# CURRICULUM VITAE JINYING ZHAO, MD, PhD

#### Office Address & Telephone:

Department of Epidemiology

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#### **EDUCATION**

2000-2005	Doctor of Philosophy (Statistical Genetics & Genetic Epidemiology) University of Texas Health Science Center at Houston, Houston, TX
1996-1999	Doctor of Philosophy (Molecular Genetics) Chinese Academy of Medical Sciences, Beijing, China
1989-1992	Master of Science (Pathology) Zhengzhou University School of Medicine, Zhengzhou, China
1984-1989	Doctor of Medicine Zhengzhou University School of Medicine, Zhengzhou, China

#### PROFESSIONAL EXPERIENCE

08/2016 -	Dean's Professor & Director, Division of Genetic Epidemiology
	Department of Epidemiology, College of Public Health and Health
	Professions and College of Medicine
	University of Florida, Gainesville, FL

8/2016 – **Adjunct Professor** 

Department of Epidemiology

School of Public Health and Tropical Medicine

Tulane University, New Orleans, LA

07/2014 - 8/2016 **Professor** 

Department of Epidemiology

School of Public Health and Tropical Medicine

Tulane University, New Orleans, LA

07/2012 – 06/2014 **Associate Professor** 

Department of Epidemiology

School of Public Health and Tropical Medicine

Tulane University, New Orleans, LA

01/2009 – 06/2012	Associate Professor Department of Biostatistics and Epidemiology College of Public Health University of Oklahoma HSC, Oklahoma City, OK
01/2006 – 12/2009	Assistant Professor Division of Cardiology, Department of Medicine Emory University School of Medicine, Atlanta, GA
05/2000 – 12/2005	Graduate Research Assistant Human Genetics Center, School of Public Health University of Texas Health Science Center at Houston Houston, Texas
07/1999 – 04/2000	Postdoctoral Research Fellow Human Genetics Center, School of Public Health University of Texas Health Science Center at Houston Houston, Texas
07/1992 – 06/1999	Clinical Pathologist Department of Pathology, Henan People's Hospital Zhengzhou, China

#### **HONORS AND AWARDS**

2012	Winner, Roger R. Williams Award for Genetic Epidemiology in the Prevention and Treatment of Atherosclerosis, presented by the American Heart Association
2010	Outstanding Faculty Award in Research or Scholarly Achievement, presented by College of Public Health, University of Oklahoma Health Science Center
2009	Finalist, Sandra Daugherty Award for Excellence in Cardiovascular Disease or Hypertension Epidemiology, presented by the American Heart Association
2006	Winner, Elizabeth Barrett-Connor Research Award for Young Investigators, presented by the American Heart Association

### PROFESSIONAL MEMBERSHIP

- American Society of Human Genetics
- American Heart Association
- American Diabetes Association

## TEACHING AND MENTORING

#### Graduate courses

2017-	Genetic Epidemiology (Course master, 3 credit hours) Department of Epidemiology, University of Florida, Gainesville, FL
2012- 2016	Genetic Epidemiology (Course master, 3 credit hours) Department of Epidemiology School of Public Health and Tropical Medicine, Tulane University, LA
2010-2012	Statistical Methods in Genetic Epidemiology (Course master, 3 credit hours) Department of Biostatistics and Epidemiology College of Public Health, University of Oklahoma HSC, OK
2011-2012	Molecular and Genetic Epidemiology (Course master, 3 credit hours) Department of Biostatistics and Epidemiology College of Public Health, University of Oklahoma HSC, OK
2009-2012	Cancer Epidemiology (3 credit hours) Department of Biostatistics and Epidemiology College of Public Health, University of Oklahoma HSC, OK
2010-2011	Problems in Biostatistics and Epidemiology (3 credit hours) Department of Biostatistics and Epidemiology College of Public Health, University of Oklahoma HSC, OK

## Academic Advisor and Mentor

## Junior Faculty Mentor

2016-present	Hui Hu, PhD, Research Assistant Scientist, Department of Epidemiology PHHP & COM, University of Florida, FL
2014-2016	Qi Zhao, MD, PhD, Research Assistant Professor, Department of Epidemiology Tulane School of Public Health and Tropical Medicine, LA

## Postdoctoral Fellows

2017-	Stefano Nembrini, PhD College of Public Health and Health Professions, University of Florida, FL
2015-2017	Hao Peng, PhD School of Public Health and Tropical Medicine, Tulane University, LA College of Public Health and Health Professions, University of Florida, FL
2013-2014	Shufeng Chen, MD, PhD School of Public Health and Tropical Medicine, Tulane University, LA
2009-2011	Jingyun Yang, PhD College of Public Health, University of Oklahoma Health Science Center, OK

#### PhD Committees Chair

2017- Pooja Subedi

Department of Epidemiology

College of Public Health and Health Professions and College of Medicine

University of Florida, FL

2016- Yun Zhu

Department of Epidemiology

College of Public Health and Health Professions and College of Medicine

University of Florida, FL

2014-2016 Yun Zhu

Department of Epidemiology

School of Public Health and Tropical Medicine, Tulane University, LA

2013-2016 Qiang An

Department of Epidemiology

School of Public Health and Tropical Medicine, Tulane University, LA

#### PhD Dissertation Committees

2016- Zhaoyi Chen

Department of Epidemiology

College of Public Health and Health Professions, University of Florida, FL

2013-2015 Changwei Li, PhD

Department of Epidemiology

School of Public Health and Tropical Medicine, Tulane University, LA

2014-2016 Yu Deng

Department of Biostatistics

The University of North Carolina at Chapel Hill, Chapel Hill, NC

2014-2016 Weiwei Ouyang

Department of Biostatistics and Bioinformatics

School of Public Health and Tropical Medicine, Tulane University, LA

#### RESEARCH SUPPORT

**Active** 

**7RF1AG052476 Zhao** (PI) \$3,721,756

Title: Genome-wide profiling of brain DNA hydroxymethylome in Alzheimer's disease

Source: National Institute of Aging (NIA)

Dates: 05/01/2016-04/30/2021 Role: Principal Investigator

April 2, 2018

**1R01DK107532 Zhao (PI)** \$3,076,642

Title: Novel metabolic predictors of diabetes in American Indians

Source: National Institute of Diabetes and Digestive and Kidney Disease (NIDDK)

Dates: 08/01/2016-07/30/2020 Role: Principal Investigator

**5R01MH097018 Zhao** (PI) \$3,127,223

Title: Epigenetic determinants for depression: a monozygotic discordant twin study

Source: National Institute of Mental Health (NIMH)

Dates: 08/15/13-07/31/18 Role: Principal Investigator

**3R01MH097018-06S1 Zhao (PI)** \$63,000

Title: Epigenetic determinants for depression: a monozygotic discordant twin study

Source: National Institute of Mental Health (NIMH)

Dates: 08/01/17-07/31/18 Role: Principal Investigator

**DRPD-ROF2017 Zhao** (PI) \$95,000

Title: Integrated multiomics analysis of MDS

Source: 2017 Research Opportunity Seed Fund Award

Dates: 06/01/2017-06/30/2019 Role: Principal Investigator

17SDG33630165 Hu (PI)

Title: The Total Environment and Hypertensive Disorders of Pregnancy: A Precision Public

Health Approach

Source: American Heart Association (AHA)

Dates: 07/01/2017-06/30/2020

Role: Primary mentor

**1R01MD011727** Kertes (PI) \$1,895,285

Title: Epigenetic mechanisms of emotional/behavioral health among impoverished African-

American youth

Source: National Institute of Minority and Health Disparities (NIMHD)

Dates: 08/14/2017-04/30/2022

Role: Co-Investigator

Training Program for Applied Research and Development in Genomic Medicine (Johnson)

Source: National Institute of Health (NIH)

Dates: 09/01/2017-08/30/2022

Role: Faculty mentor/Executive Member

**Pending** 

1R01 MD011745 Zhao (PI)

