

## Xiang Li, MD, PhD

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### **Education**

<u>Date</u>	<u>Degree</u>	<u>Discipline</u>	<u>Institution</u>
2009-2014	Bachelor of Medicine (MBBS)	Laboratory Medicine	Nanchang University, Jiangxi, China
2014-2016	MS	Epidemiology	Tulane University, New Orleans, LA, United States
2016-2020	PhD	Nutritional Epidemiology	Tulane University, New Orleans, LA, United States

### **Postdoc Training**

<u>Date</u>	<u>Institution</u>
2020-current	Tulane University

### **Honors and Awards**

- 2023 Health Disparities Committee's Top 10 Recommended Abstracts Award, American Diabetes Association
- 2023 Jeremiah and Rose Stamler Research Award for New Investigators, American Heart Association
- 2022 Presidents' Selected Abstract Award, American Diabetes Association
- 2021 Young Investigator Award, American Diabetes Association
- 2021 Emerging Leaders in Nutrition Science Abstract Recognition Award Program, Finalist, American Society for Nutrition
- 2020 Mary Elizabeth O'Connor Memorial Scholarship Award, Tulane University
- 2019 Travel Scholarship, University of North Carolina at Chapel Hill

2019 Travel Award, Indiana University  
2016 Department Scholarship, Tulane University  
2016 Summer Institute Travel Scholarship, University of Washington  
2013-4 First-class Scholarship, Nanchang University  
2013 Award for Social Work, Nanchang University

## **Experience**

**Teaching Assistant**, *Tulane University Department of Epidemiology, New Orleans, LA* 2016.08-2020.05

Epidemiology Method I

Intermediate Epidemiology Method

Survey Methodology

Cardiovascular Disease Epidemiology

Observational Epidemiology

Clinical Trials: Study design, Conduct, and Interpretation

Nutritional Epidemiology

Analytical Epidemiology

**Research Assistant**, *Tulane University Office of Health Research, New Orleans, LA* 2015.12-2016.05

Director: Dr. Jiang He, Dr. Jing Chen

Role: provide assistance to “Chronic Renal Insufficiency Cohort Study (CRIC)”

**Research Assistant**, *Tulane University Department of Epidemiology, New Orleans, LA* 2015.09-2015.11

Director: Dr. Jiang He, Dr. Changwei Li

Role: Provide assistance to “Global Burden of Mortality due to CKD Project”

## **Workshop/Training**

*Workshop*, Mathematical Sciences in Obesity Research, Indiana University 2022.06

*Workshop*, Trans-NIH Consortium of Randomized Controlled Trails of Lifestyle Weight Loss Interventions for Genome-Wide Association Studies Workshop, NIH 2021.08

*Workshop*, Causal Inference in Behavioral Obesity Research, Indiana University. 2019.07.29-08.02

*Workshop*, Nutrigenetic, Nutrigenomics and Precision Nutrition Short Course, UNC. 2019.06

*Workshop*, Program in Quantitative Genomics: Biobanks: Study Design and Data Analysis, Harvard University 2018.11

<i>Workshop</i> , Mendelian Randomization Boot Camp, Columbia University	2018.06
<i>Workshop</i> , Epigenetics Boot Camp, Columbia University	2018.06
<i>Summer Institute in Statistical Genetics (SISG)</i> , University of Washington, Seattle, LA	2016.07
<ul style="list-style-type: none"> <li>• Mixed model in quantitative genetics</li> <li>• Genetic epidemiology</li> <li>• Network and pathway analysis of omics data</li> </ul>	
<i>Workshop</i> , LA CaTS Clinical Research Coordinators Training, Tulane University	2015.11
<i>Internship</i> , the Second Affiliated Hospital to Nanchang University, Jiangxi, China	2013-2014
<ul style="list-style-type: none"> <li>• Clinical rotations</li> </ul>	

### **Professional Memberships**

2018-	Member, American Society for Nutrition
2018-	Member, American Heart Association
2019-	Member, American Diabetes Association

