168) (Times cited: 52)
20. Mao L, Lin W, Nie T, Hui X, Gao X, Li K, Ding M, Tang X, Li P, Wang Y, **Xu A**, Liu P, Wu D. Absence of *Appl2* sensitizes endotoxin shock through activation of PI3K/Akt pathway. **Cell Bioscience**. 2014 Oct 2;4(1):60. (IF=3.294) (Times cited: 5)
21. Chen J, Yang M, Zhao K, **Xu A**, Huang Q. Polymorphisms in *FTO*, *TMEM18* and *PCSK1* are associated with BMI in southern Chinese population. **J Genet**. 2014 Aug;93(2):509-512. (IF=0.995)
22. Liu T, Li H, Gounko NV, Zhou Z, Xu A, Hong W, Han W. Detection of insulin granule exocytosis by an electrophysiology method with high temporal resolution reveals enlarged insulin granule pool in *BIG3*-knockout mice. **Am J Physiol Endocrinol Metab**. 2014 Oct 1;307(7):E611-618. (IF=4.142) (Times cited: 5)
23. Huang B, Cheng X, Wang D, Peng M, Xue Z, Da Y, Zhang N, Yao Z, Li M, **Xu A**, Zhang R. Adiponectin promotes pancreatic cancer progression by inhibiting apoptosis via the activation of AMPK/Sirt1/PGC-1 $\alpha$  signaling. **Oncotarget**. 2014 Jul;5(13):4732-45. (IF=5.168) (Times cited: 52)
24. Cheng Q, Ng KT, **Xu A**, Li CX, Liu XB, Guo DY, Poon RT, Fan ST, Lo CM, Man K. The roles of lipocalin-2 in small-for-size fatty liver graft injury. **Ann Surg**. 2014 Dec;260(6):1062-1072. (IF=8.98) (Times cited: 2)
25. Liu L, Liu J, Tian XY, Wong WT, Lau CW, **Xu A**, Xu G, Ng CF, Yao X, Gao Y, Huang Y. Uncoupling protein-2 mediates DPP-4 inhibitor-induced restoration of endothelial function in hypertension through reducing oxidative stress. **Antioxid Redox Signal**. 2014 Oct 10;21(11):1571-1581. (IF=6.337) (Times cited: 38)
26. Chatzigeorgiou A, Klotzsche-von Ameln A, **Xu A**, Vriend G, ..., Schally AV, Weber C, Bornstein SR, Nicolaes G, Chavakis T, Lutgens E. Blocking CD40-TRAF6 signaling is a therapeutic target in obesity-associated insulin resistance. **PNAS**. 2014;111:2686-91. (IF=9.661) (Times cited: 57)
27. 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. (IF=8.568) (Times cited: 10)
28. Wong CM, Wang Y, Lee JT, Huang Z, Wu D, **Xu A\***, Lam KS. Adropin is a brain membrane-bound protein regulating physical activity via NB-3/Notch signaling pathway in mice. **J Biol Chem**. 2014 Sep 12;289(37):25976-86. (IF=4.125) (Times cited: 26)
29. Cheng KK, Lam KS, Wang B, **Xu A**. Signaling mechanisms underlying the insulin-sensitizing effects of adiponectin. **Best Pract Res Clin Endocrinol Metab**. 2014;28:3-13. (IF=4.466) (Times cited: 47)
30. Baretella O, **Xu A**, Vanhoutte PM. Acidosis prevents and alkalosis augments endothelium-dependent contractions in mouse arteries. **Pflugers Arch**. 2014 Feb;466(2):295-305.

(IF=3.156) (Times cited: 13)

31. Shen K, Leung SW, Huang Y, Hou M, **Xu A**, Wang Z, Vanhoutte PM. Notoginsenoside Ft1 activates both glucocorticoid and estrogen receptors to induce endothelium-dependent, nitric oxide-mediated relaxations in rat mesenteric arteries. *Biochem Pharmacol*. 2014 [Epub ahead of print] (IF=4.581) (Times cited: 16)
32. Dadson K, Chasiotis H, Wannaiampikul S, Tungtrongchitr R, **Xu A**, Sweeney G. Adiponectin Mediated APPL1-AMPK Signaling Induces Cell Migration, MMP Activation, and Collagen Remodeling in Cardiac Fibroblasts. *J Cell Biochem*. 2014;115:785-93. (IF=3.085) (Times cited: 24)
33. Chan CK, Liao SY, Zhang YL, **Xu A**, Tse HF, Vanhoutte PM. Protective effects of histamine on Gq-mediated relaxation in regenerated endothelium. *Am J Physiol Heart Circ Physiol*. 2014;306:H286-90. (IF=3.348) (Times cited: 4)
34. Baretella O, Chung SK, Barton M, **Xu A**, Vanhoutte PM. Obesity and heterozygous endothelial overexpression of prepro-endothelin-1 modulate responsiveness of mouse main and segmental renal arteries to vasoconstrictor agents. *Life Sci*. 2014 [Epub ahead of print] (IF=2.936) (Times cited: 6)
35. Song EI, Fan P, Huang B, Deng HB, Cheung BM, Félétou M, Vilaine JP, Villeneuve N, **Xu A**, Vanhoutte PM, Wang Y. Deamidated lipocalin-2 induces endothelial dysfunction and hypertension in dietary obese mice. *J Am Heart Assoc*. 2014;10;3:e000837. (IF=4.863) (Times cited: 21)
36. Wu G, Li H, Fang Q, Jiang S, Zhang L, Zhang J, Hou X, Lu J, Bao Y, **Xu A**, Jia W. Elevated Circulating Lipocalin-2 Levels Independently Predict Incident Cardiovascular Events in Men in a Population-Based Cohort. *Arterioscler Thromb Vasc Biol*. 2014 Sep 4. pii: ATVBAHA.114.303718. [Epub ahead of print] (IF=6.607) (Times cited: 17)
37. Liu T, Li H, Gouko NV, Zhou Z, **Xu A**, Hong W, Han W. Detection of insulin granule exocytosis by an electrophysiology method with high temporal resolution reveals enlarged insulin granule pool in BIG3 knockout mice. *Am J Physiol Endocrinol Metab*. 2014 Oct 1;307(7):E611-618. (IF=4.142) (Times cited: 5)
38. Hui E, Yeung CY, Lee PC, Woo YC, Fong CH, Chow WS, **Xu A\***, Lam KS. Elevated Circulating Pigment Epithelium-Derived Factor Predicts the Progression of Diabetic Nephropathy in Patients With Type 2 Diabetes. *J Clin Endocrinol Metab*. 2014 Nov;99(11):E2169-77. (IF=5.455) (Times cited:15)

#### Year 2013

39. Lin Z, Tian H, Lam KS, Lin S, Hoo R, Konishi M, Itoh N, Wang Y, Bornstein SR, **Xu A\***, Adiponectin mediates the metabolic effects of FGF21 on glucose homeostasis and insulin sensitivity in mice. *Cell Metabolism*. 2013, 17(5) 779-789. (IF=18.164) (Times cited:259)
40. Hoo RL, Lee IP, Zhou M, Wong JY, Hui X, **Xu A\***, Lam KS. Pharmacological inhibition of adipocyte fatty acid binding protein alleviates both acute liver injury and non-alcoholic steatohepatitis in mice. *J Hepatol*. 2013;58:358-64. (IF=12.486) (Times cited:29)
41. 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 J*. 2013 455(2):207-16. (IF=3.797) (Times cited:9)
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 Apr;11(4):e1001541. (IF=9.797) (Times cited:31)
43. Liu Y, Turdi S, Park T, Morris NJ, Deshaies Y, **Xu A**, Sweeney G. Adiponectin corrects high-fat diet-induced disturbances in muscle metabolomic profile and whole-body glucose

- homeostasis. *Diabetes*, 2013, 62: 743-52. (IF=8.684) (Times cited: 47)
44. Chow WS, **Xu A**, Woo YC, Tso AW, Cheung SC, Fong CH, Tse HF, Chau MT, Cheung BM, Lam KS. Serum fibroblast growth factor-21 levels are associated with carotid atherosclerosis independent of established cardiovascular risk factors. *Arterioscler Thromb Vasc Biol*. 2013 33(10):2454-9. (IF=6.607) (Times cited: 91)
45. Fang Q, Li H, Song Q, Yang W, Hou X, Ma X, Lu J, **Xu A**, Jia W. Serum Fibroblast Growth Factor 19 Levels Are Decreased in Chinese Subjects With Impaired Fasting Glucose and Inversely Associated With Fasting Plasma Glucose Levels. *Diabetes Care*. 2013 36(9):2810-4. (IF=11.857) (Times cited: 17)
46. Liang CF, Liu JT, Wang Y, **Xu A**, Vanhoutte PM. Toll-Like Receptor 4 Mutation Protects Obese Mice Against Endothelial Dysfunction by Decreasing NADPH Oxidase Isoforms 1 and 4. *Arterioscler Thromb Vasc Biol*. 2013, 33: 777-84. (IF=6.607) (Times cited: 61)
47. Zhang AJ, To KK, Li C, Lau CC, Poon VK, Chan CC, Zheng BJ, Hung IF, Lam KS, **Xu A**, Yuen KY. Leptin Mediates the Pathogenesis of Severe 2009 Pandemic Influenza A(H1N1) Infection Associated with Cytokine Dysregulation in Mice With Diet-Induced Obesity. *J Infect Dis*. 2013 Feb 8. [Epub ahead of print] (IF=6.273) (Times cited: 40)
48. Chan CK, Zhao Y, Liao SY, Zhang YL, Lee MY, **Xu A**, Tse HF, Vanhoutte PM. A-FABP and Oxidative Stress Underlie the Impairment of Endothelium-Dependent Relaxations to Serotonin and the Intima-Medial Thickening in the Porcine Coronary Artery with Regenerated Endothelium. *ACS Chem Neurosci*. 2013;4:122-9. (IF=3.883) (Times cited: 10)
49. Vu V, Liu Y, Sen S, **Xu A**, Sweeney G. Delivery of adiponectin gene to skeletal muscle using ultrasound targeted microbubbles improves insulin sensitivity and whole body glucose homeostasis. *Am J Physiol Endocrinol Metab*. 2013;304:E168-75. (IF=4.142) (Times cited: 14)
50. Liu M, Zhou M, Bao Y, Xu Z, Li H, Zhang H, Zhu W, Zhang J, **Xu A**, Wei M, Jia W. Circulating adipocyte fatty acid-binding protein levels are independently associated with heart failure. *Clin Sci (Lond)*. 2013;124:115-22. (IF=4.936) (Times cited: 21)
51. Chow WS, Tso AW, Xu A, Yuen MM, Fong CH, Lam TH, Lo SV, Tse HF, Woo YC, Yeung CY, Cheung BM, Lam KS. Elevated circulating adipocyte-fatty acid binding protein levels predict incident cardiovascular events in a community-based cohort: a 12-year prospective study. *J Am Heart Assoc*. 2013 15;2(1): e004176. (IF=4.863) (Times cited: 40)
52. Dong J, Ling Wong S, Wai Lau C, Liu J, Wang YX, Dan He Z, Yao X, **Xu A**, Ni X, Wang H, Huang Y. Calcitriol restores renovascular function in estrogen-deficient rats through downregulation of cyclooxygenase-2 and the thromboxane-prostanoid receptor. *Kidney Int*. 2013; 84:54-63. (IF=8.395) (Times cited: 22)
53. Kai AK, Lam AK, Chen Y, Tai AC, Zhang X, Lai AK, Yeung PK, Tam S, Wang J, Lam KS, Vanhoutte PM, Bos JL, Chung SS, **Xu A**, Chung SK. Exchange protein activated by camp 1 (epac1)-deficient mice develop beta-cell dysfunction and metabolic syndrome. *FASEB J*. 2013 27(10):4122-35. (IF=5.498) (Times cited: 34)
54. So WY, Cheng Q, Chen L, Evans-Molina C, **Xu A**, Lam KS, Leung PS. High glucose represses beta-klotho expression and impairs fibroblast growth factor 21 action in mouse pancreatic islets: Involvement of peroxisome proliferator-activated receptor gamma signaling. *Diabetes*. 2013, 62(11):3751-9. (IF=8.684)
55. Vu V, Bui P, Eguchi M, **Xu A**, Sweeney G. Globular adiponectin induces Ikb1/ampk-dependent glucose uptake via actin cytoskeleton remodeling. *J Mol Endocrinol*. 2013;51:155-165. (IF=3.577) (Times cited: 22)
56. Park M, Wu D, Park T, Choi CS, Li R, Cheng KK, **Xu A**, Sweeney G. Appl1 transgenic mice are protected from high fat diet induced cardiac dysfunction. *Am J Physiol Endocrinol Metab*. 2013, 305(7):E795-804. (IF=4.142) (Times cited: 21)
57. Wang T, Mao X, Li H, Qiao S, **Xu A**, Wang J, Lei S, Liu Z, Ng KF, Wong GT, Vanhoutte