April 2, 2018

Title: Genomewide profiling of socioenvironmental exposome in risk of diabetes among

Hispanics/Latinos

Source: National Institute of Minority and Health Disparities (NIMHD)

Dates: 07/01/2017-06/33/2022 Role: Principal Investigator

1R01DK115871 Zhao (PI)

Title: Differential metabolic and epigenetic responses to bariatric surgery versus intensive

medical intervention: a longitudinal study in severely obese patients

Source: National Institute of Diabetes and Digestive and Kidney Disease (NIDDK)

Dates: 07/01/2017-06/33/2022 Role: Principal Investigator

1R21CA227596 Zhao (PI)

Title: Integrated multiomics approach to identify novel biomarkers for MDS

Source: National Institute of Cancer (NCI)

Dates: 04/01/2018-03/31/2020 Role: Principal Investigator

1R21MH116401 Zhao (PI)

Title: DNA hydroxymethylome in depressed brain Source: National Institute of Mental Health (NIMH)

Dates: 04/01/2018-03/31/2020 Role: Principal Investigator

**Completed** 

**1R01DK091369 Zhao** (PI) \$1,193,562

Title: Telomere attrition and diabetes risk in American Indians

Source: National Institute of Diabetes and Digestive and Kidney Disease (NIDDK)

Dates: 09/01/11-05/31/17 Role: Principal Investigator

**1R21HL092363-01A2 Zhao** (PI) \$402,875

Title: Genetic variations in the HPA axis and comorbidity of depression and CVD

Source: National Heart, Lung and Blood Institute (NHLBI)

Dates: 9/30/09-6/30/13 Role: Principal Investigator

**1K01AG034259 Zhao** (PI) \$525,481

Title: Biological aging, mitochondrial variants and coronary artery disease

Source: National Institute of Aging (NIA)

Dates: 9/15/09-8/31/13 Role: Principal Investigator

AHA 0730100N Zhao (PI) \$260,000

Title: Common genetic pathways linking depression to cardiovascular disease: a twin study

Source: American Heart Association

Dates: 1/1/07-8/31/11 Role: Principal Investigator

**ACTSI-KL2 Zhao** (**PI**) \$168,668

Title: Role of mitochondrial polymorphisms in CAD and adverse cardiovascular outcomes Source: Atlanta Clinical and Translational Science Institute (ACTSI)/National Health Institute

Dates: 4/15/08-3/31/10 Role: Principal Investigator

Oklahoma Tobacco Research Center (OTRC) Zhao (PI) \$55,000

Title: Genotype-specific effect of cigarette smoking on CAD in American Indians

Source: Oklahoma Tobacco Research Center

Dates: 7/1/09-6/30/11 Role: Principal Investigator

Emory University Heart and Vascular Center Zhao (PI) \$300,000

Title: Blood and tissue-banking for heart and vascular diseases: The Emory Heart and Vascular

Center's Genomic Platform

Source: Emory University Heart and Vascular Center

Dates: 7/1/07-6/30/09 Role: Principal Investigator

#### **Emory Center for Research on Symptoms Interactions and Health Outcomes**

**Zhao (PI)** \$30,000

Title: Genetic pathways in depressive symptoms susceptibility

Source: Emory University School of Nursing

Dates: 7/1/07-6/30/08 Role: Principal Investigator

#### Emory University Research Committee Zhao (PI) \$25,000

Title: Genetic pathways in coronary artery disease susceptibility

Source: Emory University Dates: 1/1/08-12/30/08 Role: Principal Investigator

## **PUBLICATIONS** (\*Corresponding author; †Trainee)

- 1. Fretts AM, Mete M, Howard BV, Best LG, Siscovick DS, Eilat-Adar S, **Zhao J**. Leukocyte telomere length and physical activity in American Indians: The Strong Heart Family Study. *Eur J Epidemiol* 2018 Feb 7. doi: 10.1007/s10654-018-0363-2. [Epub ahead of print]
- 2. Li C,<sup>†</sup> He J, Chen J, **Zhao J**, Gu D, Hixson JE, Rao DC, Jaquish CE, Rice TK, Sung YJ, Kelly TN. Genome-Wide Gene-Potassium Interaction Analyses on Blood Pressure: The

- GenSalt Study (*Genetic Epidemiology Network of Salt Sensitivity*). Circ Cardiovasc Genet. 2017 Dec;10 (6). pii: e001811. doi: 10.1161/CIRCGENETICS.117.001811
- 3. Suchy-Dicey AM, Muller C, Madhyastha T, Shibata D, Cole SA, **Zhao J**, Longstreth Jr WT, Buchwald D. Telomere length and MRI findings of vascular brain injury and central brain atrophy: the Strong Heart Study. *Am J Epidemiol* (in press)
- 4. **Zhao J**,\* Zhu Y,\* Yang J,\* Li L, Wu H, De Jager P, Jin P, Bennett DA. A genome-wide profiling of brain DNA hydroxymethylome in Alzheimer's disease. *Alzheimers Dement*. 2017 Jun;13(6):674-688. doi: 10.1016/j.jalz.2016.10.004.
- 5. Mukerjee S, Zhu Y,<sup>†</sup> Zsombok A, Mauvais-Jarvis F, **Zhao J**, Lazartigues E. Perinatal Exposure to Western Diet Programs Autonomic Dysfunction in the Male Offspring. *Cell Mol Neurobiol*. 2017 May 6. doi: 10.1007/s10571-017-0502-4. [Epub ahead of print]
- 6. Peng H,<sup>‡</sup> Fawn Y, Cole SA, Lyle BG, Lin J, Blackburn E, Lee ET, Howard BV, **Zhao J**.\* Plasminogen activator inhibitor-1 is associated with leukocyte telomere length in American Indians: Findings from the Strong Heart Family Study. *J Thromb Haemost*. 2017 Jun;15(6):1078-1085. doi: 10.1111/jth.13689
- 7. Peng H,<sup>†</sup> Yeh F, de Simone G, Best LG, Lee ET, Howard BV, **Zhao J**.\* Relationship between plasma plasminogen activator inhibitor-1 and hypertension in American Indians: findings from the Strong Heart Study. *J Hypertens*. 2017 Apr 4. doi: 10.1097/HJH.000000000001375. [Epub ahead of print].
- 8. Deng Y, Zeng D, **Zhao J**, Cai J. Proportional hazards model with a change point for clustered event data. *Biometrics*. 2017; 73 (3):835-845
- 9. Li C,<sup>‡</sup> Kim YK, Dorajoo R, Li H, Lee IT, Cheng CY, He M, Sheu WH, Guo X, Ganesh SK, He J, Lee J, Liu J, Hu Y, Rao DC, Tsai FJ, Koh JY, Hu H, Liang KW, Palmas W, Hixson JE, Han S, Teo YY, Wang Y, Chen J, Lu CH, Zheng Y, Gui L, Lee WJ, Yao J, Gu D, Han BG, Sim X, Sun L, **Zhao J**, Chen CH, Kumari N, He Y, Taylor KD, Raffel LJ, Moon S, Rotter JI, Ida Chen YD, Wu T, Wong TY, Wu JY, Lin X, Tai ES, Kim BJ, Kelly TN. Genome-wide association study meta-analysis of long-term average blood pressure in east Asians. *Circ Cardiovasc Genet*. 2017 Apr;10(2):e001527. doi: 10.1161/CIRCGENETICS.116.001527
- 10. Hammadah M, Al Mheid I, Wilmot K, Ramadan R, Abdelhadi N, Alkhoder A, Obideen M, Pimple PM, Levantsevych O, Kelli HM, Shah A, Sun YV, Pearce B, Kutner M, Long Q, Ward L, Ko YA, Hosny Mohammed K, Lin J, **Zhao J,** Bremner JD, Kim J, Waller EK, Raggi P, Sheps D, Quyyumi AA, Vaccarino V. Telomere Shortening, Regenerative Capacity, and Cardiovascular Outcomes. *Circ Res.* 2017 Mar 31;120 (7):1130-1138. doi: 10.1161/CIRCRESAHA.116.309421
- 11. Peng H,<sup>†</sup> Mete M, Desale S, Fretts AM, Cole SA, Lyle BG, Lin J, Blackburn E, Lee ET, Howard BV, **Zhao J**.<sup>\*</sup> Ideal cardiovascular health and leukocyte telomere length in American Indians: The Strong Heart Study. *Eur J Epidemiol* 2017 Jan; 32 (1):67-75. doi: 10.1007/s10654-016-0199-6

