

CURRICULUM VITAE

JIE LI, PhD, MD

Professor of Nutrition,
Deputy Director, Global Health Research Center
Guangdong Provincial People's Hospital, Guangdong Academy of Medical Sciences
98 S. Donghua Rd, Guangzhou, China
Adjunct Professor of Epidemiology,
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EDUCATION

2007.9-2012.6	Ph.D. Nutrition	Harbin Medical University, Harbin, China
2002.9-2007.6	M.D. Preventive medicine	Ningxia Medical University, Yinchuan, China

ACADEMIC APPOINTMENTS

2021.05-	Deputy Director	Department of Clinical Nutrition, Guangdong Provincial People's Hospital
2021.05-	Adjunct Professor	Brown University School of Public Health, Providence RI
2020.01-	Professor, Deputy Director	Global Health Research Center, Guangdong Provincial People's Hospital, Guangdong Academy of Medical Sciences
2018.10-2020.01	Senior Research Associate	Brown University School of Public Health, Providence RI
2015.11-2018.09	Research Associate	Brown University School of Public Health, Providence RI
2014.08-2015.10	Associate Professor	Harbin Medical University, Harbin, China
2012.08-2014.08	Instructor	Harbin Medical University, Harbin, China

MEMBERSHIP IN SOCIETIES

2020	Guangdong Precision Medicine Application Association	Committee Member
2020	Psychosomatic Medicine Committee of Chinese Medical Doctor Association	Committee Member
2019	Biomarkers Committee of Chinese Environmental Mutagen Society	Committee Member
2016	Chinese Nutritional Society	Committee Member
2016	The Obesity Society, US	Member
2015	Endocrine Society, US	Member

JOURNAL PEER REVIEW

The BMJ, American Journal of Clinical Nutrition, Journal of Nutrition, Journal of Diabetes, The Journal of Nutrition Health and Aging, American Journal of Epidemiology, International Journal of Obesity, Obesity, Scientific Reports, Frontiers in Nutrition, Frontiers in Endocrinology, European Journal of Public Health, JCI Insight, Nutrients, Nephrology, Journal of Human Hypertension, International Journal of Environmental Research and Public Health, Science Bulletin, Thyroid

Guest editor

2021, Life, Special Issue: Diseases Prediction and Prevention: From Computational Biology and Artificial Intelligence to Epidemiology and Clinical Sciences

2021, Frontiers in Endocrinology, Special Issue: Systems Epidemiology of Diabetes

GRANT REVIEW

National Natural Science Foundation of China (NSFC)

AWARDS AND HONORS

2022 Kei Hang Katie Chan, Qing Liu, Alex P. Reiner, Roberta De Vito, Charles Kooperberg, Jennifer Brody, Leslie Lange, Joann E. Manson, Adolfo Correa, L. Adrienne Cupples, Matthew Flickinger, **Jie Li**, Xiaochen Lin, Tracy Madsen, Kari E. North, Laura M. Raffield, Alisa Manning, James B. Meigs, Simin Liu. Paul Dudley White International Scholar Award. The American Heart Association.

2016 **Jie Li** Journal of Diabetes Reviewer of the 2016 Year Award

2014 Shuran Wang, **Jie Li**, Na Zhang, Weiwei Ma
The Mechanism of Gut Hormones Regulating Food Intake in Obese Subjects
Natural Science Academic Achievements Award (20141023) Jilin, China

2014 Shuran Wang, **Jie Li**, Na Zhang, Dan Zhao, Weiwei Ma
The Mechanism of Gut Hormones Regulating Energy Homeostasis in Diet-induced Obesity
Science and Technology Award (2014Z30013) Jilin, China

PUBLICATION LIST**ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS****Note: ¹ contributed equally, * corresponding author.**