### **Editorial and Manuscript Review Responsibilities**

American Heart Association Scientific Sessions 2023, 51 abstract reviews
American Heart Association Scientific Sessions 2022, 37 abstract reviews
American Heart Association Scientific Sessions 2021, 44 abstract reviews
American Heart Association Scientific Sessions 2020, 75 abstract reviews
Diabetes Care: 1 review
EBioMedicine: 2 reviews
Obesity: 3 reviews
Antioxidants: 2 reviews
Cancers: 1 review
International Journal of Hygiene and Environmental Health: 2 reviews
Nutrients: 22 reviews
Heart: 2 reviews
Metabolites: 7 reviews
Gene: 1 review
Molecular and Cellular Biochemistry: 5 reviews
Healthcare: 1 review

International Journal of Hypertension: 2 reviews  
American Journal of Human Biology: 4 reviews  
Human Heredity: 3 reviews  
Journal of Obstetrics and Gynaecology: 1 review  
International Journal of Molecular Science: 1 review  
Frontiers in Bioscience-Landmark: 1 review  
Frontiers in Epidemiology: 1 review  
Frontiers in Genetics: 1 review  
Frontiers in Cardiovascular Medicine: 1 review  
Frontiers in Public Health: 4 reviews  
Frontiers in Endocrinology: 3 reviews  
Frontiers in Nutrition: 1 review  
Clocks and Sleep: 1 review  
International Journal of Environmental Research and Public Health: 2 reviews

### **Invited Presentations**

1. June 24, 2023, “Metabolic signature of Type 2 Diabetes subtypes in UK Biobank”, American Diabetes Association’s 83rd Scientific Sessions, San Diego, CA
2. March 2, 2023, “Adherence To Life’s Essential 8, Genetic Susceptibility, And Incident Cardiovascular Disease: A Prospective Study Of 137,794 UK Biobank Participants”, American Heart Association Epi|Lifestyle Scientific Sessions, Boston, MA.
3. March 3, 2023, “DNA Methylation At *ABCG1* And Long-term Changes In Adiposity In Response To Diet Interventions: The POUNDS Lost Trial”, American Heart Association Epi|Lifestyle Scientific Sessions, Boston, MA.
4. June 6, 2022, “Circulating Level of DNA Methylation Near *CPT1A* and Long-Term Changes in Triglycerides in Response to Diet Interventions: The POUNDS Lost Trial”, American Diabetes Association’s 82nd Scientific Sessions, New Orleans, LA
5. June 28, 2021, “Replacing Sedentary Time by Different Types of Physical Activity and the Risk of Type 2 Diabetes”, American Diabetes Association’s 81st Scientific Sessions, Virtual
6. June 28, 2021, “Joint Exposure to Various Ambient Air Pollutants, Obesity, and Incident Type 2 Diabetes: A Prospective Study in UK Biobank”, American Diabetes Association’s 81st Scientific Sessions, Virtual
7. June 7-10, 2021, “Genetically Determined Gut Microbiome Abundance and 2-Year Changes in Central Adiposity and Body Composition: the POUNDS Lost Trial”, Nutrition 2021, Virtual
8. February 15, 2021, “Healthy sleep patterns with cardiometabolic risk”, Tulane University Department of Epidemiology Seminar, New Orleans, LA

9. March 26, 2020, “Gut microbiota metabolites, gene-diet interaction, and cardiometabolic risk related to ectopic fat: Studies in a randomized clinical trial and prospective cohorts”, Tulane University Department of Epidemiology Seminar, New Orleans, LA

### **Presentations and Posters**

*ADA Scientific Sessions, 2023* 2023.06

**Li X**, Shao X, Kou M, Xue Q, Bray GA, Sacks FM, Qi L. DNA methylation near NFATC2IP and changes in clinical cardiovascular health: the POUNDS Lost trial

**Li X**, Kou M, Xue Q, Ma H, Wang X, Feng H, Heianza Y, Qi L. Adherence to life’s essential 8, socioeconomic status, and incidence of non-alcoholic fatty liver disease: a prospective study