- 12. Mammadah M, Mheid I AI, Obideen M, Abdelhadi N, Wilmot K, Ramadan R, Alkhoder A, Pimple PM, Fang S, Awad M, Levantsevych O, Kelli HM, Bouchi Y, Murrah N, Shah A, Garcia E, Blackburn E, Sun Y, **Zhao J**, Lin J, Kim J, Waller E, Raggi P, Vaccarino V, Quyyumi Q. Shorter telomere length is associated with lower levels of circulating progenitor cells. *J Am Coll Cardiol* 2016; 67 (13\_S):166 doi:10.1016/S0735-1097(16)30167-X
- 13. Zhao Q,<sup>†</sup> Zhu Y,<sup>‡</sup> Yeh F, Lin J, Calhoun D, Cole SA, Lee ET, **Zhao J**\*. Depressive symptoms are associated with leukocyte telomere length in American Indians: findings from the Strong Heart Family Study.. *Aging (Albany NY)*. 2016 Nov 18; 8 (11):2961-2970. doi: 10.18632/aging.101104.
- 14. Zhao Q,<sup>†</sup> Zhu Y,<sup>†</sup> Best LG, Umans JG, Uppal K, Tran VT, Jones DP, Lee ET, Howard BV, **Zhao J**\*. Metabolic profiles of obesity in American Indians: the Strong Heart Family Study. *PloS One* 2016; 11(7): e0159548. doi:10.1371/journal.pone.0159548
- 15. Fretts AM, Howard BV, Siscovick DS, Best LG, Beresford SA, Mete M, Eilat-Adar S, Sotoodehnia N, **Zhao J**. Processed meat, but not unprocessed red meat, associated with short leukocyte telomere length in the Strong Heart Family Study. *Journal of Nutrition* 2016 Aug 24. pii: jn234922. [Epub ahead of print]
- 16. Zhao Q, <sup>†</sup> Zhu Y, <sup>†</sup> Cole SA, Best LG, Lin J, Blackburn E, Devereux R, Roman MJ, Lee ET, Howard B, **Zhao J**. \* Impact of Biological Aging on Arterial Aging in American Indians: Findings from the Strong Heart Family Study. *Aging (Albany NY)*. 2016; 8 (8):1583-92. doi: 10.18632/aging.101013.
- 17. Kelly TN, Bazzano L, Ajami N, He H, **Zhao J**, Petrosino J, Correa A, He J. Gut Microbiome Associates with Lifetime Cardiovascular Disease Risk Profile among Bogalusa Heart Study Participants. *Circulation Research* 2016;119:956-964
- 18. Ouyang W,<sup>†</sup> An Q,<sup>‡</sup> **Zhao J**, Qin H. Integrating mean and variance heterogeneities to identify differentially expressed genes. *BMC Bioinformatics*. 2016 Dec 6;17 (1):497. doi: 10.1186/s12859-016-1393-y. Erratum in: BMC Bioinformatics. 2017 Feb 3;18(1):89.
- 19. Li C<sup>‡</sup>, He J, Chen J, **Zhao J**, Gu D, Hixson JE, Rao DC, Jaquish CE, Gu CC, Chen J, Huang J, Chen S, Kelly TN. Genome-wide gene-sodium interaction analyses on blood pressure: the genetic epidemiology network of salt-sensitivity study. *Hypertension*. 2016; 68 (2):348-355
- 20. **Zhao J**,\* An Q,<sup>‡</sup> Goldberg J, Quyyumi AA, Vaccarino V. Promoter methylation of glucocorticoid receptor gene is associated with subclinical atherosclerosis: a monozygotic twin study. *Atherosclerosis*. 2015 Sep;242(1):71-6
- 21. **Zhao J**,\* Zhu Y,\* Xiong M. Genome-wide gene-gene interaction analysis for next-generation sequencing. *Eur J Hum Genet* 2015 Jul 15. doi: 10.1038/ejhg.2015.147. [Epub ahead of print]

- **22.** Zhang M,<sup>†</sup> An Q,<sup>‡</sup> Zhang Y,<sup>‡</sup> Zhang X,<sup>‡</sup> Lee ET, Howard BV, **Zhao J**.<sup>\*</sup> Smoking-attributable mortality in American Indians: The Strong Heart Study. *Eur J Epidemiol* 2015;30(7):553-61
- **23. Zhao J**,\* Zhu Y,<sup>‡</sup> Hyun N, Zeng D, Uppal K, Tran VT, Yu T, Dean J, He J, Lee ET, Howard BV. Novel metabolic markers for the risk of diabetes development in American Indians. *Diabetes Care*. 2015;38(2):220-7
- 24. **Zhao J**, Zhu Y,<sup>‡</sup> Boerwinkle E, Xiong M. Pathway analysis with next-generation sequencing data. *Eur J Hum Genet* 2015; 23(4):507-15
- **25.** Li S,<sup>†</sup> **Zhao J**, Wang G, Zhu Y,<sup>†</sup> Rabito F, Krousel-Wood M, Chen W, Whelton PK. Urinary triclosan concentrations are inversely associated with body mass index and waist circumference in the US general population: Experience in NHANES 2003-2010. *Int J Hyg Environ Health*. 2015;218(4):401-6
- 26. **Zhao J**,\* Zhu Y, † Lin J, Matsuguchi T, Blackburn E, Zhang Y, † Cole SA, Best LG, Lee ET, Howard BV. Short leukocyte telomere length predicts risk of diabetes in American Indians: The Strong Heart Family Study. *Diabetes* 2014; 63(1):354-62
- 27. Zhu Y,<sup>‡</sup> Yang J,<sup>‡</sup> Yeh F, Cole SA, Haack K, Lee ET, Howard BV, **Zhao J**.<sup>\*</sup> Joint association of nicotinic acetylcholine receptor variants with abdominal obesity in American Indians: The Strong Heart Family Study. *PloS One* 2014; 9(7): e102220. doi:10.1371/journal.pone.0102220
- 28. Chen S, <sup>†</sup> Lin J, Matsuguchi T, Blackburn E, Yeh F, Best LG, Devereux RB, Lee ET, Howard BV, Roman MJ, **Zhao J**. \* Short leukocyte telomere length predicts incidence and progression of carotid atherosclerosis in American Indians: the Strong Heart Family Study. *Aging (Albany NY)* 2014; 6(5):414-27
- 29. Chen S,<sup>‡</sup> Yeh F, Lin J, Matsuguchi T, Blackburn E, Lee ET, Howard BV, **Zhao J**.\* Short leukocyte telomere length is associated with obesity in American Indians: the Strong Heart Family study. *Aging (Albany NY)*. 2014; 6(5):380-9.
- 30. **Zhao J**,\* Zhu Y, Uppal K, Tran VT, Yu T, Lin J, Matsuguchi T, Blackburn E, Jones D, Lee ET, Howard BV. Metabolic profiles of biological aging in American Indians: the strong heart family study. *Aging (Albany NY)* 2014; 6(3):176-86.
- 31. Zhu Y,<sup>†</sup> Yang J,<sup>†</sup> Li S,<sup>†</sup> Cole SA, Haack K, Umans JG, Franceschini N, Howard BV, Lee ET, **Zhao J**.<sup>\*</sup> Genetic Variants in nicotinic acetylcholine receptor genes jointly contribute to kidney function in American Indians: The Strong Heart Family Study. *J Hypertens* 2014; 32(5):1042-8.
- 32. **Zhao J**,\* Roman MJ, Devereux RB, Yeh F, Zhang Y, <sup>‡</sup> Haack K, Best LG, Cole SA, Lee ET, Howard BV. Leukotriene haplotype × diet interaction on carotid artery hypertrophy and atherosclerosis in American Indians: The Strong Heart Family Study. *Atherosclerosis* 2014; 233:165-171