1. **Jie Li**^{1*}, Lingling Zheng¹, Kei Hang Katie Chan¹, Xia Zou¹, Jihui Zhang, Jundong Liu, Qingwei Zhong, Tracy E. Madsen, Wen-Chih Wu, JoAnn E. Manson, Xueqing Yu*, Simin Liu*. Sex Hormone-Binding Globulin and Risk of Coronary Heart Disease in Men and Women. **Clin Chem**, 2022, Accepted.
2. **Jie Li**^{1*}, Xia Zou¹, Fei Zhong¹, Qingling Yang, JoAnn E. Manson, George D. Papandonatos, Lingling Zheng, Wen-Chih Wu, Kei Hang Katie Chan, Yan Song, Jian Kuang*, Simin Liu*. Prenatal Exposure to Famine and the Development of Diabetes Later in Life: An Age-Period-Cohort Analysis of the China Health and Nutrition Survey (CHNS) from 1997-2015. **Eur J Nutr**, 2022.
3. Bo Yang¹, Andrea J. Glenn¹, Qing Liu, Tracy Madsen, Matthew A. Allison, James M. Shikany, JoAnn E. Manson, Kei Hang Katie Chan, Wen-Chih Wu, **Jie Li**, Simin Liu*, Kenneth Lo*. Added Sugar, Sugar-Sweetened Beverages, and Artificially Sweetened Beverages and Risk of Cardiovascular Disease: Findings from the Women's Health Initiative and a Network Meta-Analysis of Prospective Studies. **Nutrients**, 2022, 14, 4226.
4. Chaolei Chen¹, Zhiqiang Nie¹, Jiabin Wang, Yanqiu Ou, Anping Cai, Yuqing Huang, Qingling Yang, Simin Liu, **Jie Li**^{1*}, Yingqing Feng*. Prenatal Exposure to the Chinese Famine of 1959–1962 and Risk of Cardiovascular Diseases in Adulthood: Findings from the China PEACE Million Persons Project. **Eur J Prev Cardiol**, 2022.
5. Andrea J. Glenn¹, **Jie Li**¹, Kenneth Lo, David J.A. Jenkins, Beatrice A. Boucher, Anthony J. Hanley, Cyril W.C. Kendall, Aladdin H. Shadyab, Lesley F. Tinker, Steven D. Chessler, Barbara V. Howard, Simin Liu*, John L. Sievenpiper*. The Portfolio Diet and Incident Type 2 Diabetes: Findings from the Women's Health Initiative Prospective Cohort Study. **Diabetes Care**, 2022. doi: 10.2337/dc22-1029.
6. **Jie Li**^{1*}, Andrea J. Glenn¹, Qingling Yang, Ding Ding, Lingling Zheng, Wei Bao, Jeannette Beasley, Erin LeBlanc, Kenneth Lo, JoAnn E. Manson, Lawrence Philips, Lesley Tinker, Simin Liu*. Dietary Protein Sources, Mediating Biomarkers, and Incidence of Type 2 Diabetes: Findings from the Women's Health Initiative and the UK Biobank. **Diabetes Care**, 2022;45(8):1742–1753. (Featured on the cover)