*AHA EPI Lifestyle scientific sessions, 2023* 2023.2.28-3.3

**Li X**, Shao X, Xue Q, Grundberg E, Bray GA, Sacks FM, Qi L. DNA methylation at *ABCG1* and long-term changes in adiposity in response to diet interventions: the POUNDS Lost trial. [oral]

**Li X**, Xue Q, Ma H, Feng H, Wang X, Heianza Y, Qi L. Adherence to life’s essential 8, genetic susceptibility, and incident cardiovascular disease: a prospective study of 137,794 UK biobank participants. [oral]

**Li X**, Shao X, Xue Q, Grundberg E, Bray GA, Sacks FM, Qi L. DNA methylation at *SREBF1* and long-term changes in body composition: the POUNDS Lost Trial. [poster]

*AHA Scientific sessions, 2022* 2022.11

**Li X**, Shao X, Champagne CM, Xue Q, Grundberg E, Bazzano LA, Bray GA, Sacks FM, Qi L. Blood Level Of Coffee-related DNA Methylation And Long-term Changes In Blood Pressure In Response To Weight-loss Diet Interventions: The Pounds Lost Trial [poster]

*ADA Scientific Sessions, 2022* 2022.06

**Li X**, Shao X, Xue Q, Grundberg E, Bray GA, Sacks FM, Qi L. Circulating level of DNA methylation near *CPT1A* and long-term changes in triglycerides in response to diet interventions: the POUNDS Lost trial. [oral]

*AHA EPI Lifestyle scientific sessions, 2022* 2022.03

**Li X**, Ma H, Zhou T, Qi L. Replacing Sedentary Behavior Time With Various Daily-life Physical Activities And Structured Exercises, Recommended Physical Activity, And Incident Coronary Heart Disease. [moderated poster]

- AHA Scientific sessions, 2021* 2021.11  
**Li X**, Shao X, Xue Q, Koseva BS, Grundberg E, Bray GA, Sacks FM, Qi L. Blood DNA Methylation at *TXNIP* and Glycemic Changes in Response to Weight-Loss Diet Interventions: The POUNDS Lost Trial [poster]
- Nutrition 2021* 2021.06  
**Li X**, Zhou T, Ma H, Bray GA, Sacks FM, Qi L. Genetically determined gut microbiome abundance and 2-year changes in central adiposity and body composition: the POUNDS Lost trial. [oral]
- ADA Scientific Sessions, 2021* 2020.06  
**Li X**, Wang M, Ma H, Zhou T, Liang Z, Qi L. Joint exposure to various air pollutants, obesity, and incident type 2 diabetes: a prospective study in UK Biobank. [oral]  
**Li X**, Zhou T, Ma H, Liang Z, Fonseca VA, Qi L. Replacement of sedentary behavior by various daily-life physical activities and structured exercises, genetic modification, and incident type 2 diabetes. [oral]
- AHA EPI Lifestyle scientific sessions, 2020* 2020.03  
**Li X**, Zhou T, Ma H, Sun D, Heianza Y, Manson JE, Qi L. Educational attainment, adherence to healthy lifestyle, and risk of cardiovascular diseases. [poster]
- ADA Scientific Sessions, 2019* 2019.06  
**Li X**, Sun D, Zhou T, Ma H, Liang Z, Heianza Y, Bray GA, Sacks FM, Qi L. Branched-chain amino acids and hepatic fat in weight-loss diet interventions: the POUNDS Lost trial. [moderated poster]
- AHA EPI Lifestyle scientific sessions, 2019* 2019.03  
**Li X**, Sun D, Zhou T, Heianza Y, Bray GA, Sacks FM, Qi L. Changes in gut microbiota metabolite TMAO are related to changes in hepatic fat and visceral fat in weight-loss diet intervention: the POUNDS lost trial. [moderated poster]  
**Li X**, Zhou T, Sun D, Heianza Y, Qi L. Body mass index, sedentary lifestyle, and incidence of coronary heart disease. [poster]
- Nutrition 2018* 2018.06  
**Li X**, Sun D, Zhou T, Heianza Y, Bray GA, Sacks FM, Qi L. Genetic variation of lean body mass and weight loss in response to diet intervention: The POUNDS Lost trial. [poster]
- AHA EPI Lifestyle scientific sessions, 2018* 2018.03