- PM, Irwin MG, Xia Z. N-acetylcysteine and allopurinol up-regulated the jak/stat3 and pi3k/akt pathways via adiponectin and attenuated myocardial postischemic injury in diabetes. *Free Radic Biol Med.* 2013;63:291-303. (IF=5.606) (Times cited: 50)
58. Wong HK, Ong KL, Leung RY, Cheung TT, **Xu A**, Lam TH, Lam KS, Cheung BM. Plasma level of adrenomedullin is influenced by a single nucleotide polymorphism in the adiponectin gene. *PLoS One.* 2013;8:e70335. (IF=2.806) (Times cited: 11)
59. Ye H, Zhang HJ, **Xu A**, Hoo RL. Resistin production from adipose tissue is decreased in db/db obese mice, and is reversed by rosiglitazone. *PLoS One.* 2013;8:e65543. (IF=2.806) (Times cited: 14)
60. Xu C, Bai B, Fan P, Cai Y, Huang B, Law IK, Liu L, **Xu A**, Tung C, Li X, Siu FM, Che CM, Vanhoutte PM, Wang Y. Selective overexpression of human sirt1 in adipose tissue enhances energy homeostasis and prevents the deterioration of insulin sensitivity with ageing in mice. *Am J Transl Res.* 2013;5:412-426. (IF=2.829) (Times cited: 32)
61. Xiao Y, **Xu A**, Hui X, Zhou P, Li X, Zhong H, Tang W, Huang G, Zhou Z. Circulating lipocalin-2 and retinol-binding protein 4 are associated with intima-media thickness and subclinical atherosclerosis in patients with type 2 diabetes. *PLoS One.* 2013;8:e66607. (IF=2.806) (Times cited: 39)

#### Year 2012

62. Li Y, Lam KS, Tse HF, Chen C, Wang Y, Vanhoutte PM, and **Xu A\***. Endothelium-selective Activation of AMP-activated Protein Kinase Prevents Diabetes-induced Impairment of Vascular Function and Re-endothelialization via Induction of Heme Oxygenase-1 in Mice. *Circulation*, 2012, 126: 1267-77. (IF=19.309) (Times cited: 53)
63. Cheng KK, Lam KS, Wu D, Wang Y, Sweeney G, Hoo R, Zhang J and **Xu A\***. APPL1 potentiates insulin secretion in pancreatic beta-cells by increasing Akt-dependent expression of SNARE proteins in mice. *PNAS*, 2012, 109:8919-27. (IF=9.661, direct submission), selected for commentary) (Times cited: 39)
64. Bai B, Liang Y, Xu C, Lee MY, **Xu A**, Wu D, Vanhoutte PM, Wang Y. CDK5-Mediated Hyperphosphorylation of SIRT1 Contributes to the Development of Endothelial Senescence and Atherosclerosis. *Circulation*. 2012 Aug 7;126(6):729-40. (IF=19.309) (Times cited: 2)
65. Ye D, Li Y, Lam KS, Li H, Jia W, Wang Y, Man K, Li X and **Xu A\***TLR4 mediates obesity-induced nonalcoholic steatohepatitis through activation of X-box binding protein in mice. *Gut*, 2012, 61:1058-67(IF=16.658), selected for commentary. (Times cited: 131)
66. Tian XY, Wong WT, **Xu A\***, Lu Y, Zhang Y, Wang L, Cheang WS, Wang Y, Yao X, Huang Y. Uncoupling Protein-2 Protects Endothelial Function in Diet-induced Obese Mice. *Circ Res.* 2012; 110: 1211-6 (IF=13.965) \* Corresponding author. (Times cited: 97)
67. Yuen CY, Wong SL, Lau CW, Tsang SY, **Xu A**, Zhu Z, Ng CF, Yao X, Kong SK, Lee HK, Huang Y. From Skeleton to Cytoskeleton: Osteocalcin Transforms Vascular Fibroblasts to Myofibroblasts Via Angiotensin II and Toll-Like Receptor 4. *Circ Res.* 2012 Jul 20;111(3):e55-66. (IF=13.965) (Times cited: 19)
68. Liu M, Zhou M, Bao Y, Xu Z, Li H, Zhang H, Zhu W, Zhang J, **Xu A**, Wei M, Jia W. Circulating adipocyte fatty acid-binding protein levels are independently associated with heart failure. *Clin. Sci.* 2013;124(2):115-22. (IF=4.936) (Times cited: 21)
69. Li H, Dong K, Fang Q, Hou X, Zhou M, Bao Y, Xiang K, **Xu A** and Jia W. High serum level of fibroblast growth factor 21 is an independent predictor of nonalcoholic fatty liver disease: a 3-year prospective study in China. *J Hepatol.* 2012, In press. (IF=12.486) (Times cited: 71)
70. Xu G, Ahn J, Chang S, Eguchi M, Ogier A, Han S, Park Y, Shim C, Jang Y, Yang B, **Xu A**, Wang Y, Sweeney G. Lipocalin-2 induces cardiomyocyte apoptosis by increasing intracellular iron accumulation. *J Biol Chem.* 2011 Feb 10;287(7):4808-17. (IF=4.125)

(Times cited: 68)

71. Liu JT, Song E, Xu A, Berger T, Mak TW, Tse HF, Law IK, Huang B, Liang Y, Vanhoutte PM, Wang Y. Lipocalin-2 deficiency prevents endothelial dysfunction associated with dietary obesity: role of cytochrome P450 2C inhibition. **Br J Pharmacol**. 2012 Jan;165(2):520-31. (IF=5.491) (Times cited: 38)
72. Li H, Gao Z, Zhang J, Ye X, Martin R, Wang Z, Xu A, Ye J and Jia W. Sodium Butyrate Stimulates Hepatic Production of Fibroblast Growth Factor 21 by Inhibition of Histone Deacetylase 3 in Mice. **Diabetes**, 2012, 61: 797-806. (IF=8.684) (Times cited: 70)
73. Ji Y, Sun S, Xu A, Bhargava P, Yang L, Lam KS, Gao B, Lee CH, Kersten S, Qi L. Activation of natural killer T cells promotes M2 macrophage polarization in adipose tissue and improves systemic glucose tolerance via the IL-4/STAT6 signaling axis in obesity. **J Biol Chem**. 2012; Apr 20;287(17):13561-71. (IF=4.125) (Times cited: 133)
74. Nie T, Hui X, Gao X, Li K, Lin W, Xiang X, Ding M, Kuang Y, Xu A, Fei J, Wang Z, Wu D. Adipose tissue deletion of Gpr116 impairs insulin sensitivity through modulation of adipose function. **FEBS Lett**. 2012 Oct 19;586(20):3618-25. (IF=3.623) (Times cited: 15)
75. Liu L, Liu J, Wong WT, Wang YX, Xu G, Pu Y, Zhu Z, Xu A, Lam KS, Chen ZY, Ng CF, Yao X, Huang Y. Dipeptidyl peptidase 4 inhibitor sitagliptin protects endothelial function in hypertension through a glucagon-like peptide 1-dependent mechanism. **Hypertension**. 2012 Sep;60(3):833-41. (IF=6.857) (Times cited: 123)
76. Woo YC, Tso AW, Xu A, Law LS, Fong CH, Lam TH, Lo SV, Wat NM, Cheung BM, Lam KS. Combined use of serum adiponectin and tumor necrosis factor-alpha receptor 2 levels was comparable to 2-hour post-load glucose in diabetes prediction. **PLoS One**. 2012;7(5): e36868. (IF=2.806) (Times cited: 29)
77. Liu L, Siu FM, Che CM, Xu A\*, Wang Y. Akt blocks the tumor suppressor activity of LKB1 by promoting phosphorylation-dependent nuclear retention through 14-3-3 proteins. **Am J Transl Res**. 2012;4(2):175-86. (IF=2.829) (Times cited: 12)
78. Vu V, Liu Y, Sen S, Xu A, Sweeney G. Delivery of adiponectin gene to skeletal muscle using ultrasound targeted microbubbles improves insulin sensitivity and whole body glucose homeostasis. **Am J Physiol Endocrinol Metab**. 2012 Nov 6. [Epub ahead of print]. (IF=4.142) (Times cited: 14)
79. Ong KL, Rye KA, O'Connell R, Jenkins AJ, Brown C, Xu A\*, Sullivan DR, Barter PJ, Keech AC; on behalf of the FIELD study investigators. Long-Term Fenofibrate Therapy Increases Fibroblast Growth Factor 21 and Retinol-Binding Protein 4 in Subjects with Type 2 Diabetes. **J Clin Endocrinol Metab**. 2012 Dec;97(12):4701-4708. (IF=5.455) (Times cited: 36)
80. Alkharfy KM, Al-Daghri NM, Vanhoutte PM, Krishnaswamy S, Xu A. Serum retinol-binding protein 4 as a marker for cardiovascular disease in women. **PLoS One**. 2012;7(10): e48612. (IF=2.806) (Times cited: 28)
81. Li D, Tsang JY, Chan YK, Zhu J, Lui VC, Xu A, Lamb JR, Tam PK, Chen Y. Adiponectin Mediated MHC Class II Mismatched Cardiac Graft Rejection in Mice Is IL-4 Dependent. **PLoS One**. 2012;7(11):e48893. (IF=2.806) (Times cited: 7)
82. Zhou M, Xu A, Tam PK, Lam KS, Huang B, Liang Y, Lee IK, Wu D, Wang Y. Upregulation of UCP2 by adiponectin: the involvement of mitochondrial superoxide and hnRNP K. **PLoS One**. 2012;7(2):e32349. (IF=2.806) (Times cited: 20)
83. Yang B, Fan P, Xu A, Lam KS, Berger T, Mak TW, Tse HF, Yue JW, Song E, Vanhoutte PM, Sweeney G, Wang Y. Improved functional recovery to I/R injury in hearts from lipocalin-2 deficiency mice: restoration of mitochondrial function and phospholipids remodeling. **Am J Transl Res**. 2012;4(1):60-71. (IF=2.829) (Times cited: 19)
84. Li JP, Li FY, Xu A, Cheng B, Tsao SW, Fung ML, Leung WK. Lipopolysaccharide and hypoxia-induced HIF-1 activation in human gingival fibroblasts. **J Periodontol**. 2012 Jun;83(6):816-24. (IF=3.03) (Times cited: 12)