7. **Jie Li**^{1*}, Qingling Yang¹, Ran An¹, Howard D Sesso, Victor W Zhong, Kei Hang Katie Chan, Tracy E Madsen, George D Papandonatos, Tongzhang Zheng, Wen-Chih Wu, Yan Song, Xueqing Yu*, Simin Liu*. Famine and Trajectories of Body Mass Index, Waist Circumference, and Blood Pressure in Two Generations: Results From the CHNS From 1993-2015. **Hypertension**, 2022, 79(3):518-531. (Commented by David J A Jenkins, PMID: 35138871)
8. Mengna Huang, Kenneth Lo, **Jie Li**, Matthew Allison, Wen-Chih Wu, Simin Liu. Pasta meal intake in relation to risks of type 2 diabetes and atherosclerotic cardiovascular disease in postmenopausal women: findings from the Women's Health Initiative. **BMJ Nutrition, Prevention & Health**, 2021, 4(1):195-205.
9. Xia Zou¹, Shaokun Liu¹, **Jie Li**, Wen Chen, Jiali Ye, Yuan Yang, Fenfen Zhou, Li Ling*. Factors Associated With Healthcare Workers' Insomnia Symptoms and Fatigue in the Fight Against COVID-19, and the Role of Organizational Support. **Front Psychiatry**, 2021, 12, Article 652717.
10. **Jie Li**¹, Isaac Kofi Owusu¹, Qingshan Geng¹, Aba Ankomaba Folson, Zhichao Zheng, Yaw Adu-Boakye, Xinran Dong, Wen-Chih Wu, Francis Agyekum, Hongwen Fei, Harold Ayetey, Mulan Deng, Fred Adomako-Boateng, Zuxun Jiang, Braimah Baba Abubakari, Zhao Xian, Forster Nketiah Fokuoh, Lambert Tetteh Appiah, Simin Liu*, Chunying Lin*. Cardiometabolic Risk Factors and Preclinical Target Organ Damage Among Adults in Ghana: Findings From a National Study. **J Am Heart Assoc**, 2020, 9: e017492.
11. **Jie Li**¹, Chengbin Zhou¹, Lianghai Li¹, Cong Mai, Junmin Wen, Haigang Zhang, Jinxiu Li, Ping Jin, Renqiang Yang, Chuangqiang Lin, Zhaojun Liu, Xia Zou, Fei Zhong, Ding Ding, Weifeng Li, Bei Hu*, and Xin Li*. Clinical Characteristics of COVID-19 Patients Receiving ECMO Treatment for Severe Acute Respiratory Distress Syndrome. **Biomed J Sci & Tech Res**. 2020, 32(2): 005223.
12. Hongwei Yao, Abigail L. Peterson, **Jie Li**, Haiyan Xu, Phyllis A. Dennery*. Heme Oxygenase 1 and 2 Differentially Regulate Glucose Metabolism and Adipose Tissue Mitochondrial Respiration: Implications for Metabolic Dysregulation. **Int J Mol Sci**, 2020, 21, 7123.
13. Shuiqing Lai, Geetha Gopalakrishnan, **Jie Li**, Xin Liu, Yuancheng Chen, Yuqiong Wen, Shuting Zhang, Bizhu Huang, Chanika Phornphutkul, Simin Liu*, Jian Kuang*. Familial Dysalbuminemic Hyperthyroxinemia (FDH), Albumin Gene Variant (R218S), and Risk of Miscarriages in Offspring. **Am J Med Sci**, 2020, 360 (5): 566-574.
14. Jung Ho Gong¹, Kenneth Lo¹, Qing Liu, **Jie Li**, Shuiqing Lai, Aladdin H Shadyab, Chrisa Arcan, Linda Snetselaar, Simin Liu*. Dietary Manganese, Plasma Markers of Inflammation, and the Development of Type 2 Diabetes in Postmenopausal Women: Findings From the Women's Health Initiative. **Diabetes Care**, 2020, 43(6): 1344-1351.
15. **Jie Li**^{*}, Simin Liu. Early life malnutrition is a problem that may be fixed by improving later-life lifestyle: Never too late to mend. **Heart**, 2020, 106(3):170-171.
16. **Jie Li**, Ran An, Shuiqing Lai, Linlin Li, Simin Liu, Haiyan Xu*. Dysregulation of PP2A-Akt interaction contributes to Sucrose non-fermenting related kinase (SNRK) deficiency induced insulin resistance in adipose tissue. **Mol Meta**, 2019, 28: 26-35.
17. **Jie Li**¹, Bin Feng¹, Yaohui Nie, Ping Jiao, Xiaochen Lin, Mengna Huang, Ran An, Qin He, Huilin Emily Zhou, Arthur Salomon, Kirsten S Sigrist, Zhidan Wu, Simin Liu*, Haiyan Xu*. Sucrose Non-fermenting Related Kinase regulates both adipose inflammation and energy homeostasis in mice and humans. **Diabetes**, 2018, 67(3): 400-411.
18. **Jie Li**, Simin Liu, Songtao Li, Rennan Feng, Lixin Na, Xia Chu, Xiaoyan Wu, Yucun Niu, Zongxiang Sun, Tianshu Han, Haoyuan Deng, Xing Meng, Huan Xu, Zhe Zhang, Qiannuo Qu, Qiao Zhang, Ying Li,* Changhao Sun*. Prenatal exposure to famine and the development of hyperglycemia and type 2 diabetes in adulthood across consecutive generations: a population-based cohort study of families in Suihua, China. **Am J Clin Nutr**, 2017, 105: 221-227.