Li X, Sun D, Zhao M, Nisa H, Heianza Y, Kelly T, Harville E, Whelton P, He J, Chen W, Li S, Bazzano L, Qi L. Trajectory of fasting glucose from childhood to adulthood and risk of hypertension: The Bogalusa Heart Study [poster]

*American College of Epidemiology, 2017*

2017.09

Li X, Wang T, Zhao M, Huang T, Sun D, Han L, Nisa H, Shang X, Heianza Y, Qi L. DNA methylation variant, B-vitamins intake and longitudinal change in body mass index [poster]

## **Publications**

1. Li X, Ma H, Wang X, Feng H, Qi L. Life's Essential 8, Genetic Susceptibility, and Incident Cardiovascular Disease: A Prospective Study. **Arterioscler Thromb Vasc Biol.** 2023 May 18. doi: 10.1161/ATVBAHA.123.319290. Epub ahead of print. PMID: 37199161.
2. Li X, Shao X, Xue Q, Kou M, Champagne CM, Koseva BS, Heianza Y, Grundberg E, Bazzano LA, Bray GA, Sacks FM, Qi L. DNA methylation near CPT1A and changes in triglyceride-rich lipoproteins in response to weight-loss diet interventions. **J Clin Endocrinol Metab.** 2023 Feb 17:dgad086. doi: 10.1210/clinem/dgad086. Epub ahead of print. PMID: 36800272.
3. Li X, Xue Q, Ma H, Champagne CM, Bray GA, Sacks FM, Qi L. Genetically Determined Gut Microbial Abundance and 2-Year Changes in Central Adiposity and Body Composition: the POUNDS Lost Trial. **Clinical Nutrition.** 2022 , ISSN 0261-5614, <https://doi.org/10.1016/j.clnu.2022.11.002>.
4. Li X, Ma H, Zhou T, Qi L. Replacing Sedentary Behavior Time With Physical Activities, Recommended Physical Activity, and Incident Coronary Heart Disease. **Mayo Clin Proc.** 2022 Dec 1:S0025-6196(22)00434-7. doi: 10.1016/j.mayocp.2022.06.031. Epub ahead of print. PMID: 36464539.
5. Li X, Qi L. Epigenetics in Precision Nutrition. **J. Pers. Med.** 2022, 12, 533.
6. Li X, Shao X, Bazzano LA, Xue Q, Kosewa B, Grundberg E, Shai I, Bray GA, Sacks FM, Qi L. Blood DNA methylation at *TXNIP* and glycemic changes in response to weight-loss diet interventions: the POUNDS Lost Trial. **Int J Obes** (2022). <https://doi.org/10.1038/s41366-022-01084-5>
7. Li X, Zhou T, Ma H, Huang T, Gao X, Manson JE, Qi L. Healthy Sleep Patterns and Risk of Incident Arrhythmias. **J Am Coll Cardiol.** 2021 Sep 21;78(12):1197-1207.
8. Li X, Wang M, Song Y, Ma H, Zhou T, Liang Z, Qi L. Obesity and Relation between Joint Exposure to Various Ambient Air Pollution and Incident Type 2 Diabetes in UK Biobank. **PLoS Med.** 2021 Aug 30;18(8):e1003767.