## Year 2011

85. Wang Y, 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, 60: 3044-54. (IF=8.684)
86. Chen W, Hoo RL, Konishi M, Itoh N, Lee PC, Ye HY, Lam KS, **Xu A\***. Growth hormone induces hepatic production of fibroblast growth factor 21 through a mechanism dependent on lipolysis in adipocytes. *J Biol Chem*. 2011 Oct 7;286(40):34559-66. (IF=4.125) (Times cited: 87)
87. Ge X, Chen C, Hui X, Wang Y, Lam KS, **Xu A\***. Fibroblast growth factor 21 induces glucose transporter-1 expression through activation of the serum response factor/ Ets-like protein-1 in adipocytes. *J Biol Chem*. 2011 Oct 7;286(40):34533-41. (IF=4.125) (Times cited: 71)
88. Wong WT, Tian XY, **Xu A\***, Yu J, Lau CW, Hoo R, Wang Y, Lee VW, Lam KS, Vanhoutte PM, and Huang Y. The obligatory role of adiponectin in restoring endothelial function in PPAR $\gamma$  agonist-treated diabetic mice. *Cell Metabolism*, 2011, 16:101-15. (IF=18.164) **\*as a corresponding author.**
89. Yu H, Xia F, Lam KS, Wang Y, Bao Y, Zhang J, Gu Y, Zhou P, Lu J, Jia W, **Xu A\***. Circadian Rhythm of Circulating Fibroblast Growth Factor 21 (FGF21) is Related to Diurnal Changes in Free Fatty Acids in Humans. *Clinical Chemistry*. 2011, 51(5): 691-700. (IF=8.008) (Times cited: 95)
90. Chen C, Cheung BM, Tso AW, Wang Y, Lam LS, Ong KL, Wat NM, Xu A Lam KS. High Plasma Level of **Fibroblast Growth Factor 21** is an Independent Predictor of Type 2 Diabetes: A 5.4-year population-based prospective study in Chinese subjects. *Diabetes Care*, 2011, 34: 2113-5. **\*as a co-corresponding author.** (IF=11.857) (Times cited: 93)
91. Wong SL, Lau CW, Wong WT, **Xu A**, Au CL, Ng CF, Ng SS, Gollasch M, Yao X, Huang Y. Pivotal role of protein kinase C $\xi$  in angiotensin II-induced endothelial cyclooxygenase II expression: A link to vascular inflammation. *Arterioscler Thromb Vasc Biol*. 2011 31(5):1169-76. (IF=6.607) (Times cited: 24)
92. Lee MY, Li HY, Xiao Y, Zhou Z, **Xu A** and Vanhoutte PM. Chronic administration of BMS309403, an inhibitor of adipocyte fatty acid binding protein improves endothelial function in apolipoprotein E-deficient mice. *Br. J. Pharmacol.*, 2011, 162(7): 1564-76. (IF=5.491) (Times cited: 61)
93. Zhang X, **Xu A\***, Chung SK, Cresser JB, Sweeney G, Wong LC, Lin A and **Lam KS\***. Selective Inactivation of c-Jun NH2 Terminal Kinase in Adipose Tissue Protects against Diet-induced-obesity and Improves Insulin Sensitivity in Both Liver and Skeletal Muscle in Mice. *Diabetes*, 2011, 60(2) 486-95. (IF=8.8). (\*Co-corresponding author). (IF=8.684) (Times cited: 88)
94. Cheung CY, Tso AW, Cheung BM, **Xu A**, Ong KL, Law LS, Wat NM, Janus ED, Sham PC, Lam KS. Genetic variants associated with persistent central obesity and metabolic syndrome in a 12-year longitudinal study. *Eur J Endocrinol*. 2011 Mar;164(3):381-8. (IF=4.101) (Times cited: 29)
95. Tian XY, Wong WT, **Xu A**, Chen ZY, Lu Y, Liu LM, Lee VW, Lau CW, Yao X, Huang Y. Rosuvastatin Improves Endothelial Function of db/db Mice: Role of Angiotensin II Type 1 Receptors and Oxidative Stress. *Br J Pharmacol*. 2011, 164: 598-606. (IF=5.491) (Times cited: 34)
96. Gao X, Li K, Hui X, Kong X, Sweeney G, Wang Y, **Xu A**, Teng M, Liu P, Wu D. Carnitine palmitoyltransferase-1A prevents free fatty acid induced adipocyte dysfunction through suppression of c-Jun N-terminal kinase. *Biochem J*. 2011, 435(3): 723-32. (IF=3.797)



(Times cited: 42)

97. Li M, Ho JC, Lai KW, Au KK, Xu A, Cheung BM, Lam KS, Tse HF. The decrement in circulating endothelial progenitor cells (EPCs) in type 2 diabetes is independent of the severity of the hypoadiponectemia. *Diabetes/Metabolism Research and Review*. 2011, 27(2):185-94. (IF=3.263) (Times cited: 16)
98. Wang T, Qiao S, Lei S, Liu Y, Ng KF, Xu A, Lam KS, Irwin MG, Xia Z. N-acetylcysteine and allopurinol synergistically enhance cardiac adiponectin content and reduce myocardial reperfusion injury in diabetic rats. *PLoS One*. 2011;6(8): e23967. (IF=2.806) (Times cited: 59)
99. Cheung BM, Ong KL, Tso AW, Leung RY, Xu A, Cherny SS, Sham PC, Lam TH, Lam KS. C-reactive protein as a predictor of hypertension in the Hong Kong Cardiovascular Risk Factor Prevalence Study (CRISPS) cohort. *Journal of Human Hypertension*. 2011 Jan 27. [Epub ahead of print]. (IF=2.797) (Times cited: 34)
100. Liu X, Huang X, Lin W, Wang D, Diao Y, Li H, Hui X, Wang Y, Xu A, Wu D, Ke D. New aromatic substituted pyrazoles as selective inhibitors of human adipocyte fatty acid-binding protein. *Bioorg Med Chem Lett*. 2011, 15;21(10):2949-52. (IF=2.454) (Times cited: 31)
101. Cleasby ME, Lau Q, Polkinghorne E, Patel SA, Leslie SJ, Turner N, Cooney G, Xu A, Kraegen E. The adaptor protein APPL1 increases glycogen accumulation in rat skeletal muscle through activation of the PI3-kinase signalling pathway. *J Endocrinol*. 2011 Jul;210(1):81-92. (IF=4.706) (Times cited: 33)
102. Park M, Youn B, Zheng XL, Wu D, Xu A, Sweeney G. Globular Adiponectin, acting via AdipoR1/APPL1, Protects H9c2 Cells from Hypoxia/Reoxygenation-Induced Apoptosis. *PLoS One*. 2011 Apr 28;6(4): e19143. (IF=2.806) (Times cited: 63)
103. Tsang JY, Li D, Ho D, Peng J, Xu A, Lamb J, Chen Y, Tam PK. Novel immunomodulatory effects of adiponectin on dendritic cell functions. *Int Immunopharmacol*. 2011;11(5):604-9. (IF=2.956) (Times cited: 59)
104. Chen Y, Li D, Tsang JY, Niu N, Peng J, Zhu J, Hui K, Xu A, Lui VC, Lamb JR, Tam PK. PPAR- $\gamma$  signaling and IL-5 inhibition together prevent chronic rejection of MHC Class II-mismatched cardiac grafts. *J Heart Lung Transplant*. 2011, 30(6): 698-706. (IF=7.114) (Times cited: 11)
105. Xiang Y, Zhou P, Li X, Huang G, Liu Z, Xu A, Leslie RD and Zhou Z. Heterogeneity of Altered Cytokine Levels Across the Clinical Spectrum of Diabetes in China. *Diabetes Care*, 2011 Jul;34(7):1639-41. (IF=11.857) (Times cited: 21)
106. Chen C, Cheung BM, Tso WK, Wang Y, Law SC, Ong KL, Wat MS, Xu A\* and Lam KS\*. High plasma level of fibroblast growth factor 21 is an independent predictor of type 2 diabetes: A 5.4-year population-based prospective study in Chines. *Diabetes Care*, 2011, 34(9): 2113-5. (IF=6.8) \* Co-corresponding author. (IF=11.857) (Times cited: 93)
107. Ong KL, Tso AW, Xu A, Law LS, Li M, Wat NMS, Rye KA, Lam TH, Cheung BMY and Lam KSL, Evaluation of the combined use of adiponectin and C-reactive protein levels as biomarkers for predicting the deterioration in glycaemia after a median of 5.4 years. *Diabetologia*, 2011, Oct;54(10):2552-60. (IF=6.08) (Times cited: 25)
108. Xiao Y, Xu A, Law LS, Chen C, Li H, Li X, Yang L, Liu S, Zhou Z, Lam KS. Distinct Changes in Serum Fibroblast Factor 21 in Different Subtypes of Diabetes. *J Clin Endocr Metab*, 2012, 97:54-8. (IF=5.455) (Times cited: 60)
109. Tso AW, Lam TK, Xu A, Yiu KH, Tse HF, Li SW, Law SC, Cheung BMY, Cheung RTF, Lam KS. Serum adipocyte fatty acid-binding protein is associated with ischemic stroke and early death. *Neurology*, 2011 Jun 7;76(23):1968-75. (IF=7.592) (Times cited: 41)