- 33. Yang J,<sup>†</sup> Zhu Y,<sup>†</sup> Lee ET, Zhang Y,<sup>†</sup> Cole SA, Haack K, Best LG, Devereux RB, Roman MJ, Howard BV, **Zhao J**.<sup>\*</sup> Joint associations of 61 genetic variants in the nicotinic acetylcholine receptor genes with subclinical atherosclerosis in American Indians: a gene-family analysis. *Circulation: Cardiovascular Genetics*. 2013; 6:89-96.
- 34. Zhu Y,<sup>‡</sup> Voruganti VS, Lin J, Matsuguchi T, Blackburn E, Best LG, Lee ET, Maccluer JW, Cole SA, **Zhao J**.<sup>\*</sup> QTL mapping of leukocyte telomere length in American Indians: The Strong Heart Family Study. *Aging* (Albany NY). *Aging* (*Albany NY*). 2013;5(9):704-16
- 35. **Zhao J**,\* Goldberg J, Bremner JD, Vaccarino V. Association between promoter methylation of serotonin transporter gene and depressive symptoms: a monozygotic twin study. *Psychosom Med*. 2013; 75(6):523-9
- 36. **Zhao J**,\* Bremner JD, Goldberg J, Quyyumi AA, Vaccarino V. Monoamine oxidase a genotype, childhood trauma, and subclinical atherosclerosis: a twin study. *Psychosom Med*. 2013;75(5):471-7
- 37. **Zhao J**,\* Goldberg J, Vaccarino V. Leukotriene A4 hydrolase haplotype, diet and atherosclerosis: A twin study. *Atherosclerosis* 2013; 226(1):238-44
- 38. **Zhao J**,\* Goldberg J, Bremner JD and Vaccarino V. Global DNA methylation is associated with insulin resistance: a monozygotic twin study. *Diabetes* 2012; 61(2):542-6.
- 39. Yang J,<sup>†</sup> Cole SA, Haack K, Zhang Y,<sup>‡</sup> Howard BV, Best LG, Devereux RB, Henderson JA, Henderson P, Lee ET and **Zhao J**.<sup>\*</sup> A gene-family analysis of 61 genetic variants in the nicotinic acetylcholine receptor genes for insulin resistance and type 2 diabetes in American Indians. *Diabetes* 2012; 61(7):1888-94
- 40. **Zhao J**,\* Goldberg J and Vaccarino V. Promoter methylation of the serotonin transporter gene is associated with obesity measures: a monozygotic twin study. *International Journal of Obesity* 2012; doi: 10.1038/ijo.2012.8
- 41. **Zhao J**,\* Forsberg CW, Goldberg J, Smith NL, Vaccarino V. MAOA Promoter methylation and susceptibility to carotid atherosclerosis: role of familial factors in a monozygotic twin sample. *BMC Med Genet* 2012 Nov 2;13:100.
- 42. Yang J, <sup>†</sup> and **Zhao J**. \*Cumulative effect of common genetic variants predicts incident type 2 diabetes: a study of 21,183 subjects from three large prospective cohorts. Epidemiology. 2011 Nov 1;1(3):108
- 43. Patel RS, Su S, Neeland IJ, Ahuja A, Veledar E, **Zhao J**, Helgadottir A, Holm H, Gulcher JR, Stefansson K, Waddy S, Vaccarino V, Zafari AM, Quyyumi AA. The chromosome 9p21 risk locus is associated with angiographic severity and progression of coronary artery disease. *Eur Heart J*. 2010; 31(24):3017-23

- 44. Peng G, Luo L, Siu H, Zhu Y, Hu P, Hong S, **Zhao J**, Zhou X, Reveille JD, Jin L, Amos CI, Xiong M. Gene and pathway-based second-wave analysis of genome-wide association studies. *Eur J Hum Genet*. 2010; 18: 111–117.
- 45. **Zhao J**,\* Quyyumi AA, Patel R, Zafari AM, Veledar E, Onufrak S, Shallenberger LH, Jones L, Vaccarino V. Sex-specific association of depression and a haplotype in leukotriene A4 hydrolase gene. *Psychosom Med*. 2009;71 (7):691-6.
- 46. Vaccarino V, Votaw J, Faber T, Veledar E, Murrah NV, Jones LR, **Zhao J**, Su S, Goldberg J, Raggi JP, Quyyumi AA, Sheps DS, Bremner JD. Major depression and coronary flow reserve detected by positron emission tomography. *Arch Intern Med.* 2009; 169 (18):1668-76.
- 47. Su S, **Zhao J**, Bremner JD, Miller AH, Tang W, Bouzyk M, Snieder H, Novik O, Afzal N, Goldberg J, Vaccarino V. Serotonin transporter gene, depressive symptoms and interleukin-6. *Circ Cardiovas Genet* 2009; 2:614-620
- 48. Su S. Lampert R, **Zhao J**, Bremner JD, Miller A, Snieder H, Lee F, Khan D, Goldberg J, Vaccarino V. Pleiotropy of C-reactive protein gene polymorphisms with C-reactive protein levels and heart rate variability in healthy male twins. *Am J Cardiol*. 2009; 104 (12):1748-54.
- 49. **Zhao J**,\*Cheema FA, Bremner JD, Goldberg J, Su S, Snieder H, Maisano C, Jones L, Javed F, Murrah N, Le NA and Vaccarino V. Heritability of carotid intima-media thickness: a twin study. *Atherosclerosis* 2008; 197:814-820
- 50. Su S, Snieder H, Miller AH, Ritchie J, Bremner JD, Goldberg J, Dai J, Jones L, Murrah NV, **Zhao J**, Vaccarino V. Genetic and environmental influences on systemic markers of inflammation in middle-aged male twins. *Atherosclerosis*. 2008; 200(1):213-20
- 51. **Zhao J**,\* Cheema FA, Reddy U, Bremner JD, Su S, Goldberg J, Snieder H, and Vaccarino V. Heritability of flow-mediated dilation: a twin study. *J Thromb Haemost* 2007; 5 (12): 2386-2392.
- 52. **Zhao J**, Boerwinkle E, Xiong M. An entropy-based genome-wide transmission/disequilibrium test. *Hum Genet* 2007; 121(3-4):357-67
- 53. Lee EB, **Zhao J** (<u>equal contribution first author</u>), Kim JY, Xiong MM and Song YW. Evidence of potential interaction of chemokine genes in systemic sclerosis susceptibility. *Arthritis and Rheumatism* 2007; 56(7): 2443-2448
- 54. Lee EB, Kim JY, **Zhao J**, Park MH, Song YW. Haplotype association of IL-8 gene with Behcet's disease. *Tissue Antigens* 2007; 69(2): 128-132
- 55. **Zhao J**, Jin L, Xiong M. Test for interaction between two unlinked loci. *Am J Hum Genet* 2006; 79(5):831-45