19. Xue Yang, Yifan Huang, Changhao Sun*, **Jie Li***. Maternal Prenatal Folic Acid Supplementation Programs Offspring Lipid Metabolism by Aberrant DNA Methylation in Hepatic ATGL and Adipose LPL in Rats. **Nutrients**, 2017, 9: 935.
20. Mengna Huang, **Jie Li**, M.-A. Ha, G. Riccardi, Simin Liu, A systematic review on the relations between pasta consumption and cardio-metabolic risk factors. **Nutrition, Metabolism and Cardiovascular Diseases**, 2017,27: 939-948.
21. **Jie Li**, Changhao Sun, Simin Liu, Ying Li*. Dietary Protein Intake and Type 2 Diabetes Among Women and Men in Northeast China. **Sci Rep**, 2016, 6: 37604.
22. Hua Ning¹, Zongxiang Sun¹, Yunyun Liu, Lei Liu, Liuyi Hao, Yaxin Ye, Rennan Feng, **Jie Li**, Ying Li, Xia Chu, Songtao Li*, Changhao Sun*. Insulin Protects Hepatic Lipotoxicity by Regulating ER Stress through the PI3K/Akt/p53 Involved Pathway Independently of Autophagy Inhibition. **Nutrients** 2016;8(4):227.
23. Songtao Li¹, Yujie He¹, Song Lin, Liuyi Hao, Yaxin Ye, Lin Lv, Zongxiang Sun, Huiru Fan, Zhiping Shi, **Jie Li**, Rennan Feng, Lixin Na, Yanwen Wang, Ying Li*, Changhao Sun. Increase of circulating cholesterol in vitamin D deficiency is linked to reduced vitamin D receptor activity via the Insig-2/SREBP-2 pathway. **Mol Nutr Food Res**, 2016, 60(4):798-809.
24. **Jie Li**, Lixin Na, Hao Ma, Zhe Zhang, Tianjiao Li, Liqun Lin, Qiang Li, Changhao Sun*, Ying Li*. Multigenerational effects of parental prenatal famine exposure on adult offspring cognitive function. **Sci Rep**, 2015, 5: 13792.
25. **Jie Li**¹, Hao Ma¹, Lixin Na, Shuo Jiang, Lin Lv, Gang Li, Wei Zhang, Guanqiong Na, Ying Li*, Changhao Sun*. Increased Hemoglobin A1c threshold for prediabetes remarkably improving the agreement between A1c and oral glucose tolerance test criteria in obese population. **J Clin Endoc Metab**, 2015, 100(5):1997-2005.
26. Lixin Na¹, Xiaoyan Wu¹, Rennan Feng, **Jie Li**, Tianshu Han, Liqun Lin, Li Lan, Chao Yang, Ying Li*, Changhao Sun*. The Harbin Cohort Study on Diet, Nutrition and Chronic Non-Communicable Diseases: Study Design and Baseline Characteristics. **Plos One**, 2015, 10(4): e0122598.
27. **Jie Li**, Ran An, Yanping Zhang, Xiaoling Li, Shuran Wang*. Correlations of macronutrient-induced fMRI signal changes in human brain and gut hormones responses. **Am J Clin Nutr**, 2012, 96(2):275-282.
28. **Jie Li**, Weiwei Ma, Shuran Wang*. Slower gastric emptying in high-fat diet induced obese rats is associated with attenuated plasma ghrelin and elevated plasma leptin and cholecystokinin concentrations. **Regul Pept**, 2011, 171(1-3): 53-57.
29. **Jie Li**, Shuran Wang*, Na Zhang, Ze Li, Rui Li, Cong Li. Effects of changing dietary fat content on plasma gut hormone concentrations in diet-induced obese and diet-resistant rats. **Br J Nutr**, 2011, 105(6): 879-886.
30. **Jie Li**, Na Zhang, Lizhen Hu, Ze Li, Rui Li, Cong Li, Shuran Wang*. Improvement in chewing activity reduces energy intake in one meal and modulates plasma gut hormone concentrations in obese and lean young Chinese men. **Am J Clin Nutr**, 2011, 94(3): 709-716.
31. Na Zhang¹, Chao Yuan¹, Ze Li, **Jie Li**, Xiangwei Li, Cong Li, Rui Li, Shuran Wang*. Meta-analysis of the relationship between obestatin and ghrelin levels and the ghrelin/ obestatin ratio with respect to obesity. **Am J Med Sci**, 2011, 341(1), 48-55.
32. **Jie Li***, Yan-Feng Chen, Ran An, Zhen Kang, Zongxiang Sun. Association of maternal pre-pregnant body mass index with serum neonatal inflammatory factors in umbilical cord blood. **Chinese Journal of Public Health**, 2017, 33(Suppl), 133-136. (In Chinese)
33. **Jie Li**, Ying Li*. Nutrition in the first 1000 days of life and obesity. **Science & Technology Review**, 2016, 34(20): 81-85. (In Chinese)
34. **Jie Li**, Shi-xiang Lv, Ying Li, Shuwen Lu, Kaixin Chen, Xiuhai Liang, Changhao Sun. Diet and nutrition status among primary and secondary school students in Heilongjiang province. **Chinese Journal of Public Health**, 2015, 33(1):46-49. (In Chinese)