Year 2010

110. Zhang X, Lam KS, Ye H, Chung SK, Zhou M, Wang Y, Xu A\*. Adipose tissue-specific inhibition of hypoxia inducible factor 1 $\alpha$  induces obesity and glucose intolerance by impeding energy expenditure in mice. *J Bio. Chem.* 2010, 285: 32869-77. (IF=4.125) (Times cited: 77)
111. Chang J, Li Y, Huang Y, Lam KS, Hoo LC, Wong WT, Cheng KK, Wang Y, Vanhoutte PM, and Xu A\*. Adiponectin Prevents Diabetic Premature Senescence of Endothelial Progenitor Cells and Promotes Endothelial Repair by Suppressing the p38 MAP kinase/p16<sup>INK4A</sup> Signaling Pathway. *Diabetes*, 2010, 59: 2949-59. (IF=8.684)
112. Hui X, Li H, Zhou Z, Lam KS, Xiao Y, Wu D, Ding K, Wang Y, Vanhoutte PM and Xu A\*. Adipocyte fatty acid binding protein mediates inflammatory responses in macrophages through a positive feedback loop involving c-Jun N-terminal kinases and activator protein-1. *J. Biol. Chem.* 2010, 285: 10273-80. (IF=4.125) (Times cited: 102)
113. Zhou M, Xu A, Lam KS, Tam PK, Che CM, Chan L, Lee IK, Wu D, Wang Y. Rosiglitazone promotes fatty acid CoA accumulation and excessive glycogen storage in livers of mice without adiponectin. *J Hepatol.* 2010 Dec;53(6):1108-16. (IF=12.486) (Times cited: 24)
114. Law IK, Xu A, Lam KS, Berger T, Mak TW, Vanhoutte PM, Liu JT, Sweeney G, Zhou M, Yang B, Wang Y. Lipocalin-2 deficiency attenuates insulin resistance associated with ageing and obesity. *Diabetes*. 2010, 59: 872-82. (IF=8.684) (Times cited: 157)
115. Chen C, Tso AW, Law LS, Cheung BM, Ong KL, Wat NM, Janus ED, Xu A\*, Lam KS. Plasma Level of Pigment Epithelium-Derived Factor Is Independently Associated with the Development of the Metabolic Syndrome in Chinese Men: A 10-Year Prospective Study. *J Clin Endocrinol Metab.* 2010 Nov;95(11):5074-81. \* Co-corresponding author. (IF=5.455) (Times cited: 51)
116. Wong WT, Tian XY, Chen Y, Leung FP, Liu L, Lee HK, Ng CF, Xu A, Yao X, Vanhoutte PM, Tipoe GL, Huang Y. Bone Morphogenic Protein-4 Impairs Endothelial Function Through Oxidative Stress-Dependent Cyclooxygenase-2 Upregulation. Implications on Hypertension. *Circulation Research.* 2010, 107: 984-91. (IF=13.965) (Times cited: 92)
117. Li H, Fang Q, Gao F, Fan J, Zhou J, Wang X, Zhang H, Pan X, Bao Y, Xiang K, Xu A, Jia W. Fibroblast growth factor 21 levels are increased in nonalcoholic fatty liver disease patients and are correlated with hepatic triglyceride. *J Hepatol.* 2010, 53: 534-40. (IF=12.486) (Times cited: 207)
118. Ong KL, Li M, Tso AW, Xu A, Cherny SS, Sham PC, Tse HF, Lam TH, Cheung BM, Lam KS. Association of genetic variants in the adiponectin gene with adiponectin level and hypertension in Hong Kong Chinese. *Eur J Endocrinol.* 2010;163:251-7. (IF=4.101) (Times cited: 74)
119. Wong WT, Tian X, Xu A, Ng CF, Lee HK, Chen ZY, Au CL, Yao X, Huang Y. Angiotensin II type 1 receptor-dependent oxidative stress mediates endothelial dysfunction in type 2 diabetic mice. *Antioxid Redox Signal.* 2010, 13: 757-68. (IF=6.337) (Times cited: 53)
120. Man K, Ng KT, Xu A, CM Lo, Xiao JW, Sun BS, Wu EX, Poon RT and Fan ST. Suppression of liver tumor growth and metastasis by adiponectin in nude mice through inhibition of angiogenesis and downregulation of Rho kinase/metalloproteinase 9 signaling. *Clinical Cancer Research*, 2010, 16(3): 967-77. (IF=9.619) (Times cited: 102)
121. Fang X, Palanivel R, Cresser J, Schram K, Tuinei J, Xu A, Abel ED, & Sweeney G. An APPL1-AMPK signaling axis mediates the beneficial metabolic effects of adiponectin in the heart. *Am. J. Physiol.- Endocrinol. Metab.* 2010 Nov; 299(5):E721-9. (IF=4.142) (Times cited: 78)
122. Cheung CY, Tso AW, Cheung BM, Xu A, Ong KL, Fong CH, Wat NM, Janus ED, Sham

- PC, Lam KS. Obesity Susceptibility Genetic Variants Identified from Recent Genome-Wide Association Studies: Implications in a Chinese Population. *J Clin Endocrinol Metab*. 2010, 95: 1395-403. (IF=5.455) (Times cited: 74)
123. Richards AA, Colgrave ML, Zhang J, Webster J, Simpson F, Preston E, Wilks D, Hoehn KL, Stephenson M, Macdonald GA, Prins JB, Cooney GJ, Xu A, Whitehead JP. Sialic acid modification of adiponectin is not required for multimerization or secretion but determines half-life in circulation. *Mol Endocrinol*. 2010 Jan;24(1):229-39. (IF=3.993) (Times cited: 45)
124. Chow KH, Sun RW, Lam JB, Li CK, Xu A, Ma DL, Abagyan R, Wang Y, Che CM. A gold(III) porphyrin complex with antitumor properties targets the Wnt/beta-catenin pathway. *Cancer Res*. 2010 Jan 1;70(1):329-37. (IF=9.122) (Times cited: 64)
125. Hoo RL, Wong JY, Qiao C, Xu A\*, Xu H, Lam KS. The effective fraction isolated from Radix Astragali alleviates glucose intolerance, insulin resistance and hypertriglyceridemia in db/db diabetic mice through its anti-diabetic activity. *Nutr Metab (Lond)*. 2010 Aug 24;7:67. (IF=2.974) (Times cited: 57)
126. Wen L, Yang Y, Wang Y, Xu A, Wu D, Chen Y. APPL1 is essential for the survival of xenopus pancreas, duodenum, and stomach progenitor cells. *Dev Dyn*. 2010;239(8):2198-207. (IF=2.004) (Times cited: 17)
127. Milner KL, Van Der Poorten D, Xu A, Smythe G, Dore GJ, Zekry A, Weltman M, Fragomeli V, George J, Chisholm DJ. Chronic Hepatitis C is Associated with Peripheral rather than Hepatic Insulin Resistance. *Gastroenterology*. 2010, 138:932-41. (IF=18.392) (Times cited: 117)

#### Year 2009

128. Cheng KK, Iglesias MA, Lam KS, Wang Y, Sweeney, Zhu W, Vanhoutte PM, Kraegen EW and Xu A\*. APPL1 Potentiates Insulin-mediated Inhibition of Hepatic Glucose Production and Alleviates Diabetes via Akt Activation in Mice. *Cell Metabolism*, 2009, 9:417-27 (IF=18.164). The paper was selected as the featured article by this Journal. (Times cited: 98)
129. Hui X, Zhu W, Wang Y, Lam KS, Zhang J, Wu D, Kraegen EW, Li Y, Xu A\*. Major Urinary Protein -1 Increases Energy Expenditure and Improves Glucose Intolerance Through Enhancing Mitochondria Function in Skeletal Muscle of Diabetic mice. *J. Biol. Chem*. 2009, 284: 14050-14057. (IF=4.125) (Times cited: 72)
130. Yau MH, Wang Y, Lam KS, Zhang J, Wu D, Xu A\*, A Highly Conserved Motif within the NH2-terminal Coiled-coil Domain of Angiopoietin-like Protein 4 Confers its Inhibitory Effects on Lipoprotein Lipase through Disrupting the Enzyme Dimerization. *J Biol Chem*. 2009, 284: 11942-52. (IF=4.125) (Times cited: 72)
131. Wang Y, Huang Y, Lam KSL, Lau CW, Vanhoutte and Xu A\*. Berberine prevents hyperglycemia-induced endothelial injury and enhances vasodilatation through eNOS and AMP-activated protein kinase. *Cardiovascular Research*, 2009, 82: 484-92. (IF=5.878) (Times cited: 128)
132. Yeung DC, Lam KS, Wang Y, Tso AW, Xu A\*. Serum zinc-alpha2-glycoprotein correlates with adiposity, triglycerides and the key components of the metabolic syndrome in Chinese subjects. *J Clin Endocrinol Metab*. 2009 Jul;94(7):2531-6. (IF=5.455) (Times cited: 56)
133. Milner KL, Poorten D, Xu A, Bugianesi E, James G. Kench JG, Lam KSL, Chisholm DJ. Jacob George J. Adipocyte Fatty Acid Binding Protein levels relate to inflammation and fibrosis in Non Alcoholic Fatty Liver Disease. *Hepatology*, 2009 Jun;49(6):1926-34. (IF=13.246) (Times cited: 136)
134. Li H, Bao Q, Xu A, Pan X, Lu J, Wu H, Lu H, Xiang K and Jia WP. Serum Fibroblast