9. Li X, Zhou T, Ma H, Liang Z, Fonseca VA, Qi L. Replacement of Sedentary Behavior by Various Daily-Life Physical Activities and Structured Exercises: Genetic Risk and Incident Type 2 Diabetes. **Diabetes Care**. 2021 Jun 28;dc210455.
10. Li X, Heiskanen J, Ma H, Heianza Y, Guo Y, Kelly TN, He H, Fonseca V, Fonseca VA, Chen W, Harville EW, Ruohonen S, Hutri-Kähönen N, Bazzano LA, Raitakari OT, Qi L. Fatty Liver Index and Left Ventricular Mass: Prospective Associations from Two Independent Cohorts. **Journal of Hypertension** 2021.
11. Li X, Xue Q, Wang M, Zhou T, Ma H, Heianza Y, Qi L. Adherence to a Healthy Sleep Pattern and Incident Heart Failure: A Prospective Study of 408,802 UK Biobank Participants. **Circulation**. 2020 Nov 16.
12. Li X, Zhou T, Ma H, Heianza Y, Champagne CM, Williamson DA, Bray GA, Sacks FM, Qi L. Genetic variation in lean body mass, changes of appetite and weight loss in response to diet interventions: The POUNDS Lost trial. **Diabetes Obes Metab**. 2020 Jul 30.
13. Li X, Sun D, Zhou T, Ma H, Heianza Y, Liang Z, Bray GA, Sacks FM, Qi L. Changes of Branched-Chain Amino Acids and Ectopic Fat in Response to Weight-loss Diets: the POUNDS Lost Trial. **J Clin Endocrinol Metab**. 2020 Oct 1;105(10):dgaa377.
14. Li X, Qi L. Gene-Environment Interactions on Body Fat Distribution. **Int J Mol Sci**. Switzerland; 2019;20.
15. Li X, Wang T, Zhao M, Huang T, Sun D, Han L, Nisa H, Shang X, Heianza Y, Qi L. DNA methylation variant, B-vitamins intake and longitudinal change in body mass index. **Int J Obes (Lond)**; 2019;43:468–74.
16. Kou M, Li X, Shao X, Grundberg E, Wang X, Ma H, Heianza Y, Alfredo Martinez J, Bray GA, Sacks FM, Qi L. DNA Methylation of Birthweight-Blood Pressure Genes and Changes of Blood Pressure in Response to Weight-Loss Diets in the POUNDS Lost Trial. **Hypertension**. 2023 Apr 11. doi: 10.1161/HYPERTENSIONAHA.123.20864. Epub ahead of print. PMID: 37039021.
17. Ma H, Wang X, Xue Q, Li X, Liang Z, Heianza Y, Franco OH, Qi L. Cardiovascular Health and Life Expectancy Among Adults in the United States. **Circulation**. 2023 Apr 11;147(15):1137-1146. doi: 10.1161/CIRCULATIONAHA.122.062457. Epub 2023 Apr 10. PMID: 37036905.
18. Wang X, Ma H, Li X, Heianza Y, Manson JE, Franco OH, Qi L. Association of Cardiovascular Health With Life Expectancy Free of Cardiovascular Disease, Diabetes, Cancer, and Dementia in UK Adults. **JAMA Intern Med**. 2023 Feb 27:e230015. doi: 10.1001/jamainternmed.2023.0015. Epub ahead of print. PMID: 36848126; PMCID: PMC9972243.
19. Kou M, Wang X, Ma H, Li X, Heianza Y, Qi L. Degree of Joint Risk Factor Control and Incident Heart Failure in Hypertensive Patients. **J Am Coll Cardiol HF**. null2023, 0 (0). <https://doi.org/10.1016/j.jchf.2023.01.006>
20. Ma H, Wang X, Li X, Heianza Y, Qi L. Adding Salt to Foods and Risk of Cardiovascular Disease. **J Am Coll Cardiol**. 2022 Dec 6;80(23):2157-2167. doi: 10.1016/j.jacc.2022.09.039. PMID: 36456045.