35. Quansen Zheng, Yuping Wu, Qi Ye, **Jie Li**, Yan Zhao*. Relation between dietary iron intake and nonalcoholic fatty liver disease. **Journal of Hygiene Research**, 2015, 44(4): 527-531. (In Chinese)
36. Chao Yuan, **Jie Li**, Wei Geng, Yan Zhang, Ruifang Zhao, Na Lin, Shuran Wang*. Investigation of veterinary drug residues in raw meat in Harbin. **Chin J Public Health**, 2009, 25(6): 747-748. (In Chinese)
37. Chao Yuan, Wei Geng, Xianzhi Yang, Jianghua Huo, **Jie Li**, Shuran Wang*. Determination of avermectin and imidaclopride residues in vegetables in Harbin. **J Prev Med Inf**, 2009, 25(3): 232-236. (In Chinese)
38. Mingming Hu, Xiufang Liu, **Jie Li**, Xia Guan, Yanhua Ning. Combined toxicity of phoxim and methomylon on reproductive function in male rats. **Carcinogenesis, Teratogenesis & Mutagenesis**, 2008, 20(5): 389-401. (In Chinese)

BOOK CHAPTERS

1. Yan Song, Alina Li, **Jie Li**, Simin Liu. Chapter 33 - Dairy Products and Chronic Diseases: Evidence From Population Studies. *Dairy in Human Health and Disease Across the Lifespan*: Academic Press; 2017.

PRESENTATIONS:

1. **Jie Li**. Annual conference of Guangdong Medical Association of Pain: Causal ideas in the top-level design of clinical research. November 12, 2022.
2. **Jie Li**. The 33rd Great Wall International Congress of Cardiology Asia Heart Society Congress 2022: Construction and application of real-world health big data cloud platform, and causal ideas in the top-level design of clinical research. October 26, 2022.
3. **Jie Li**. 2022 Annual Conference of Nutrition Special Committee of Hainan Preventive Medical Association: Causal ideas in the top-level design of clinical research. July 31, 2022.
4. **Jie Li**. Guangdong Medical Science Week 2022: Guangdong Academy of Medical Sciences Strategy & Development Symposium: The Forum on Metabolic Health and Technology Innovation. July 31, 2022 Guangzhou. Organizer and Host.
5. **Jie Li**. Guangzhou Center for Disease Control and Prevention "Academic Salon on Scientific Research Innovation and Technology Promotion (Lecture 20)": problem-driven data mining goes from correlation to causality. June 22, 2022.
6. **Jie Li**. ICRNM2022-20th Congress of the International Society of Renal Nutrition and Metabolism: How to achieve causal inference in clinical studies. June 17, 2022.
7. **Jie Li**. Famine and cardiometabolic health across multiple generations: Human evidence for transgenerational epigenetic inheritance. FASEB Catalyst Conferences. April 13-14, 2022. Co-organizer and speaker.
8. **Jie Li**. Famine and metabolic disorders across multiple generations. The 22nd South China International Congress of Cardiology. 2021 Guangzhou. (Invited oral presentation).
9. **Jie Li**. Integrating molecular epidemiology and gene-editing technology to identify novel targets for metabolic diseases. 2020 Guangdong Medical Association Nephrology Annual Conference. 2020 Guangzhou. (Invited oral presentation).
10. **Jie Li**. Nutrition and cardio-metabolic health: from a life-course perspective. Annual Meeting of Chinese Medical Doctor Association. 2020 Guangzhou. (Invited oral presentation).
11. **Jie Li**. The real-world study of Diabetic nephropathy. South China Blood Purification Forum. 2020 Guangzhou. (Invited oral presentation)
12. **Jie Li**. Prenatal Famine Exposure and Adult Health Across Generations. The 5th Guangzhou International Symposium of Nutrition and Health. 2019 Guangzhou. (Invited oral presentation).
13. **Jie Li**. Familial dysalbuminemic hyperthyroxinemia (FDH) and miscarriage. May 10, 2018. Brown University. (Oral presentation)