- Growth Factor 21 is Associated with Adverse Lipid Profiles and  $\gamma$ -glutamyltransferase but not Insulin Sensitivity in Chinese Subjects. *J Clin Endocr Metab*, 2009 Jun;94(6):2151-6. (IF=5.455) (Times cited: 98)
135. Lui MM, Lam JC, Mak H, Xu A, Ooi C, Lam CL, Mak J, Khong PL, Ip MSM. Elevated C-reactive protein is associated with obstructive sleep apnea syndrome independent of obesity. *Chest*, 2009, Apr;135(4):950-6. (IF=6.044) (Times cited: 124)
136. Leung KC, Xu A, Craig M, Martin A, Lam KSL, O'Sullivan AJ. Adiponectin isoform distribution in women: relationship to female sex steroids and insulin Sensitivity. *Metabolism*, 2009, 58:239-45. (IF=5.777) (Times cited: 36)
137. Lam JB, Chow KH, Xu A, Lam KS, Liu J, Wong NS, Moon RT, Shepherd PR, Cooper GJ, Wang Y. Adiponectin haploinsufficiency promotes mammary tumor development in MMTV-PyVT mice by modulation of phosphatase and tensin homolog activities. *PLoS One*, 2009;4(3): e4968. (IF=2.806) (Times cited: 73)
138. Lam DCL, Xu A, Lam KSL, Lam B, Lam JCM, Lui MS, Ip MSM. Serum adipocyte fatty acid binding protein level is elevated in severe obstructive sleep apnea and correlates with insulin resistance. *European Respiratory Journal*, 2009, 33:346-51. (IF=10.569) (Times cited: 42)
139. Gao XF, Chen W, Kong XP, Xu A, Wang ZG, Sweeney G, Wu D. Enhanced susceptibility of Cpt1c knockout mice to glucose intolerance induced by a high-fat diet involves elevated hepatic gluconeogenesis and decreased skeletal muscle glucose uptake. *Diabetologia*. 2009, 52: 912-20. (IF=6.08) (Times cited: 47)
140. Xu A\*, Wang H, Hoo RL, Sweeney G, Vanhoutte PM, Wang Y, Wu D, Chu W, Qin G, Lam KS. Selective Elevation of Adiponectin Production by the Natural Compounds Derived from a Medicinal Herb Alleviates Insulin Resistance and Glucose Intolerance in Obese Mice. *Endocrinology*. 2009, 150(2):625-33. (IF=4.286) (Times cited: 72)
141. Shi Z, Liang N, Xu W, Li K, Sheng G, Liu J, Xu A, Li XJ, Wu D. Expression, purification, crystallization and preliminary X-ray crystallographic analysis of the SH3 domain of human AHI1. *Acta Crystallogr Sect F Struct Biol Cryst Commun*. 2009 Apr 1;65(Pt 4):361-3. (IF=0.799) (Times cited: 2)
142. Luo Y, Kong X, Xu A, Jin S, Wu D. Expression, Purification and Functional Characterization of recombinant human interleulin-7. *Protein Expr Purif*. 2009, 63:1-4. (IF=1.351) (Times cited: 20)
143. Law IKM, Liu L, Xu A, Lam KS, Vanhoutte PM, Che CM, Leung PT and Wang Y. Identification and Characterization of Proteins Interacting with SIRT1 and SIRT3: Implications in the anti-ageing and metabolic effects of Sirtuins. *Proteomics*, 2009, 9:2445-56. (IF=4.041) (Times cited: 97)
144. Fang X, Fetros J, Dadson KE, Xu A, Sweeney G. Leptin prevents the metabolic effects of adiponectin in L6 Myotubes. *Diabetologia*. 2009 Oct;52(10):2190-200. (IF=6.08) (Times cited: 23)

#### Year 2008

145. Zhang X, Yeung DC, Karpisek M, Stejskal D, Zhou ZG, Liu F, Wong RL, Chow WS, Tso AW, Lam KS, Xu A\*. Serum FGF21 levels are increased in obesity and are independently associated with the metabolic syndrome in humans. *Diabetes*. 2008;57(5):1246-53. (IF=8.684) (Times cited: 518)
146. Yang YH, Wang Y, Lam KS, Yau MH, Cheng KK, Zhang J, Zhu W, Wu D, Xu A\*. Suppression of the Raf/MEK/ERK signaling cascade and inhibition of angiogenesis by the carboxyl terminus of angiopoietin-like protein 4. *Arterioscler Thromb Vasc Biol*. 2008;28(5):835-40. (IF=6.607) (Times cited: 88)
147. Liu M, Zhou L, Xu A, Lam KS, Wetzel MD, Xiang R, Zhang G, Dong LQ, Feng L. A Disulfide-bond-A Oxidoreductase-like Protein (DsbA-L) Regulates Adiponectin

- Multimerization. *Proc. Natl. Acad. Sci. USA*, 2008, 105(47):18302-7. (IF=9.661) (Times cited: 168)
148. Zhou, M, Xu A, Tam P, Lam KS, Chan L, Liu J, Chow K and Wang Y. Mitochondria Dysfunction Contributes to the increased vulnerability of adiponectin knockout mice to liver injury. *Hepatology*, 2008, 48: 1087-96. (IF=13.246) (Times cited: 103)
149. Lam JC, Xu A, Tam S, Yao DJ, Lai AYK, Lam B, Lam KSL, Ip MSP. Hypoadiponectinemia is related to hypoxemia and sympathetic activation in sleep obstructive apnea. *Sleep*. 2008, 31:1721-7. (IF=4.923) (Times cited: 89)
150. Gao Y, Zhou Y, Xu A and Wu D. Effects of AMP-activated protein kinase inhibitor, compound C, on adipogenic expression of 3T3-L1 cells. *Biol Pharm Bull*. 2008, 31(9):1716-22. (IF=1.683) (Times cited: 42)
151. Krause MP, Liu Y, Vu V, Chan L, Xu A, Riddell MC, Sweeney G, Hawke TJ. Adiponectin is Expressed by Skeletal Muscle Fibers and Influences Muscle Phenotype and Function. *Am J Physiol Cell Physiol*. 2008, 295: C203-12. (IF=3.602) (Times cited: 108)
152. Yeung DC, Wang Y, Xu A, Cheung SC, Wat NM, Yau MH, Zhang JL, Fong DY, Fong CH, Chau MT, Sham PC, Lam KS. Epidermal fatty acid-binding protein: a new circulating biomarker associated with cardio-metabolic risk factors and carotid atherosclerosis. *Eur Heart J*, 2008, 29: 2156-63. (IF=19.651) (Times cited: 38)
153. Yeung DC, Xu A, Tso AW, Chow W, Wat NM, Fong CH, Tam S, Sham PC, Lam KS. Circulating levels of adipocyte and epidermal fatty acid-binding proteins in relation to nephropathy staging and macrovascular complications in type 2 diabetic patients. *Diabetes Care*, 2009: 32, 132-4. (IF=11.857) (Times cited: 47)
154. Stöckli J, Davey JR, Hohnen-Behrens C, Xu A, James DE, Ramm G. Regulation of GLUT4 Translocation by the RABGAP AS160/TBC1D4. Role of Phosphorylation and Membrane Translocation. *Mol Endocrinol*, 2008: 22, 2703-15. (IF=3.993)
155. Liu J, Lam JB, Chow KH, Xu A, Lam KS, Moon RT, Wang Y. Adiponectin stimulates Wnt inhibitory factor-1 expression through epigenetic regulations involving the transcription factor specificity protein 1. *Carcinogenesis*. 2008; 29:2195-202. (IF=5.105) (Times cited: 44)

#### Year 2007

156. Cheng KY, Lam KS, Wang Y, Huang Y, Carling D, Wu D, Wong C and Xu A\*, Adiponectin-induced eNOS activation and Nitric Oxide Production are Mediated by APPL1 in endothelial cells. *Diabetes*, 2007, 56: 1387-94. (IF=8.684) (Times cited: 276)
157. Xu A, Tso AW, Cheung BM, Wang Y, Wat NM, Fong CHY, Yeung DCY, Janus ED, Sham PC and Lam KS. Circulating adipocyte-fatty acid binding protein levels predict the development of the metabolic syndrome: a 5-year prospective study, *Circulation*, 2007, 115:1537-43. (IF = 19.309) (Times cited: 314)
158. Tso AW\*, Xu A\*, Sham PC, Wat NM, Wang Y, Fong CHY, Cheng BMY, Janus ED, Lam KS. Serum adipocyte fatty acid-binding protein as a new biomarker predicting the development of type 2 diabetes. *Diabetes Care*, 2007, 30:2667-72. \* Co-first authors. (IF=11.857) (Times cited: 247)
159. Wang Y, Lam KS, Kraegen EW, Sweeney G, Zhang J, Tso AW, Chow WS, Wat MN, Xu JY and Xu A\*. Lipocalin-2 is an inflammatory marker closely associated with obesity, insulin resistance and hyperglycemia in humans, *Clin Chem*, 2007, 53:34-41. (IF=8.008). (Times cited: 407)
160. Julig M, Chen X, Hickey AJ, Crossman DJ, Xu A, Wang Y, Greenwood DR, Choong YS, Middleditch MJ, Phillips ARJ and Cooper GJS. Reversal of diabetes-evoked changes in mitochondrial protein expression of cardiac left ventricle by treatment with a copper (II)-selective chelator. *Proteomics Clinical application*, 2007, 1, 387-99. (IF=3.814) (Times