- 56. **Zhao J**, Jin L, Xiong M. Nonlinear tests for genome-wide association studies. *Genetics* 2006; 174:1529-38
- 57. **Zhao J**, Boerwinkle E, Xiong M. Impact of haplotype frequency estimation error on test statistics in association studies. *Am J Hum Genet* 2006; 78: 728-729
- 58. **Zhao J,** Boerwinkle E and Xiong M. An entropy-based statistic for genome-wide association studies. *Am J Hum Genet* 2005; 77: 27-40
- 59. **Zhao J**, Xiong M, Huang W, Wang H, Zuo J, Wu G, Chen Z, Qiang B, Zhang M, Chen J, Ding W, Yuan W, Xu H, Jin L, Li Y, Sun Q, Liu Q, Boerwinkle E, Fang F. An autosomal genomic scan for loci linked to type 2 diabetes in northern Han Chinese population. *J Mol Med* 2005; 209:209-215
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- 80. **Zhao J**,\* Zhu Q and Wu K. Researches on the relationship between human papillomaviruses and human penile condylomas and carcinomas. *Chin J Urology* 1993; 14(3):207-209
- 81. **Zhao J**,\* Wu K. Research advances in the relationship between human papillomaviruses (HPVs) and cancer. *Henan Medical Research* 1993; 2(1):85-88
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## **MANUSCRIPTS UNDER REVIEW OR IN PREPARATION** ( <sup>†</sup>Trainee; \*Corresponding author)

- 1. Peng H<sup>†</sup>, Zhu Y<sup>†</sup>, Goldberg J, Vaccarino V, **Zhao J\***. Childhood Trauma, HPA-axis Genes Methylation, and Depression: A Mediation Analysis in Monozygotic Twins. (revised)
- **2.** Peng H<sup>†</sup>, Zhu Y<sup>†</sup>, Goldberg J, Vaccarino V, **Zhao J\***. DNA Methylation of Five Core Circadian Genes Jointly Contributes to Glucose Metabolism: A Gene-set Analysis in Monozygotic Twins. Diabetes Care (under review)
- 3. Chen X, Wang Y, Leeman R, Li F, **Zhao J**. Video-assisted topographical measurement of cigarette smoking behavior: A laboratory-based exploration of the method for objective evaluation of nicotine dependence. (under review)
- 4. Sullivan S, Hammadah M, Al Mheid I, Shah A, Sun Y, Kutner M, Ward L, Blackburn E, **Zhao J**, Lin J, Bremner JD, Quyyumi AA, Vaccarino V, Lewis T. Experiences of Everyday Discrimination are Associated with Shorter Leukocyte Telomere Length among Women with Coronary Artery Disease (under review)
- 5. Grau-Perez M, **Zhao J**, Pierce B, Moon KA, Zhu Y, An Q, Umans J, Howard BV, Best LG, Cole SA, Navas-Acien A, Tellez-Plaza M. Urinary metals and leukocyte telomere length in American Indian communities: The Strong Heart and the Strong Heart Family Study (under review)
- 6. Spratlen MJ, Maria Grau-Perez M, Umans JG, Yracheta J, Best LG, Francesconi K, Goessler W, Bottiglieri T, Gamble MV, Cole SA, **Zhao J**, Navas-Acien A. Targeted Metabolomics to Understand the Association between Arsenic Metabolism and Diabetes-Related Outcomes: Preliminary Evidence from the Strong Heart Family Study.(under review)
- 7. **Zhao J\***, Zhu Y, <sup>†</sup> Folwer E, Bacus T, Strachan E, Roy-Byrne P. An epigenome-wide association study (EWAS) on major depression: a monozygotic discordant twin study. (under preparation)
- 8. Zhu Y, <sup>†</sup> Yao B, Jin P, Bennett DA, **Zhao J\***. Genome-wide mapping of brain 6mA methylome in AD: findings from a pilot study. (under preparation)
- 9. Huo Z, Zhu Y, Yu L, Yang J, De Jager P, Bennett DA, **Zhao J\***. Variably methylated genes associated with AD pathology. (under preparation)
- 10. Peng H, <sup>†</sup> An Q, <sup>†</sup> Goldberg J, Vaccarino V, **Zhao J.**\* A gene-family analysis of promoter DNA methylation of circadian-related genes with inflammation: a monozygotic twin study. (under preparation)

11. Peng H, <sup>†</sup> Zhu Y, <sup>†</sup> Gang Hu, Brantley P, **Zhao J**. \*Altered DNA methylation in response to bariatric surgery predicts diabetes remission in severely obese patients: findings from a pilot study. (under preparation)

## **SELECTED SCIENTIFIC/PROFESSIONAL MEETINGS** (\*Correspondence; <sup>†</sup>Trainee)

- 1. **Zhao J**, Zhu Y, Eric Strachan, Emily Fowler, Tamara J. Bacus, Peter Roy-Byrne. Genomewide profiling of DNA methylome and transcriptome in peripheral blood monocytes for major depression: a monozygotic discordant twin study. Accepted for oral presentation at the 2017 Behavioral Genetics Meeting, Oslo, Norway June 28-July 1, 2017
- 2. Zhu Y, Eric Strachan, Emily Fowler, Tamara J. Bacus, Peter Roy-Byrne, **Zhao J.** An Epigenomewide Association Study (EWAS) on Alcohol Consumption: A Monozygotic Twin Study. Accepted for oral presentation at the 2017 Behavioral Genetics Meeting, Oslo, Norway June 28-July 1, 2017
- 3. Peng H, Yeh F, Zhang Y, de Simone G, Best LG, Lee ET, Howard BV, **Zhao J**. Plasminogen Activator Inhibitor-1 Predicts the Risk of Hypertension in American Indians: Findings from the Strong Heart Study. Accepted for oral presentation at the American Heart Association Scientific Sessions, New Orleans Nov 12-16, 2016
- 4. Zhao Q, Zhu Y, Yeh F, Lin J, Zhang Y, Calhoun D, Cole SA, Lee ET, Howard BV, **Zhao J**. Depression Is Associated with Leukocyte Telomere Length in American Indians: Findings from the Strong Heart Family Study. Accepted for poster presentation at the American Heart Association Scientific Sessions, New Orleans Nov 12-16, 2016
- 5. Hu Z, Wan P, Zhu Y, <sup>†</sup> Bennett DA, **Zhao J**, Xiong M. A novel causal methylation network approach to Alzheimer's disease. Human Genome Meeting 2016, Houston, February 28-March 2, 2016
- 6. Lin N, Wang P, Zhu Y, <sup>†</sup> **Zhao J**, Calhoun VD, Xiong M. Integrative large-scale causal network analysis of brain imaging and genomic data and its application to schizophrenia. Human Genome Meeting 2016, Houston, February 28-March 2, 2016
- 7. Peng H,<sup>†</sup> Fawn Y, Cole SA, Best LG, Roman MJ, Lee ET, Howard BV, **Zhao J**.\* Prospective Association of Allostatic Load with Incident CVD in American Indians: The Strong Heart Study. EPI/Lifestyle, American Heart Association, Phoenix, February 29-March 4, 2016.
- 8. Li C, <sup>†</sup> He J, Hixson JE, Gu D, Rao DC, Shimmin LC, Huang J, Gu CC, Chen J, Li J, Chen J, **Zhao J**, Kelly KN. Genomewide Gene-Potassium Interaction Analyses on Blood Pressure: the GenSalt study. EPI/Lifestyle, American Heart Association, Phoenix, February 29-March 4, 2016.
- 9. Kelly TN, Ajami NJ, Bazzano LA, **Zhao J**, He J. Gut microbiota diversity and specific microbial genera associate with cardiovascular disease risk: Findings from the Bogalusa Heart Study. EPI/Lifestyle, American Heart Association, Phoenix, February 29-March 4, 2016.
- 10. An Q, <sup>†</sup> Zhu Y, <sup>‡</sup> Goldberg J, Vaccarino V, **Zhao J**. \* Alterations in DNA methylation of circadian-related genes are associated with metabolic traits: a gene promoter-based and