21. Ma H, Wang X, **Li X**, Heianza Y, Qi L. Moderate alcohol drinking with meals is related to lower incidence of type 2 diabetes. **Am J Clin Nutr.** 2022 Oct 17:nqac207. doi: 10.1093/ajcn/nqac207.
22. Ma H, **Li X**, Zhou T, Wang M, Heianza Y, Qi L. Long-term exposure to low-level air pollution, genetic susceptibility and risk of dementia. **Int J Epidemiol.** 2022 Jul 18:dyac146.
23. Zhou T, Du S, Sun D, **Li X**, Heianza Y, Hu G, Sun L, Pei X, Shang X, Qi L. Prevalence and trends in Gestational Diabetes Mellitus Among Women in the United States, 2006-2017: a population-based study. **Front Endocrinol (Lausanne).** 2022 Jun 6;13:868094.
24. Ma H, Xue Q, Wang X, **Li X**, Franco OH, Li Y, Heianza Y, Manson JE, Qi L. Adding salt to foods associates with risk of all-cause premature mortality and life expectancy. **Eur Heart J.** 2022 Jul 10:ehac208. doi: 10.1093/eurheartj/ehac208. Epub ahead of print. PMID: 35808995.
25. Ma H, Zhou T, **Li X**, Maraganore D, Heianza Y, Qi L. Early-life educational attainment, APOE  $\epsilon$ 4 alleles, and incident dementia risk in late life. **Geroscience.** 2022 Mar 20. doi: 10.1007/s11357-022-00545-z. Epub ahead of print. PMID: 35306636.
26. Li A, **Li X**, Zhou T, Ma H, Heianza Y, Williamson DA, Smith SR, Bray GA, Sacks FM, Qi L. Sleep Disturbance, Changes in Energy Intake and Body Compositing During Weight Loss in the POUNDS LOST Trial. **Diabetes.** 2022 Feb 24:db210699. doi: 10.2337/db21-0699. Epub ahead of print. PMID: 35202470.
27. Ma H, Zhou T, **Li X**, Heianza Y, Qi L. Use of fish oil supplements is differently related to incidence of all-cause and vascular dementia among people with the distinct APOE  $\epsilon$ 4 dosage. **Clin Nutr.** 2022 Feb 3;41(3):731-736. doi: 10.1016/j.clnu.2022.01.019. Epub ahead of print. PMID: 35172255.
28. Song Q, Wang M, Zhou T, Sun D, Ma H, **Li X**, Heianza Y, Qi L. The Lifestyle-Related Cardiovascular Risk Is Modified by Sleep Patterns. **Mayo Clin Proc.** 2022 Feb 5:S0025-6196(21)00701-1. doi: 10.1016/j.mayocp.2021.08.031. Epub ahead of print. PMID: 35135690.
29. Xue Q, **Li X**, Ma H, Zhou T, Heianza Y, Rood J, Bray GA, Sacks FM, Qi L. Changes in Pedometer-measured Physical Activity are associated with Weight Loss and Changes in Body Composition and Fat Distribution in Response to Reduced Energy Diet Interventions: the POUNDS Lost trial. **Diabetes Obes Metab.** 2022 Feb 3. doi: 10.1111/dom.14662. Epub ahead of print. PMID: 35112774.
30. Wang M, Xue Q, **Li X**, Krohn K, Ziesche S, Ceglarek U, Blüher M, Keller M, Yaskolka Meir A, Heianza Y, Kovacs P, Shai I, Qi L. Circulating levels of microRNA-122 and hepatic fat change in response to weight-loss interventions: CENTRAL Trial. **J Clin Endocrinol Metab.** 2022 Jan 17:dgac023. doi: 10.1210/clinem/dgac023. Epub ahead of print. PMID: 35037057.
31. Geng T, **Li X**, Ma H, Heianza Y, Qi L. Adherence to a Healthy Sleep Pattern and Risk of Chronic Kidney Disease: The UK Biobank Study. **Mayo Clin Proc.** 2022 Jan;97(1):68-77. doi: 10.1016/j.mayocp.2021.08.028. PMID: 34996567.