14. **Jie Li**. Genetic variants in SNRK and ASCVD risk in the Women's Health Initiative. Mar 1, 2018. Brown University. (Oral presentation)
15. **Jie Li**. Prenatal Exposure to Famine and Type 2 Diabetes in Adulthood Across Generations. 11th Congress of the International Society of Nutrigenetics and Nutrigenomics. Sep 19, 2017. Los Angeles, CA. (Invited oral presentation)
16. **Jie Li**, Ran An, Simin Liu, Haiyan Xu. Deregulation of PP2A-Akt Interaction Contributes to Sucrose Non-Fermenting Related Kinase (SNRK) Deficiency Induced Insulin Resistance in Adipose Tissue. Nutrition 2019. (Poster P21-071-19)
17. **Jie Li**, Yan Song, Changhao Sun, Simin Liu, Ying Li. Insulin Resistance As a Mediator for the Association of Protein Intake with Type 2 Diabetes in a Chinese Population. Endocrine Society Centennial Conference 2016. (Poster)
18. **Jie Li**, Simin Liu, Tianshu Han, Ying Li, Changhao Sun. Prenatal Exposure to Famine and Trans-generational Risk of Type 2 Diabetes in Adulthood: a Population-based Study of Families in Consecutive Generations in Suihua, China. American Diabetes Association 76th Scientific Sessions, 2016. (Poster)

THESIS:

Jie Li. The mediating role of gut hormones in the relation of macronutrients intake and chewing activity with obesity [dissertation]. Harbin (China): Harbin Medical University School of Public Health, 2012.

GRANTS

Active

- 2021-2024 The role of SNRK playing in the development of obesity-induced adipose inflammation**
 > NSFC 82073528
 > Role: Principal Investigator

In this project, we hypothesize that SNRK is a critical regulator to integrate nutrient input and metabolism, and SNRK deficiency will lead to white adipose tissue (WAT) inflammation. The following aims will be pursued: 1) relation of SNRK activity and inflammation in WAT during the development of high-fat diet induced obesity; 2) elucidate the effect of adipocyte specific deletion of SNRK in adult mice on WAT inflammation; 3) investigate the roles of EEF1D and HDAC1 in SNRK signaling; 4) validate the role of SNRK playing in the development of adipose tissue inflammation in humans.

- 2020-2023 Asprosin, body weight, and risk of type 2 diabetes in U.S. men and women**
 > NIH 5R01DK125403-03
 > Role: Investigator

We will characterize the distribution of Asprosin, a newly identified hormone from white adipose tissue, in blood circulation, and evaluate its potential predictive and/or causal role for the development of obesity and type 2 diabetes (T2D) among women who participated in the national Women's Health Initiative (WHI) and among men who participated in the Health Professionals Follow-Up Study (HPFS), each with 20 years of follow-up. We will investigate relevant genetic variations, plasma levels of biochemical markers, obesity and type 2 diabetes incidence using state-of-the-art methodology. Achieving the specific aims in our application will be a major step toward the timely and cost-efficient development of novel diagnostic and therapeutic strategies for the prevention and control of obesity and type 2 diabetes.

Complete

2017-2021 Transgenerational effects of early-life exposure to the Chinese famine on cardiometabolic**risk factors in adulthood and the underlying epigenetic mechanism**

- > National Natural Science Foundation of China (81673156)

- > Role: Principal Investigator

The main goal of this project is to explore the transgenerational effects of early-life nutritional exposure on cardiometabolic risk factors in adulthood in a population-based cohort study of families, and to elucidate the underlying epigenetic mechanism.