- gene-set analysis in monozygotic twins. EPI/Lifestyle, American Heart Association, Phoenix, February 29-March 4, 2016.
- 11. Pimple PM, Wilmot K, Mheid IA, **Zhao J**, Lin J, Blackburn E, Rooks C, Goetz M, Sun Y, Bremner JD, Quyyumi AA, Vaccarino V. Adherence to the Mediterranean diet is associated with longer telomere length in patients with coronary artery disease. EPI/Lifestyle, American Heart Association, Phoenix, February 29-March 4, 2016.
- 12. **Zhao J**, \* Zhu Y, Xiong M. A novel quadratically regularized canonical correlation analysis for genetic pleiotropic analysis of multiple phenotypes. The Human Genome Meeting, Houston, February 28 March 2, 2016
- 13. Zhu Y,<sup>‡</sup> An Q,<sup>‡</sup> Best, LG, Lee ET, Howard BV, Devereux RB, Roman MJ, **Zhao J**. \* Novel metabolic markers for the risk of carotid plaque progression in American Indians. EPI/Lifestyle, American Heart Association, Baltimore, March 3-6, 2015.
- **14.** An Q,<sup>†</sup> Vaccarino V, Goldberg J, **Zhao J**. \* Promoter Methylation of the MAOA Gene Is Associated with Fasting Plasma Glucose: A Monozygotic Twin Study. EPI/Lifestyle, American Heart Association, Baltimore, March 3-6, 2015.
- **15. Zhao J**, \* Mete M, Desale S, Fretts AM, Cole SA, Best LG, Lin J, Matsuguchi T, Blackburn E, Lee ET, Howard BV. Life's simple 7 and telomere length in American Indians. EPI/Lifestyle, American Heart Association, Baltimore, March 3-6, 2015.
- 16. Zhu Y, He J, Best LG, Lee ET, Howard BV and **Zhao J**. Metabolic predictors of type 2 diabetes in American Indians: The Strong Heart Family Study. The Nutrition, Physical Activity and Metabolism and the Cardiovascular Disease Epidemiology and Prevention, American Heart Association, San Francisco, March 18-21, 2014.
- 17. **Zhao J**, \* Zhu Y, † He J, Lin J, Matsuguchi T, Blackburn E, Lee ET, Howard BV. Metabolic profiles of biological aging in American Indians: The Strong Heart Family Study. The Nutrition, Physical Activity and Metabolism and the Cardiovascular Disease Epidemiology and Prevention, American Heart Association, San Francisco, March 18-21, 2014.
- 18. Chen S, <sup>†</sup> Yeh F, Lin J, Matsuguchi T, Blackburn E, Lee ET, Howard BV, Zhao J. \* Short leukocyte telomere length is associated with obesity in American Indians: The Strong Heart Family Study. The Nutrition, Physical Activity and Metabolism and the Cardiovascular Disease Epidemiology and Prevention, American Heart Association, San Francisco, March 18-21, 2014.
- 19. Li S, <sup>†</sup> Zhu Y, <sup>‡</sup> Wang G, Yun M, McLachlan JA, Chen W, He J, Whelton PK, **Zhao J**. <sup>\*</sup> Urinary triclosan concentrations are associated with body mass index and waist circumference in US population, NHANES 2003-2010. The Nutrition, Physical Activity and Metabolism and the Cardiovascular Disease Epidemiology and Prevention, American Heart Association, San Francisco, March 18-21, 2014.
- 20. **Zhao J**,\* Zhu Y,\* Xiong M. Gene-gene interaction analysis for next-generation sequencing. The 63<sup>rd</sup> Annual Meeting of the American Society of Human Genetics in Boston, October 22-26, 2013. (*Platform presentation*)
- 21. Chen S,<sup>‡</sup> Roman RJ, Yeh F, Lin J, Matsuguchi T, Blackburn E, Devereux RB, Lee ET, Howard BV, and **Zhao J**. \* Prospective association of leukocyte telomere length and

- incident carotid atherosclerosis in American Indians. The American Heart Association Scientific Session, Dallas, Nov 16-20, 2013. (*Platform presentation, this abstract has been interviewed by the American Heart Association*)
- 22. Zhu Y,<sup>†</sup> Lee ET, Cole SA, Haack K, Best LG, Howard BV, **Zhao J**. <sup>\*</sup> Genetic variants involved in telomere maintenance and type 2 diabetes in American Indians: a pathway association analysis. The American Heart Association Scientific Session, Dallas, Nov 16-20, 2013.
- 23. Zhu Y,<sup>‡</sup> Lee ET, Cole SA, Haack K, Best LG, Howard BV, **Zhao J**. <sup>\*</sup> Joint association of 31 mitochondrial variants with type 2 diabetes: The Strong Heart Family Study. The 63<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Boston, Oct 22-26, 2013.
- **24.** Yang J,<sup>†</sup> Zhu Y, <sup>†</sup> Cole SA, Haack K, Howard BV, Best LG, Mary RJ, Devereux RB, Lee ET and **Zhao J**.\* Joint impact of 61 genetic variants in seven nicotinic acetycholine receptor genes on subclinical atherosclerosis in American Indians: a gene-set analysis. The Nutrition, Physical Activity and Metabolism and the Cardiovascular Disease Epidemiology and Prevention, American Heart Association, New Orleans, March 19-22, 2013 (*Platform presentation, Hot Of Press*)
- **25. Zhao J**,\* Zhu Y,<sup>‡</sup> Xiong M. A smooth functional principle component analysis of next generation sequencing data. The 62<sup>th</sup> Annual Meeting of the American Society of Human Genetics, San Francisco, Nov 6-10, 2012. (*Platform presentation*)
- **26. Zhao J**,\* Goldberg J and Vaccarino V. Promoter methylation of glucocorticoid receptor gene is associated with subclinical cardiovascular disease: a monozygotic twin study. The Nutrition, Physical Activity and Metabolism and the Cardiovascular Disease Epidemiology and Prevention, American Heart Association, San Diego, March 13-16, 2012. (*Platform presentation. This abstract won the Rogers R. Williams Award for Genetic Epidemiology, presented by the American Heart Association, 2012*)
- **27.** Yang J,<sup>†</sup> Cole SA, Haack K, Howard BV, Best LG, Mary RJ, Devereux RB, Lee ET and **Zhao J**. \* Joint impact of 61 genetic variants in seven nicotinic acetycholine receptor genes on subclinical atherosclerosis in American Indians: a gene-set analysis. The Nutrition, Physical Activity and Metabolism and the Cardiovascular Disease Epidemiology and Prevention, American Heart Association, San Diego, March 13-16, 2012
- **28.** Yang J,<sup>†</sup> Cole SA, Haack K, Howard BV, Best LG, Roman RJ, Devereux RB, Lee ET and **Zhao J**. \* A pathway analysis of 32 genetic variants in leukotriene genes and subclinical atherosclerosis in American Indians: the Strong Heart Family Study. The Nutrition, Physical Activity and Metabolism and the Cardiovascular Disease Epidemiology and Prevention, American Heart Association, San Diego, March 13-16, 2012.
- **29.** Yang J,<sup>†</sup> Cole SA, Haack K, Howard BV, Best LG, Devereux RB, Lee ET and **Zhao J**.<sup>\*</sup> Gene and pathway-based analysis of 61 genetic variants in the nicotinic acetylcholine receptor genes and insulin resistance in American Indians. The 61<sup>th</sup> Annual Meeting of