32. Song QY, Zhou T, Sun D, Ma H, **Li X**, Heianza Y, Qi L. Panoramic Smoking Burden and Genetic Susceptibility in Relation to All-cause and Cause-Specific Mortality: A Prospective Study in UK Biobank. **Addiction**. 2021 Oct 4. doi: 10.1111/add.15711.
33. Ma H, **Li X**, Zhou T, Sun D, Shai I, Heianza Y, Rimm EB, Manson JE, Qi L. Alcohol consumption levels as compared with drinking habits in predicting all-cause mortality and cause-specific mortality among current drinkers. **Mayo Clin Proc**. 2021;96(7):1758-1769.
34. Zhou T, Yuan Y, Xue Q, **Li X**, Wang M, Ma H, Heianza Y, Qi L. Adherence to a healthy sleep pattern is associated with lower risks of all-cause, cardiovascular, and cancer-specific mortality. **J Intern Med**. 2021 Jul 8.
35. Song Q, Sun D, Zhou T, **Li X**, Ma H, Liang Z, Wang H, Cardoso MA, Heianza Y, Qi L. Perinatal exposure to maternal smoking and adulthood smoking behaviors in predicting cardiovascular diseases: A prospective cohort study. **Atherosclerosis**. 2021 May 26;328:52-59.
36. Francis M, Li C, Sun Y, Zhou J, **Li X**, Brenna JT, Ye K. Genome-wide association study of fish oil supplementation on lipid traits in 81,246 individuals reveals new gene-diet interaction loci. **PLoS Genet**. 2021 Mar 24;17(3):e1009431.
37. Geng T, Wang M, **Li X**, Zhou T, Ma H, Fonseca VA, Koh WP, Huang T, Heianza Y, Qi L. Birth weight modifies the relation between adulthood levels of insulin-like growth factor-1 and type 2 diabetes: a prospective cohort study. **BMJ Open Diabetes Res Care**. 2021 Jan;9(1):e001885.
38. Zhou T, Sun D, **Li X**, Heianza Y, LeBoff MS, Bray GA, Sacks FM, Qi L. Genetically determined Short-Chain Fatty Acid level modifies dietary fiber intake on changes in BMD during weight loss: The POUNDS lost trial. **Am J Clin Nutr**. 2021 Jul 1;114(1):42-48.
39. Wang M, Zhou T, Song Y, **Li X**, Ma H, Hu Y, Heianza Y, Qi L. Joint exposure to various ambient air pollutants and incident heart failure: a prospective analysis in UK Biobank. **Eur Heart J**. 2021 Feb 2;.
40. Zhou T, Wang M, Ma H, **Li X**, Heianza Y, Qi L. Dietary fibre, genetic variations of gut microbiota-derived short-chain fatty acids, and bone health in UK biobank. *J Clin Endocrinol Metab*. 2020. **J Clin Endocrinol Metab**. 2020 Oct 14:dga740.
41. Wang M, Zhou T, **Li X**, Ma H, Liang Z, Fonseca VA, Heianza Y, Qi L. Baseline Vitamin D Status, Sleep Patterns, and the Risk of Incident Type 2 Diabetes in Data From the UK Biobank Study. **Diabetes Care**. 2020 Aug 26:dc201109.
42. Chen Y, Zhou T, Sun D, **Li X**, Ma H, Liang Z, Heianza Y, Pei X, Bray GA, Sacks FM, Qi L. Distinct genetic subtypes of adiposity and glycemic changes in response to weight-loss diet intervention: the POUNDS Lost trial. **Eur J Nutr**. 2021 Feb;60(1):249-258. doi: 10.1007/s00394-020-02244-x.
43. Ma H, **Li X**, Zhou T, Sun D, Liang Z, Li Y, Heianza Y, Qi L. Glucosamine Use, Inflammation, and Genetic Susceptibility, and Incidence of Type 2 Diabetes: A Prospective Study in UK Biobank. **Diabetes Care**. United States; 2020;43:719–25.