**cited: 24)**

161. Chow WS, Cheung BMY, Tso AWK, Xu A, Wat NMS, Fong CHY, Tam Y, Tan KCB, Janus ED, Lam TH and Lam KSL. Hypoadiponectinemia as a Predictor for the Development of Hypertension: A 5-year Prospective Study. **Hypertension**, 2007, 49: 1455-61. **(IF=6.857)**
162. Chen J, Sun M, Liang B, Xu A, Zhang S, Wu D. Cloning and expression of PDK4, FOXO1A and DYRK1A from the hibernating greater horseshoe bat (*Rhinolophus ferrumequinum*). **Comp Biochem Physiol B Biochem Mol Biol**. 2007; 146:166-71. **(Times cited: 6)**
163. Tan KC, Chow WS, Tso AW, Xu A, Tse HF, Hoo RL, Betteridge DJ, Lam KS. Thiazolidinedione increases serum soluble receptor for advanced glycation end-products in type 2 diabetes. **Diabetologia**. 2007 50:1819-1825. **(IF=6.08) (Times cited: 71)**
164. Palanivel R, Fang X, Park<sup>a</sup> M, Eguchi<sup>a</sup> M, Pallan S, Girolamo SD, Liu y, Wang Y, Xu A and Sweeney G. Globular and full-length forms of adiponectin mediate specific changes in glucose and fatty acid uptake and metabolism in cardiomyocytes, **Cardiovascular Research**, 2007, 745: 148-57. **(IF=5.878) (Times cited: 103)**
165. Hui CK, Zhang HY, Lee NP, Chan W, Yueng YH, Fan ST, Luk JM, Xu A, Lam KS, Kwong YL, Lau GK. Serum adiponectin is increased in advancing liver fibrosis and declines with reduction in fibrosis in chronic hepatitis B. **J Hepatol**. 2007, 47:191-202. **(IF=12.486) (Times cited: 73)**
166. Yeung DCY, Xu A, Cheung CWS, Wat NMS, MH Yau, Fong CHY, Chau MT and Lam KSL. Serum adipocyte fatty acid binding proteins were independently associated with carotid atherosclerosis in Chinese women. **Arterioscl. Throm. Vas Biol**, 2007, 27:1796-802. **(IF=7.47) (Times cited: 181)**
167. Wang Y, Lam KS, Lam JB, Lam MC, Leung PT, Zhou M, Xu A\*. Overexpression of Angiopoietin-like Protein 4 Alters Mitochondria Activities and Modulates Methionine Metabolic Cycle in the Liver Tissues of db/db Diabetic Mice. **Molecular Endocrinology**, 2007, 21:972-86. **(IF=3.993) (Times cited: 39)**
168. Fayad R, Pini M, Sennello GA, Cabay RG, Chan L, Xu A and Fantuzzi G. Adiponectin deficiency protect mice from chemically induced colon inflammation, **Gastroenterology**, 2007, 132:601-14. **(IF=18.392) (Times cited: 116)**
169. Vu V, Kim W, Fang X, Liu YT, Xu A, Sweeney G. Coculture with primary visceral rat adipocytes from control but not streptozotocin-induced diabetic animals increases glucose uptake in rat skeletal muscle cells: role of adiponectin. **Endocrinology**. 2007, 148: 4411-9. **(IF=4.286) (Times cited: 26)**
170. Hoo RL, Chow WS, Yau MH, Xu A, Tso AW, Tse HF, Fong CH, Tam S, Chan L, Lam KS. Adiponectin mediates the suppressive effect of rosiglitazone on plasminogen activator inhibitor-1 production. **Arterioscler Thromb Vasc Biol**. 2007, 27:2777-82. **(IF=6.607) (Times cited: 38)**
171. Xu J, Sham PC, Xu A, Tso AW, Cheng KY, Wat NM, Fong CH and Lam KS. Resistin gene polymorphisms and persistent hyperglycaemia in Chinese: a 5-year prospective study. **Clinical Endocrinology**. 2007, 66:211-7. **(IF=3.327) (Times cited: 46)**

### Year 2006

172. Xu A\*, Wang Y, Xu JY, Stejskal D, Tam S, Zhang J, Wat NM, Wong WK, Lam KS, Adipocyte Fatty Acid-Binding Protein Is a Plasma Biomarker Closely Associated with Obesity and Metabolic Syndrome. **Clin Chem**, 2006, 52:405. **(IF= 8.008) (Times cited: 453)**
173. Wang Y, Lam KS, Chan L, Lam JBB, Cahn KW, Lam MC, Hoo RCL, Cooper GS and Xu A\*. Posttranslational modifications on the four conserved lysine residues within the collagenous domain of adiponectin are required for the formation of its high-molecular-weight oligomeric complex. **J Bio Chem**. 2006, 281:16391-400. **(IF= 5.4) (Times cited:**

264)

174. Wang Y, Lam JB, Lam KS, Liu J, Lam MC, Hoo RCL, Wu D, Cooper GJS and Xu A\*. Adiponectin modulates the GSK3beta/beta-catenin Signaling Pathway and attenuates mammary Tumorigenesis of MDA-MB-231 Cells in Nude Mice. **Cancer Research**, 2006, 66, 11462-70. (IF=9.619) (Times Cited: 234)
175. Wang Y, Xu LY, Lam KSL, Gang L, Cooper GJ and Xu A\*. Proteomic characterization of the human serum proteins associated with the fat-derived hormone adiponectin. **Proteomics**, 2006, 6: 3862-70. (IF: 4.041) (Times cited: 56)
176. Chen B, Lam KS, Wang Y, Wu D, Lam MC, Shen JG, Wong L, Hoo CL, Zhang J and Xu A\*. Hypoxia dysregulates the production of adiponectin and plasminogen activator inhibitor-1 independent of reactive oxygen species in adipocytes. **BBRC**. 2006, 341:549-556. (IF=2.466) (Times cited: 216)
177. Rong R, Tao X-Y, Cheung BM, Xu A, Cheung G and Lam, KSL. Identification and Functional Characterization of Three Novel Human Melanocortin-4 Receptor Gene Variants in an Obese Chinese Population. **Clinical Endocrinology**, 2006, 65(2), 198-205. (IF=3.327) (Times cited: 34)
178. Tso AW, Sham PC, Wat NM, Xu A, Cheung BM, Rong R, Fong CH, Xu JY, Cheng KK, Janus ED, Lam KS. Polymorphisms of the gene encoding adiponectin and glycaemic outcome of Chinese subjects with impaired glucose tolerance: a 5-year follow-up study. **Diabetologia**. 2006, 49(8):1806-15. (IF=6.08) (Times cited: 77)
179. Shore SA, Terry RD, Flynt C, Xu A, Hug C. Adiponectin attenuates allergen-induced airway inflammation and hyperresponsiveness in mice. **J Allergy Clin Immunol**. 2006, 118:389-95. (IF=13.081) (Times cited: 298)

#### Year 2005

180. Wang Y, Lam KS, Xu JY, Lu G, Xu LY, Cooper GJ, Xu A\*. Adiponectin inhibits cell proliferation by interacting with several growth factors in an oligomerization dependent manner. **J Biol Chem**. 2005, 280:18341-18347. (IF=4.125) (Times cited: 416)
181. Xu A\*, Chan KW, Hoo RL, Wang Y, Tan KC, Zhang J, Chen B, Lam MC, Tse C, Cooper GJ, Lam KS. Testosterone selectively reduces the high molecular weight form of adiponectin by inhibiting its secretion from adipocytes. **J Biol Chem**. 2005: 280: 18073-80. (IF=4.125) (Times cited: 453)
182. Ding X, Saxena NK, Lin S, Xu A, Srinivasinan S, Anania FA. The role of leptin and adiponectin: a novel paradigm in adipocytokine regulation of liver fibrosis and stellate cell biology. **American journal of Pathology**. 2005, 166: 1655-69. (IF=4.057) (Times cited: 307)
183. Fang X, Palanivel R, Zhou X, Liu Y, Xu A, Wang Y, Sweeney G. Hyperglycemia- and hyperinsulinemia-induced alteration of adiponectin receptor expression and adiponectin effects in L6 myoblasts. **Journal of Molecular Endocrinology**, 2005, 35: 465-76. (IF=3.577) (Times cited: 78)
184. Xu A\*, Lam MCL, Chan KW, Wang Y, Hoo RCL, Zhang JL, Tso A and Lam KSL, ANGPTL4 decreases blood glucose, improve glucose tolerance, but induces hyperlipidemia and hepatic steatosis in mice, **PNAS**, 2005, 102, 6089-6091 (\* corresponding author). (IF=9.661) (Times cited: 243)

#### Year 2004

185. Lam KSL, Xu A, Tan KCB, Wong LC, Tiu SC, Tam S. Serum adiponectin is reduced in acromegaly and normalized after correction of growth hormone excess. **J Clin Endocr Metab** 2004,89: 5772-78. (IF=5.455) (Times cited: 43)
186. Wang Y, Lu G, Wong W.P.S. Vliegthart JFG, and Gerwig GJ, Lam KSL, Cooper GS

- and **Xu A\***. Proteomic and Functional Characterization of Endogenous Adiponectin Purified from Fetal Bovine Serum. *Proteomics* 2004, 4:3933-42. (IF=4.041) (Times cited: 89)
187. **Xu A\***, Wong L, Wang Y, Xu J, Cooper GJS and Lam KSL. Chronic Treatment of Growth Hormone Induces Adiponectin Gene Expression in 3T3-L1 adipocytes. *FEBS Lett.* 572:129-34. (IF=3.623) (Times cited: 61)
188. Choi KL, Wang Y, Tse CA, Lam KS, Cooper GJ, **Xu A\***. Proteomic analysis of adipocyte differentiation: Evidence that alpha2 macroglobulin is involved in the adipose conversion of 3T3 L1 preadipocytes. *Proteomics*. 2004, 4: 1840-8. (IF=4.041) (Times cited: 35)
189. **Xu A\***, Yin S, Wong L, Chan KW, Lam KS. Adiponectin Ameliorates Dyslipidemia Induced by the HIV Protease Inhibitor Ritonavir in Mice. *Endocrinology*. 2004; 145:487-94. (\*corresponding author, the paper was selected for News and Views Editorial for this journal) (IF=4.286) (Times cited: 119)
190. Tan K, **Xu A**, Chow W, Lam M, Ai V, Tam S, Lam K. Hypoadiponectinemia is associated with impaired endothelium dependent vasodilation. *J Clin Endocr Metab*. 2004,89:765-769. (IF=6.325) (Times cited: 437)

#### Year 2002-03

191. **\*Xu A**, Wang Y, Keshaw H, Xu LY, Lam KS, Cooper GJ. The fat-derived hormone adiponectin alleviates alcoholic and nonalcoholic fatty liver diseases in mice. *J Clin Invest*. 2003;112:91-100 (\*Corresponding author, the paper was selected for the cover story of this issue). (IF=12.784). The paper has been cited over 1300 TIMES)
192. **\*Xu A**, Choi KL, Wang Y, Permana PA, Xu LY, Bogardus C, Cooper GJ. Identification of novel putative membrane proteins selectively expressed during adipose conversion of 3T3-L1 cells. *BBRC*. 2002;293:1161-1167. (IF=2.466) (Times cited: 50)
193. Wang Y, **\*Xu A**, Knight C, Xu LY, Cooper GJ. Hydroxylation and glycosylation of the four conserved lysine residues in the collagenous domain of adiponectin. Potential role in the modulation of its insulin-sensitizing activity. *J Biol Chem*. 2002;277:19521-19529 (\*Co-first author and corresponding author). (IF=4.125) (Times cited: 458)