- the American Society of Human Genetics, Montreal, Quebec, Canada, October 11-15, 2011
- **30. Zhao J**, \* Cowan LD, Yang J, † Zhang Y, † Cole SA, Haack K, Howard BV, Lee ET. Leukotriene haplotype, diet and insulin resistance: the Strong Heart Study. The Nutrition, Physical Activity and Metabolism and the Cardiovascular Disease Epidemiology and Prevention, American Heart Association, Atlanta, March 22-25, 2011
- **31.** Yang J,<sup>†</sup> Cowan LD, Zhang Y,<sup>†</sup> Cole SA, Haack K, MacCluer JW, Howard BV, Lee ET, **Zhao J**. \* NOS3 genotype, dietary intake and insulin resistance: The Strong Heart Family Study. The Nutrition, Physical Activity and Metabolism and the Cardiovascular Disease Epidemiology and Prevention, American Heart Association, Atlanta, March 22-25, 2011
- **32.** Yang J,<sup>†</sup> Zhang Y,<sup>†</sup> Cowan LD, Cole SA, Haack K, MacCluer JW, Howard BV, Lee ET and **Zhao J**.<sup>\*</sup> Cumulative association of 62 genetic variants in a smoking-metabolizing pathway with insulin resistance in American Indians: The Strong Heart Family Study. The Nutrition, Physical Activity and Metabolism and the Cardiovascular Disease Epidemiology and Prevention, American Heart Association, Atlanta, March 22-25, 2011
- 33. **Zhao J**, \* Forsberg CF, Yang J, Goldberg J, Smith NL, Vaccarino V. MAOA methylation is associated with subclinical atherosclerosis in a monozygotic twin sample. American Heart Association Scientific Session, Chicago, IL, Nov 13-17, 2010
- 34. **Zhao J,**\* Wu X, Zhu Y,<sup>†</sup> Xiong M. A novel statistic for testing genetic interactions between linked loci. The 60<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Washington, DC, Nov 2-6, 2010
- 35. Yang J, <sup>†</sup> Bouzyk M, Goldberg J, Vaccarino V, **Zhao J**. <sup>\*</sup> Interaction between monoamine oxidase A gene polymorphism and childhood emotional abuse on susceptibility to early atherosclerosis: a twin study. The 60<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Washington, DC, Nov 2-6, 2010
- 36. **Zhao J**,\* Goldberg J, Bremner JD, Jones L, Bouzyk M, Tang W, Vaccarino V. Dietary intake modifies the effect of leukotriene A4 hydrolase gene on subclinical atherosclerosis. The 49th Cardiovascular Disease Epidemiology and Prevention, American Heart Association, Palm Harbor, FL, March 10-14, 2009 (Platform presentation. *This abstract was selected as Finalist for the Sandra Daugherty Award for Excellence in Cardiovascular Disease or Hypertension Epidemiology, presented by the American Heart Association*, 2009)
- 37. **Zhao J**, \* Goldberg J, Su S, Bouzyk M, Tang W, Bremner JD, Jones L, Murrah N, Vaccarino V. Leukotriene A4 hydrolase gene polymorphism is associated with subclinical atherosclerosis. The 49th Cardiovascular Disease Epidemiology and Prevention, American Heart Association, Palm Harbor, FL, March 10-14, 2009
- 38. Su S, **Zhao J**, \* Bremner JD, Miller AH, Bouzyk M, Snieder H, Goldberg J, Vaccarino V. haplotypes of serotonin transporter gene associated with both depressive symptoms and interleukin-6 in middle-aged males: the twins heart study. The 49th Cardiovascular

- Disease Epidemiology and Prevention, American Heart Association, Palm Harbor, FL, March 10-14, 2009
- 39. **Zhao J**, \* Bremner JD, Bouzyk M, Tang W, Goldberg J, Afzal N, Murrah N, Jones L, Vaccarino V. Tryptophan hydroxylase gene haplotypes modify the effect of childhood emotional abuse on symptoms of depression, American Heart Association Scientific Session, Orlando, FL, Nov 14-18, 2009
- 40. **Zhao J**, \* Riyaz Patel, <sup>†</sup> A. Maziar Zafari, Viola Vaccarino, Arshed A. Quyyumi. A potential common genetic pathway linking depression to cardiovascular disease. The 58<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Philadelphia, Nov 11-15, 2008
- 41. Luo L, Peng G, Siu H, Zhu Y, Hu P, Hong S, **Zhao J**, Zhou X, Reveille J, Amos C, Jin L, Xiong M. Gene and pathway-based analysis second wave of GWAS. The 58<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Philadelphia, Nov 11-15, 2008
- 42. **Zhao J**, \* Quyyumi AA, Patel R, Qureshi I, Warren F, Zafari AM, Veledar E, Onufrak S, Gulcher JR and Vaccarino V. Gender-Specific Association of Depression and a Haplotype in Leukotriene A4 Hydrolase Gene. The 48th Cardiovascular Disease Epidemiology and Prevention, American Heart Association, Colorado Springs, CO, March 13-15, 2007
- 43. Veledar E, Narayan V, Wenger N, **Zhao J**, Shaw L, Wilson P, Vaccarino V. Trends in Coronary Heart Disease (CHD) Incidence and Mortality Rates in US Women. The 48th Cardiovascular Disease Epidemiology and Prevention, American Heart Association, Colorado Springs, CO, March 13-15, 2007
- 44. **Zhao J**,\* Cheema FA, Bremner JD, Goldberg J, Su S, Snieder H, Maisano C, Jones L, Murrah N and Vaccarino V. Heritability of carotid intima-media thickness: a twin study. American Heart Association Annual Meeting, Chicago, Illinois, Nov 12-15, 2006 (*Platform presentation. This abstract won the Elizabeth Barrett-Connor Research Award in Epidemiology for Young Investigator, presented by the American Heart Association, 2006)*
- 45. **Zhao J**,\* Cheema FA, Reddy U, Bremner JD, Su S, Goldberg J, Snieder H, and Vaccarino V. Heritability of flow-mediated dilation: a twin study. The 47th Cardiovascular Disease Epidemiology and Prevention, American Heart Association, Orlando, FL, Feb 28-Mar 3, 2006
- 46. **Zhao J**, Jin L and Xiong M. Nonlinear tests for genome-wide association studies. The 55th Annual Meeting of the American Society of Human Genetics, Salt Lake City, Utah, Oct 25-29, 2005
- 47. Wang Y, **Zhao J**, Zhou X, Wang W, Jin L and Xiong MM(2005) Identification of genetic interaction networks. The 55th Annual Meeting of the American Society of Human Genetics, Salt Lake City, Utah, Oct 25-29, 2005

- 48. Xiong M, **Zhao J**, Boerwinkle E and Amos C. Nonlinear transmission/disequilibrium test. The 55th Annual Meeting of the American Society of Human Genetics, Salt Lake City, Utah, Oct 25-29, 2005
- 49. **Zhao J** and Xiong M. Global test for genome-wide association studies. The American Journal of Human Genetics, A511. The 54th Annual Meeting of the American Society of Human Genetics, Toronto, Ontario, Canada, 2004
- 50. Xiong M, **Zhao J**, Boerwinkle E. Dynamic models for quantitative genetics. The American Journal of Human Genetics, A511. The 54th Annual Meeting of the American Society of Human Genetics, Toronto, Ontario, Canada, Oct 26-30, 2004
- 51. Zhou X, **Zhao J**, Arnett FC, Xiong M. Candidate pathway approach to genetic studies of complex traits. The 53th Annual Meeting of the American Society of Human Genetics, Los Angeles, CA, Nov 4-8, 2003
- 52. Xiong M and **Zhao J.** Genetic and transcriptional analysis of metabolic networks. The 53th Annual Meeting of the American Society of Human Genetics, Nov 4-8, Los Angeles, CA, Nov 4-8, 2003
- 53. Li Y, Liu L, **Zhao J**, Zuo J, Fang F. *Pank4*, a novel pantothenate kinase gene is a candidate gene for type 2 diabetes mellitus. The 53th Annual Meeting of the American Society of Human Genetics, Los Angeles, CA, 2003
- 54. Wu G, **Zhao J**, Yang C, Wang H, Zuo J, Wang Y, Liu Z, Zhang Y, Shen Y, Qiang B, Huang W, Zhu C, Fang F. Association analysis of genetic polymorphisms in sac, pank4, casp9, and cdc22 genes with type 2 diabetes in Han Chinese of Northern China. The 53th Annual Meeting of the American Society of Human Genetics, Los Angeles, CA, Nov 4-8, 2003
- 55. **Zhao J** and Xiong M. Genetic analysis of function-valued traits. The 53th Annual Meeting of the American Society of Human Genetics, Los Angeles, CA, Nov 4-8, 2003
- 56. **Zhao J** and Xiong M. Unbiased quantitative population association test. The 52th Annual Meeting of the American Society of Human Genetics, Baltimore, Maryland, Oct 15-19, 2002
- 57. Sun H, **Zhao J**, Du W, Wang H, Zuo J, Qiang B, Shen Y, Yao Z, Huang W, Chen Z, Xiong M, Fang F. SNP analysis of candidate genes associated with type 2 diabetes in Chinese Han population. The 52th Annual Meeting of the American Society of Human Genetics, Baltimore, Maryland, Oct 15-19, 2002
- 58. **Zhao J** and Xiong M. The generalized T<sup>2</sup> test for biomarker identification using gene expression data. The 51th Annual Meeting of the American Society of Human Genetics, San Diego, CA, Oct 12-16, 2001