44. Ma H, Li X, Sun D, Zhou T, Ley SH, Gustat J, Heianza Y, Qi L. Association of habitual glucosamine use with risk of cardiovascular disease: Prospective study in UK Biobank. **BMJ**. 2019;365.
45. Heianza Y, Ma W, Li X, Cao Y, Chan AT, Rimm EB, Hu FB, Rexrode KM, Manson JE, Qi L. Duration and Life-Stage of Antibiotic Use and Risks of All-Cause and Cause-Specific Mortality: Prospective Cohort Study. **Circ Res**. United States; 2020;126:364–73.
46. Sun D, Zhou T, Li X, Ley SH, Heianza Y, Qi L. Maternal smoking, genetic susceptibility, and birth-to-adulthood body weight. **Int J Obes (Lond)**. England; 2019;
47. Zhou T, Sun D, Li X, Ma H, Heianza Y, Qi L. Educational attainment and drinking behaviors: Mendelian randomization study in UK Biobank. **Mol Psychiatry**. England; 2019;
48. Sun D, Zhou T, Li X, Heianza Y, Liang Z, Bray GA, Sacks FM, Qi L. Genetic Susceptibility, Dietary Protein Intake, and Changes of Blood Pressure: The POUNDS Lost Trial. **Hypertension** (Dallas, Tex 1979). United States; 2019;74:1460–7.
49. Huang T, Wang T, Zheng Y, Ellervik C, Li X, Gao M, Fang Z, Chai J-F, Ahluwalia TVS, Wang Y, et al. Association of Birth Weight With Type 2 Diabetes and Glycemic Traits: A Mendelian Randomization Study. **JAMA Netw open**. United States; 2019;2:e1910915.
50. Sun D, Zhou T, Heianza Y, Li X, Fan M, Fonseca VA, Qi L. Type 2 Diabetes and Hypertension. **Circ Res**. United States; 2019;124:930–7.
51. Ma H, Wang X, Guo X, Li X, Qi L, Li Y. Distinct Uric Acid Trajectories Are Associated With Different Risks of Incident Hypertension in Middle-Aged Adults. **Mayo Clin Proc**. England; 2019;94:611–9.
52. Heianza Y, Sun D, Li X, DiDonato JA, Bray GA, Sacks FM, Qi L. Gut microbiota metabolites, amino acid metabolites and improvements in insulin sensitivity and glucose metabolism: the POUNDS Lost trial. **Gut**. England; 2019;68:263–70.
53. Zhou T, Heianza Y, Chen Y, Li X, Sun D, DiDonato JA, Pei X, LeBoff MS, Bray GA, Sacks FM, Qi L. Circulating Gut Microbiota Metabolite Trimethylamine N-Oxide (TMAO) and Changes in Bone Density in Response to Weight Loss Diets: The POUNDS Lost Trial. **Diabetes Care**. United States; 2019;42:1365–71.
54. Sun D, Heianza Y, Li X, Shang X, Smith SR, Bray GA, Sacks FM, Qi L. Genetic, epigenetic, and transcriptional variations at NFATC2IP locus with weight loss in response to diet interventions: The POUNDS Lost Trial. **Diabetes Obes Metab**. England; 2018;
55. Zhou T, Sun D, Heianza Y, Li X, Champagne CM, LeBoff MS, Shang X, Pei X, Bray GA, Sacks FM, Qi L. Genetically determined vitamin D levels and change in bone density during a weight-loss diet intervention: the Preventing Overweight Using Novel Dietary Strategies (POUNDS Lost) Trial. **Am J Clin Nutr**. United States; 2018;108:1129–34.
56. Sun D, Li X, Heianza Y, Nisa H, Shang X, Rabito F, Kelly T, Harville E, Li S, He J, Bazzano LA, Chen W, Qi L. History of Asthma From Childhood and Arterial Stiffness in Asymptomatic Young Adults: The Bogalusa Heart Study. **Hypertension**. United States; 2018;71:928–36.

57. Liu T, Li X, Zou Z-Y, Li C. The Prevalence and Determinants of Using Traditional Chinese Medicine Among Middle-aged and Older Chinese Adults: Results from the China Health and Retirement Longitudinal Study. **J Am Med Dir Assoc.** United States; 2015;16:1002.e1-5.

### **Funded Grant/Fellowship**

Role:	Principle Investigator
Project:	Novel Method to Detect the Gene-Diet Interaction Combining Cohort Studies and Intervention Trial
Period of support	01/01/2019-12/31/2020
Funding source:	American Heart Association Predoctoral Fellowship (19PRE34380036)
Funding level:	\$53,688
Principal Investigator:	Xiang Li, MD, MS
Objectives:	The study aims to use a novel method to detect variance-controlling genetic variants and assess their interactions with diet interventions on changes in adiposity and body composition.