#### Before 2002

194. **Xu A**, Bellamy AR, Taylor JA. Immobilization of the early secretory pathway by a virus glycoprotein that binds to microtubules. *The EMBO J*. 2000;19:6465-6474 (The paper has been chosen AS the cover story of this issue). (IF=9.792) (Times cited: 87)
195. **Xu A**, Suh PG, Marmy-Conus N, Pearson RB, Seok OY, Cocco L, Gilmour RS. Phosphorylation of nuclear phospholipase C beta1 by extracellular signal-regulated kinase mediates the mitogenic action of insulin-like growth factor I. *Mol Cell Biol*. 2001;21:2981-2990. (IF=4.398) (Times cited: 119)
196. **Xu A**, Wang Y, Xu LY, Gilmour RS. Protein kinase C alpha -mediated negative feedback regulation is responsible for the termination of insulin-like growth factor I-induced activation of nuclear phospholipase C beta1 in Swiss 3T3 cells. *J Biol Chem*. 2001;276:14980-14986. (IF=3.797) (Times cited: 60)
197. Wang Y, **Xu A**, Ye J, Kraegen EW, Tse CA, Cooper GJ. Alteration in phosphorylation of P20 is associated with insulin resistance. *Diabetes*. 2001;50:1821-1827. (IF=8.684) (Times cited: 47)
198. **Xu A**, Bellamy AR, Taylor JA. Expression of translationally controlled tumour protein is regulated by calcium at both the transcriptional and post-transcriptional level. *Biochem. J*. 1999;342:683-689. (IF=3.797) (Times cited: 128)
199. **Xu A**, Bellamy AR, Taylor JA. BiP (GRP78) and endoplasmic (GRP94) are induced following rotavirus infection and bind transiently to an endoplasmic reticulum-localized virion component. *J Virol*. 1998;72:9865-9872. (IF=4.663) (Times cited: 89)



200. Wang Y, **Xu A**, Cooper GJ. Amylin evokes phosphorylation of P20 in rat skeletal muscle. *FEBS Lett.* 1999;457:149-152. (IF=3.623) (Times cited: 11)
201. Wang Y, **Xu A**, Pearson RB, Cooper GJ. Insulin and insulin antagonists evoke phosphorylation of P20 at serine 157 and serine 16 respectively in rat skeletal muscle. *FEBS Lett.* 1999;462:25-30. (IF=3.623) (Times cited: 34)
202. Wang Y, **Xu A**, Cooper GJ. Phosphorylation of P20 is associated with the actions of insulin in at skeletal and smooth muscle. *Biochem J.* 1999;344:971-976. (IF=3.797) (Times cited: 25)

#### **Invited Reviews and book chapter**

203. Vanhoutte PM, Zhao Y, **Xu A**, Leung SW. Thirty Years of Saying NO: Sources, Fate, Actions, and Misfortunes of the Endothelium-Derived Vasodilator Mediator. *Circulation Research*, 2016 Jul 8;119(2):375-96. (IF=13.965) (Times cited: 51)
204. Hui X, Feng T, Liu Q, Gao Y, **Xu A\***. The FGF21-adiponectin axis in controlling energy and vascular homeostasis. *J Mol Cell Biol.* 2016 Apr;8(2):110-9. doi:10.1093/jmcb/mjw013. Review. (IF=5.988) (Times cited: 12)
205. Huang Z, **Xu A\***, Cheung BM. The Potential Role of Fibroblast Growth Factor 21 in Lipid Metabolism and Hypertension. *Curr Hypertens Rep.* 2017 Apr;19(4):28. (IF=3.036) (Times cited: 2)
206. Kwok KH, Lam KS, **Xu A**. Heterogeneity of white adipose tissue: molecular basis and clinical implications. *Exp Mol Med.* 2016 Mar 11;48:e215. doi: 10.1038/emm.2016.5. Review. (IF=5.063) (Times cited: 13)
207. Huang J, Xiao Y, **Xu A**, Zhou Z. Neutrophils in type 1 diabetes. *J Diabetes Investig.* 2016 Sep;7(5):652-63. (IF=3.039) (Times cited: 9)
208. **Xu A\***, Huang Y, A tireless giant in vascular research, *J Cardiovasc Pharmacol.* 2016 May;67(5):359-60. (IF=2.247) (Times cited: 2)
209. Guo Y, **Xu A**, Wang Y, SIRT1 in Endothelial Cells as a Novel Target for the Prevention of Early Vascular Aging. *J Cardiovasc Pharmacol.* 2016 Jun;67(6):465-73. (IF=2.247) (Times cited: 8)
210. Jin L, Lin Z, **Xu A\***, Fibroblast Growth Factor 21 Protects against Atherosclerosis via Fine-Tuning the Multiorgan Crosstalk. *Diabetes Metab J.* 2016 Feb;40(1):22-31. (IF=4.101) (Times cited: 7)
211. Wu G, Li H, Zhou M, Fang Q, Bao Y, **Xu A**, Jia W. Mechanism and clinical evidence of lipocalin-2 and adipocyte fatty acid-binding protein linking obesity and atherosclerosis. *Diabetes/Metabolism Research and Reviews.* 2014 Sep; 30(6):447-456. (IF=3.263) (Times cited: 25)
212. Gu P, **Xu A\***. Interplay between adipose tissue and blood vessels in obesity and vascular dysfunction. *Rev Endocr Metab Disord.* 2013, 14: 49-58. (IF=4.817) (Times cited: 78)
213. Jia W, **Xu A**, Chen A, Wu J, Ye J. Chronic vascular complications in diabetes. *Journal of diabetes research.* 2013;2013:858746. (IF=2.717) (Times cited: 2)
214. Woo YC, **Xu A**, Wang Y, Lam KS. Fibroblast Growth Factor 21 as an emerging metabolic regulator: clinical perspectives. *Clin Endocrinol (Oxf).* 2013, 78:489-496. (IF=5.455) (Times cited: 162)
215. Ge X, Wang Y, Lam KS, **Xu A\***. Metabolic actions of FGF21: molecular mechanisms and therapeutic implications. *Acta Pharmaceutica Sinica*, 2012 (2): 350-7. (IF=3.223) (Times cited: 9)
216. Dehwah MA, **Xu A**, Huang Q. MicroRNAs and type 2 diabetes/obesity. *J Genet Genomics.* 2012,1:11-8. (IF=4.051) (Times cited: 85)
217. Li FY, Lam KS and **Xu A\***. Therapeutic perspectives for adiponectin: an update. *Curr*

- Med Chem.** 2012, 19:5513-23. (IF=3.249) (Times cited: 17)
218. **Xu A\*** and Vanhoutte PM, Adiponectin and adipocyte fatty acid binding proteins in the pathogenesis of cardiovascular disease. **Am J Physiol Heart Circ Physiol.** 2012 Mar 15;302(6):H1231-40. (IF=3.348) (Times cited: 85)
219. Hui X, Lam KS, Vanhoutte PM and **Xu A\***. Adiponectin and cardiovascular health, an update. **British Journal of Pharmacology**; 2012 Feb;165(3):574-90. (IF=5.491) (Times cited: 207)
220. Tang EH, Libby P, Vanhoutte PM, **Xu A**. Anti-inflammation therapy by activation of prostaglandin EP4 receptor in cardiovascular and other inflammatory diseases. **J Cardiovasc Pharmacol.** 2012 Feb;59(2):116-23. (IF=2.247) (Times cited: 38)
221. Li FY, Cheng KK, Lam KS, Vanhoutte PM, **Xu A\***. Cross-talk between adipose tissue and vasculature: role of adiponectin. **Acta Physiol (Oxf).** Sep;203(1):167-80. (IF=4.867) (Times cited: 118)
222. **Xu A\***, Wang Y, Lam KS and Vanhoutte PM. Vascular Actions of Adipokines: Molecular Mechanisms and Therapeutic Implications. **Advances in Pharmacology**, 2010, Vol. 59, 1-15. (Times cited: 82)
223. Yeung DC, **Xu A**, Tso AW, Chow WS, Wang Y and Lam KS. Epidermal Fatty acid binding Protein, a Novel Mediator Linking Obesity, Inflammation and Atherosclerosis. Invited online commentary article by IAS (International Atherosclerosis Society, 2009,. <http://www.athero.org/comm900.asp>.
224. Wang Y, Zhou M, Lam KS, **Xu A**. Protective roles of adiponectin in obesity-related fatty liver disease: Mechanisms and Functional Implications. **Arq Bras Endocrinol Metabol.** 2009 Mar;53(2):201-12. (IF=1.193) (Times cited: 82)
225. Wang Y, Lam KS, Yau M-H and **Xu A\***. Posttranslational modifications of adiponectin: Mechanisms and functional implications. **Biochemical Journal**, 2008;409(3):623-33. Invited review. (IF=5.2)
226. Zhu W, Cheng K, Lam KS and **Xu A\***. Vascular actions of adiponectin: Molecular Mechanisms and Therapeutic intervention. **Clin Science**, (Lond). 2008; 114(5):361-74. Invited review. (IF=4.936) (Times cited: 255)
227. Liu L, Wang Y, Lam KS and **Xu A\***. Moderate wine consumption in the prevention of metabolic syndrome and its related medical complications. **Endocr Metab Immune Disord Drug Targets.** 2008 Jun;8(2):89-98. (Times cited: 54)
228. Tso AW, **Xu A** and Lam KSL. Adipose tissue and the Metabolic Syndrome: Focusing on adiponectin and several new adipokines. **Biomarkers Medicine**, 2008, 2:239-252. (Times cited: 12)
229. Hoo R, Yeung DC, Lam KS and **Xu A\***. Inflammatory biomarkers associated with obesity and insulin resistance: a focus on adipocyte fatty acid binding protein and lipocalin-2. **Expert Rev. Endocrinol. Metab.** 2008, 3(1): 29-41. (Times cited: 23)
230. Wang Y, Lam KSL and **Xu A**, Adiponectin as a negative regulator in obesity-related mammary carcinogenesis. **Cell Research**, 2007, 17:280-2. (IF=15.606) (Times cited: 56)
231. Cheng KY, Lam KS, Wang Y and **Xu A\*** (corresponding author). Adiponectin as a key player in inflammation. **Biomedical Review**, 2006, 17:11-22. (Times cited: 4)
232. Wang Y, Lam KS and **Xu A\***. Adiponectin as a therapeutic target for obesity-related metabolic and cardiovascular diseases. **Drug Development Research**, 2006, 67:1-9. (IF=1.909) (Times cited: 23)
233. **Xu A\***, Wang Y, Yeung D and Lam K S, Adipocyte-Fatty Acid Binding Protein: a Novel Mediator Linking Obesity, Metabolic Syndrome, and Atherosclerosis. Invited online commentary article by IAS (International Atherosclerosis Society, 2006, June. <http://www.athero.org/metasyn.asp>.
234. Lam KSL, **Xu A**, Tan KC, Wang Y, Dan QH, Chung SK, Chung SS. Atherosclerosis, new players in the field. IAS commentary, 2006, March. <http://www.athero.org/metasyn.asp>.