- 59. Xiong M, **Zhao J**, Li J, E Boerwinkle. Dynamic models for mapping quantitative traits with time-dependent genetic effects. The 51th Annual Meeting of the American Society of Human Genetics, San Diego, CA, Oct 12-16, 2001
- 60. Xiong M, **Zhao J**, Jin L, Boerwinkle E. Fine-scale mapping of quantitative traits loci by internal mapping in human population. The 50<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Philadelphia, PA, Oct 3-7, 2000
- 61. **Zhao J**, Amos C, Boerwinkle E, Xiong M. Multiple-marker locus and multiple trait-locus linkage disequilibrium mapping of quantitative trait loci with epitasis. The 50<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Philadelphia, PA, Oct 3-7, 2000
- 62. **Zhao J,** Xiong M, Huang W, Wang H, Zuo J, Chen Z, Qiang B, Zhang ML, Du WN, Chen JL, Ding W, Yuan WT, Zhao Y, Xu HY, Jin L, Li YX, Sun Q, Liu QY, Fang FD. Type 2 diabetes susceptibility loci maps on chromosomes 1 and 20 in Chinese Han families. The 49<sup>th</sup> Annual Meeting of the American Society of Human Genetics, San Francisco, CA, Oct 19-23, 1999

#### **INVITED TALKS**

4/8/2016 Novel 'Omics' Biomarkers for Human Complex Diseases: Genomics, *Epigenomics, Transcriptomics, and Metabolomics* Department of Epidemiology & Community Health, University of Minnesota, Minneapolis, MN 3/12/2015 Novel Biomarkers for CVD and its Risk Factors Emory University School of Medicine, Atlanta, GA 6/18/2015 Brain DNA hydroxymethylome in Alzheimer's disease: a pilot study Rush University Medical Center, Chicago, IL. Novel 'omics' markers for CVD, diabetes and their risk factors 11/20/2014 Department of Preventive Medicine, Northwestern University, Chicago, IL 7/16/2014 Metabolomic profiling of CVD and diabetes: Findings from American Indians Chinese Heart Conference, Beijing, China 9/4/2013 Telomeres and epigenetic factors in CVD risk Department of Biostatistics, University of North Carolina, Chapel Hill, NC 3/12/2013 Biological aging and diabetes risk in American Indians Department of Biostatistics, Tulane University School of Public Health and Tropical Medicine, New Orleans, LA 3/28/2013 *Genetic and epigenetic determines for CVD and type 2 diabetes* 

	Hayward Genetics Center, Tulane University School of Medicine, New Orleans, LA
4/16/2012	Genetic mechanisms in Metabolic Disorders
	Emory University School of Public Health, Atlanta, GA
9/6/2010	Genetics of Type 2 Diabetes and Its Risk Factors
	School of Medicine, University of Oklahoma HSC, Oklahoma City, OK
6/25/2009	Genetic Determinants of Type 2 Diabetes and Its Related Phenotypes
	Clinical Endocrinology and Metabolism Forum, Chinese Academy of Medical Science, Beijing, China
9/4/2009	Genome-wide Linkage and Association Studies of Type 2 Diabetes
	Endocrinology Research Conference
	University of Oklahoma Health Science Center, Oklahoma City, OK
10/162008	Genetic Linkage and Association Analysis for Human Complex Disorders
	Cardiovascular Research Institute, Morehouse School of Medicine, Atlanta, GA
3/13/2008	Genetic Susceptibility to Coronary Artery Disease
	Division of Biostatistics and Epidemiology
	Medical University of South Carolina, Charleston, SC

## PROFESSIONAL SERVICE

## **National**

## NIH Study Sections (partial list over the past 3 years)

•	NIDDK	ZDK1 GRB-2 (M1&)	M2)	2018
•		,	(V12)	
•	NIDDK	ZDK1-GRB-2-M1		2018
•	NIDDK	ZDK1-GRB-2-M1		2017
•	NIDDK	ZDK1-GRB-2-M2		2017
•	NHLBI	ZHL1-CSR-I-M1	2017	
•	NIEHS	ZES1-LWJ-K-R	2017	
•	NIDDK	ZDK1-GRB-2-O1	2017	
•	NIDDK	ZDK1-GRB-2-O2	2017	
•	NEI	ZEY1-VSN-02	2016	
•	MESH Study section		2015	
•	KNOD Study Section	1	2015	

#### American Heart Association

- Abstract reviewer, EPI/NPAM Scientific Sessions, 2013
- Abstract reviewer, EPI/NPAM Scientific Sessions, 2014
- Abstract reviewer, EPI/NPAM Scientific Sessions, 2015

#### Peer-reviewed journal reviewer (since 2014, partial list)

Diabetes; Diabetes Care; Diabetologia; Circulation Cardiovascular Genetics; Atherosclerosis; Blood; Obesity; Aging; International Journal of Obesity; American Journal of Human Genetics; American Journal of Epidemiology; International Journal of Epidemiology; Europe Journal of Human Genetics; American Journal of Medical Genetics; Genetics; Epigenetics; Clinical Epigenetics; Human Genetics; BMC Genetics; BMC Genomics; Human Heredity; Bioinformatics; Genetic Epidemiology; Metabolism, Genomics, Genome Research; Biological Psychiatry; Molecular Psychiatry; PLOS One; PLOS Genetics; PLOS Medicine; PLOS Computational Biology; Statistical Applications in Genetics and Molecular Biology; Molecular Biology Reports; Schizophrenia Research, etc

#### **University of Florida**

- 2017 present *Epidemiology Executive/Operations Committee* Department of Epidemiology, University of Florida, Gainesville, FL
- 2017 present *Gen Med T32 Executive Committee* University of Florida, Gainesville, FL
- 2016 present *Chair, Genetic Epidemiology Faculty Search Committee* Department of Epidemiology, University of Florida, Gainesville, FL
- 2016 present *Faculty Search Committee*Department of Epidemiology, University of Florida, Gainesville, FL
- 2016 present *Curriculum Committee*Department of Epidemiology, University of Florida, Gainesville, FL
- 2016 present *TAC TL1 Advisory Committee* CTSI, University of Florida, Gainesville, FL

#### **Tulane University**

• Faculty Search Committee

Department of Epidemiology, School of Public Health and Tropical Medicine, Tulane University, New Orleans, LA, 2015, 2016

- Appointment, Promotion and Tenure (APT) Committee
  Tulane University School of Public Health and Tropical Medicine, LA, 2014-present
- *Nominating Committee for the Faculty Reelections*Tulane University School of Public Health and Tropical Medicine, LA, 2015-present
- MS in Outcomes and Comparative Effectiveness Program
   Mentor and Co-Lead, Tulane University School of Public Health and Tropical Medicine, LA, 2015-present
- *Grant reviewer*The ADA Pathway competition panel, Tulane University, 2013

#### **OUHSC**

- Senator
   Faculty Senate, University of Oklahoma Health Science Center, OK, 2011
- Committee Member
   Professional Development Committee, University of Oklahoma Health Science Center, OK, 2010-2012

#### Other

2015-present Member, Strong Heart Study (SHS) Steering Committee