2018-2019 Comprehensive assessment of therapeutic targets using integrative genomics with special functional evaluation of SHBG recombinant and MAP kinase phosphatase 3 as anti-diabetes targets

- > Molecular Epidemiology Grant of Brown Public Health

- > Role: Investigator

In this project, we will specifically investigate the biological pathways and gene networks that are perturbed by genetic variations and their interactions with potential targets in affecting risk of developing T2D and cardiovascular risk in three ethnic populations (African Americans/AA, White Americans/WA, and Hispanic Americans/HA), and evaluate whether siRNA against MKP-3 (siMKP3) or recombinant SHBG can reduce glucose output in primary hepatocytes and lower blood glucose levels in diet induced obese mice and rats.

2012–2017 Folic Acid Level in Early Life and Obesity Susceptibility in Later Life

- > National Natural Science Foundation of China (81302417)

- > China Postdoctoral Science Foundation Grant (2014M551279)

- > Specialized Research Fund for the Doctoral Program of Higher Education (20132307120016)

- > Science and Technology Research Project of Heilongjiang Province Department of Education (12541343)

- > Heilongjiang Postdoctoral Financial Assistance (LBH-Z14132)

- > Heilongjiang Natural Science Foundation (QC2015097)

- > Role: Principal Investigator

The main goal of these projects is to research the effects of early-life folic acid exposure on adult obesity susceptibility and methylation level of carbohydrate and lipid metabolism related genes using rodent and human studies.

2012-2017 Prenatal Exposure to Famine and Transgenerational Risk of Cardio-metabolic Diseases

- > University Nursing Program for Young Scholars with Creative Talents in Heilongjiang Province (UNPYSCT-2015033)

- > Role: Principal Investigator

The main goal of this project is to examine whether prenatal exposure to the Chinese famine of 1959–1961 was associated with future risk of cardiometabolic diseases in adulthood in two consecutive generations and explore the potential epigenetic mechanism.

2013–2015 Dietary Histidine Supplementation and Inflammation, Oxidative Stress, and Metabolic Dysfunction in Obese Individual

- > National Natural Science Foundation of China (81202184)

- > Role: Co-investigator

The main goal of this project is to research whether dietary histidine supplementation improve inflammation, oxidative stress and metabolic dysfunction in obese population.

2011-2013 Mitochondrial Dysfunction and Diet-induced Obesity

> National Natural Science Foundation of China (81072297)

> Role: Co-investigator

The main goal of this project is to investigate the effects of mitochondrial dysfunction on obesity and to screen phytochemicals with the ability of improving mitochondrial function to treat obesity.

2009-2011 Gut Hormones and Diet-induced Obesity

> National Natural Science Foundation of China (30872108)

> Role: Co-investigator

The main goal of this project is to study the central role of gut hormones played in energy homeostasis regulation in high-fat diet induced obese rat model and obese population.

TEACHING AND COURSES

Postgraduate and Post-doctoral education:

	Name	Years	College	Major
1	Huabing Zhang	2021-2024	South China University of Technology	Clinical Medicine
2	Zhixiong Luo	2022-2025	South China University of Technology	Clinical Medicine
3	Shuhao Chen	2022-2025	Southern Medical University	Clinical Medicine
4	Xiaojing Kuang	2022-2025	Guangdong provincial peoples hospital	Molecular Epidemiology
5	Chunyan Tao	2022-2025	Guangdong provincial peoples hospital	Molecular Epidemiology

Teaching situation:

Years	Courses	College
2022	PHP2018 Spring 22 S01 Epidemiology of Cardio-Metabolic Health	Brown University
2018	PHP2018 Epidemiology of Cardio-Metabolic Health: TaqMan SNP Genotyping Assay	Brown University
2016	PHP2018 Epidemiology of Cardio-Metabolic Health:	Brown University
2013-2015	Clinical Nutrition	Harbin Medical University, China
2013-2015	Rational Nutrition and Balanced Diet	Harbin Medical University, China
2013-2015	Nutrition and Food Hygiene Experimental Course	Harbin Medical University, China