235. **Xu A\***, Wang Y and Lam KS. Adiponectin, in *Adipose tissue and adipokines in health and disease*, publisher: Human press. 2006, p47-59. (Book Chapter).
236. Lam KS and **Xu A**. Adiponectin: protection of the endothelium. *Curr Diab Rep.* 2005;5(4):254-9. (Review). (**Times cited: 117**)
237. Lam KSL, **Xu A**, NMS Wat, AWK Tso, MSM Ip. Obesity as the key player in the metabolic syndrome. In: *Atherosclerosis XIII; International Congress Series 1262* (2004), Y Matsuzawa, T Kita, R Nagai, T Teramoto (eds). Elsevier p.542-545 (Review).

**G: RESEARCH GRANTS AWARDED**

<b>Funding source and grant number</b>	<b>Title of grants awarded</b>	<b>Amount (HK\$) and duration (excluding overheads)</b>
*RGC Collaborative Research Fund (C7037-17W)	Conversion of white into brown adipocytes as a therapeutic strategy for obesity-related metabolic and vascular complications	7,439,996 HKD 06/2018 to 06/2021
*RGC Collaborative Research Fund (C7055-14G)	A Multi-disciplinary Approach to Investigate Vascular Dysfunction in Obesity and Diabetes: From Molecular Mechanism to Therapeutic Intervention	8,780,850 HKD 06/2015 to 06/2018
*Human Frontier Scientific Program (RGP0024/2017)	Mechanobiology of Obesity	2,623,500 (337,500 USD) (From 12/2017 to 12/2020)
*Croucher Senior Research Fellowships in Natural Sciences, Technology and Medicine	Vascular Dysfunction in Obesity and Diabetes: From Molecular Mechanism to Therapeutic Intervention	960,000 From 11/2016 to 11/2017
*Qatar National Research Fund (NPRP-6-428-3-133)	The protective effect of FGF21 against vascular diseases in obesity and diabetes	334,632.52 USD =2,619,133 HKD From 11/2013 to 11/2017
*National Key project of China 2016	The genetic and immunological basis of type 1 diabetes	1,300,000 RMB From 01/2017 to 12/2021
*Health and Medical Research Fund (13143731)	Activation of uncoupling protein-1 as a potential therapeutic strategy for obesity-induced endothelial dysfunction and atherosclerosis	1,159,010 From 06/2016 to 05/2018
*Health and Medical Research Fund (03144516)	FGF21 as a potential mediator for the anti-depressant effects of physical exercise	1,197,608 From 06/2016 to 05/2018

*Health and Medical Research Fund (03143966)	Deciphering the molecular mechanism of Protein Arginine Methyltransferase (PRMT) 1 in the regulation of hepatic glucose and lipid metabolism	919,296 From 06/2016 to 05/2018
*Health and Medical Research Fund (02132836)	FGF21 resistance as a potential mediator of systemic insulin resistance and type 2 diabetes	999,736 From 04/2015 to 09/2017
*Collaborative Research Fund (C4024-16W)	A multi-disciplinary study on the beneficial effects of PPAR $\delta$ in physical exercise against diabetic vascular complications: cellular crosstalk and energy metabolism	1,000,000 From 06/2017 to 05/2020
*General research fund (17125317)	UCP1 Independent Mechanisms Mediate the Crosstalk between Brown and White Adipose Tissue to Dissipate Energy	1,215,840 01/01/2018— 31/12/2020
*General Research Fund (17166016)	Fibroblast growth factor-21 as an Autocrine Regulator of Browning and Adaptive Thermogenesis in Subcutaneous Adipose Tissue	1,247,772 HKD (01/2017-12/2019)
*General Research Fund (17128115)	Neutrophil serine proteases as a potential mediator of insulinitis in autoimmune diabetes	1,092,383 HKD 01/2016 to 12/2018
*General Research Fund (HKU17124714)	Interplay between Adiponectin and Alternatively-activated Macrophages in Cold-induced Remodeling and Adaptive Thermogenesis of White Adipose Tissues	957,794 HKD 01/2015 to 12/2017
RGC collaborative research fund (HKU4/CRF/10)	A multiple disciplinary approach to investigate vascular dysfunction in obesity and diabetes: From molecular mechanism to therapeutic intervention	7,280,000 HKD 06/2011 to 06/2014
RGC collaborative research fund (HKU 2/07C)	Vascular dysfunction in obesity and diabetes: from risk prediction to therapeutic intervention	5,500,000 (From 06, 2008 to 06, 2011)
General Research Fund (HKU 784111M)	The Liver-derived Hormone FGF21 as a Novel Regulator of Vascular Function: Molecular Basis and Physiological Implications	1,437,500 HKD 01/2012 to 12/2014
General Research Fund (783010)	APPL2 as a Negative Regulator of Insulin Sensitivity and Glucose Uptake in Skeletal Muscle: A Novel Pathway Leading to Insulin Resistance?	1,380,000 01/2011 to 12/2013
General research fund (HKU 781309M)	Characterization of Novel Adaptor Proteins Involved in Regulating Insulin Sensitivity and Glucose Homeostasis: from Molecular Mechanism to Physiological Implication	1,780,000 (From 01, 2010 to 12, 2012)

General Research Fund 2008 (HKU 779608M)	Protective roles of AMP-activated protein kinase against vascular disease in diabetes: Molecular mechanisms and therapeutic intervention	1,107,306 From 01, 2009 to 12, 2011
General Research Fund 2007 (HKU 779707M)	APPL1 as a novel modulator of endothelial nitric oxide production and endothelium-dependent vasodilation	1,258, 228 From 01, 2008 to 06, 2010
General Research Fund 2006(HKU7645/06M)	Hypoxia inducible factor 1 $\alpha$ as a mediator of obesity-induced chronic inflammation, aberrant production of adipokines, and insulin resistance	843,500 From 01, 2007 to 12, 2009
General Research Fund 2005 (HK7609/05M)	Angiopoitein-like protein 4 (ANGPTL4) as a novel therapeutic target for the treatment of insulin resistance and hyperglycemia	1, 458,040 12/2005 to 11/2008
General Research Fund 2004 (HK 7486/04M)	Characterization of the receptor and postreceptor events that underlie the anti-atherogenic and anti-diabetic actions of adiponectin	1,414,530 From 01, 2005 to 06, 2007
NSFC/RGC joint research scheme 2008 (NHKU 735_08)	Adipocyte fatty acid binding protein as a novel diagnostic marker and therapeutic target to combat vascular complications of diabetes: mechanisms and clinical implications	716,000 From 01, 2009 to 06, 2011
NSFC/RGC joint research scheme 2005 (N_HKU_727_05)	The use of adiponectin as a biomarker to identify novel anti-diabetic and anti-atherogenic agents from Chinese herbs	784,000 From 01, 2006 to 06, 2008
Guangdong-Hong Kong Technology Cooperation Funding Scheme (GHP/027/05)	Development of a Suspension Antibody Array-based Multiplex Immunoassay for Early Diagnosis and Therapeutic Monitoring of Diabetes and Cardiovascular Diseases	3,299,000 From 04, 2006 to 08, 2008
Germany/HK Joint Research Scheme (G_HK708/13)	Adipocyte fatty acid binding protein as a mediator of obesity-related medical complications	85,800 HKD 01/2014 to 12/2015
National “973” basic research on diabetes matching fund (2006CB503908)	2型糖尿病发生发展的分子机制研究 (Molecular basis of type 2 diabetes).	500,000 From 04, 2007 to 03, 2012
Innovation &Technology Fund (ITS/048/03)	Adiponectin as a novel diagnostic marker and therapeutic target for the treatment of diabetes, steatohepatitis and other metabolic disorders	2,538,960 From 07/2003 to 01 2006
Hong Kong Jockey Club Institute of Chinese Medicine Limited (HKJICM HKU-005)	An in vivo evaluation platform for assessing the anti-diabetic potential of Traditional Chinese Medicines( <i>as a project collaborator, PI: Prof. K Lam</i> )	4,857,815 From 03/2006 to 02/2009

**H: PATENTS AND INVENTIONS**

**A: Patent Awarded as a primary inventor (6)**

1. **Lipocalin-2 antibodies for methods of treatments.** US patent number: 8,481,032B2
2. **Methods and Compositions for Use of Neutrophil Elastase and Proteinase 3 as Diagnostic Biomarkers.** US P ATENT Number **9,625,460**
3. **Lipocalin-2 as a prognostic and diagnostic marker for heart and stroke risks,** US patent number: 8,030,097 B2
4. **Phosphoprotein target for insulin and insulin antagonists.** (US patent number: US 6,884,575)
5. **Adiponectin and uses thereof. (US patent Number: 7,365,170)**
6. **Lipocalin-2 as a diagnostic marker and therapeutic target.** US patent No: 7,645,616.

**B: Patent in application as an inventor (4)**

1. ***Non-polyaminated LCN2 as a biomarker for diagnosis and treatment of cardiometabolic disease,*** US patent Application number: PCT/CN2016/103792
2. ***FALP proteins.*** (International Application No: PCT/NZ03/00039, US 20050074756
3. ***. Peptides with Anti-Obesity Activity and Other Related Uses,*** US patent application No: 20070275872
4. **Method for Decreasing Blood Glucose and Improving Glucose Tolerance Using Angiotensin-like Protein 4.** US Patent Application Number: 20080095782, US patent application 20090274709