

## Curriculum Vitae

**Rector Arya, Ph.D., M.A., M.Ed., FTOS**

### PERSONAL DATA:

Office Address: Associate Professor  
Department of Health and Behavioral Sciences  
College of Arts and Sciences  
Texas A & M University- San Antonio  
Science and Technology Building, Suite 149A  
One University Way,  
San Antonio, Texas 78224 USA

Phone: 210-668-5436 (cell); 210-784-1227 (office)

E-mail Address: [rector.arya@tamusa.edu](mailto:rector.arya@tamusa.edu); [rectorarya@gmail.com](mailto:rectorarya@gmail.com)

Citizenship: United States of America

Home Address: 11518 Camp Real Lane  
San Antonio, Texas 78253, USA

### EDUCATION:

Year	Degree	Discipline/Institution/Location
1999	Ph.D.	Biological Anthropology/Population Genetics The University of Kansas, Lawrence, KS, USA
1990	M.Ed.	Education (Teaching and Research Methods, Educational Statistics, and Curriculum Development) Annamalai University, Annamalai Nagar, India
1984	B.Ed.	Education (Methods of Teaching Biology & English) Nagarjuna University, Nagarjuna Nagar, India
1982	M.A..	Anthropology (Biological) Andhra University, Visakhapatnam, India
1980	B.Sc.	Biological and Geological Sciences (Geology, Zoology, Chemistry) Andhra University, Visakhapatnam, India

### TRAINING: Postdoctoral Fellow

1999-2002	Genetic Epidemiology	Department of Medicine/Clinical Epidemiology, School of Medicine, The University of Texas Health Science Center, San Antonio, TX, USA
-----------	----------------------	---

### ACADEMIC APPOINTMENTS:

09/2023 – Present	Associate Professor, Department of Health and Behavioral Sciences College of Arts and Sciences, Texas A&M University – San Antonio,
-------------------	--

One University Way, San Antonio, TX, USA

06/2024 – present	Alternate Member, Institutional Review Board, Texas A&M University-San Antonio, San Antonio, Texas
05/2023 – 05/2024	Vice-Chair, Institutional Review Board, Texas A&M University-San Antonio, San Antonio, Texas
10/2023 – 09/2024	Adjunct Associate Professor, Department of Medical Physiology, School of Medicine, Texas A&M Health, Texas A&M University, Bryan, TX
12/2022 – 08/2023	Associate Professor, Department of Life Sciences, College of Arts and Sciences, Texas A&M University – San Antonio, One University Way, San Antonio, TX, USA
09/2020 – 08/2022	Associate Professor/Research, Department of Human Genetics, South Texas Diabetes and Obesity Institute, School of Medicine, The University of Texas Rio Grande Valley, Edinburg, Texas, USA
02/2021 – 01/2022	Vice Chair, Institutional Review Board, Biomedical Panel, Department of Human Genetics, and South Texas Diabetes and Obesity Institute, University of Texas Rio Grande Valley, Edinburg, Texas 78539
11/2017 – 08/2020	Assistant Professor/Research, Department of Human Genetics, School of Medicine, The University of Texas Rio Grande Valley, Edinburg, Texas, USA
12/2014 – 08/2020	Assistant Professor/Research, South Texas Diabetes and Obesity Institute, School of Medicine, The University of Texas Rio Grande Valley, Edinburg, Texas
09/2010 - 10/2014	Assistant Professor, Department of Pediatrics, The University of Texas Health Science Center, San Antonio, Texas
05/2005 – 07/2010	Assistant Scientist (Adjunct), Department of Genetics, Texas Biomedical Research Institute, San Antonio, Texas
05/2004 - 08/2010	Assistant Professor, Division of Clinical Epidemiology, Department of Medicine, University of Texas Health Science Center, San Antonio, Texas
03/2002 - 04/2004	Instructor, Division of Clinical Epidemiology, Department of Medicine, University of Texas Health Science Center, San Antonio, Texas

#### **HONORS, AWARDS, FELLOWSHIPS, AND SCHOLARSHIPS:**

01/2007	American Heart Association-Scientist Development Grant –National
09/2003	The William K. Warren Diabetes Fellow Award: Awarded by the William K. Warren Medical Research Institute and American Diabetes Association.

- 01/2000      Mentor-based Postdoctoral Fellowship Award: Awarded by American Diabetes Association
- 09/1997      Graduate Teaching Assistant: Department of Anthropology, The University of Kansas, Lawrence, KS
- 09/1996      Carroll Clark Award: Dept. of Anthropology, University of Kansas, Lawrence, KS
- 09/1991      National Overseas Scholarship: Scholarship for higher studies abroad  
Government of India, Department of Environment
- 05/1985      Senior Research Fellowship: Department of Environment, Government of India

### TEACHING EXPERIENCE:

- 08/1997 - 07/1998      Graduate Teaching Assistant, 1997-1998, Undergraduate/graduate course taught: "Human Variation and Evolution" Fall 97 and Spring 98, Department of Anthropology, University of Kansas, Lawrence, KS 66045.
- 07/1983 – 05/1988      Taught biological and social sciences to students at undergraduate level in India.

### RESEARCH EXPERIENCE AND EXPERTISE:

***Ph.D., Dissertation:*** Genetic and Environmental Determinants of Anthropometric Phenotypes in Indian Caste Populations. Department of Anthropology, University of Kansas, Lawrence, KS, 1999. (Advisor: Dr. Michael H. Crawford, Ph.D.)

***Genetic and Genomic Epidemiological Studies:*** As a biological anthropologist and genetic epidemiologist/statistical geneticist with more than 22 years of research experience in biomedical sciences particularly in human genetics and genomics, I have been conducting family- and population-based genetic epidemiological studies in human populations, particularly Mexican Americans.

### ***Major research and teaching areas of interest:***

- Human biology, human genetics, population genetics, quantitative genetics, genetic epidemiology, and statistical genetics
- Anthropological genetics of human populations, human growth, human variation and evolution, health disparities, and minority health
- Obesity, childhood obesity, type 2 diabetes, metabolic syndrome, liver disease, birth weight and cardiometabolic risk factors
- Omics: genomics, metabolomics, transcriptomics; and gut microbiome
- Nutritional epidemiology, nutrigenetics, and nutrigenomics, and bioinformatics

**Field Research Experience (01/1982-01/1990):**

- Participated in the palaeoanthropological explorations at Narmada valley, Madhya Pradesh, India, in 1990 as part of a project entitled "Human Origins and Variation."
- Performed several activities such as preservation, maintenance, and study of prehistoric, protohistoric, and historic remains consisting of fossils and artifacts.
- Involved in a field research project titled "Nutrition and growth of certain population groups of Visakhapatnam", 1985-1989, sponsored by the Department of Environment, Government of India.
- Collected and analyzed data on sociocultural aspects of health and nutrition, anthropometric measurements, family and individual dietary intake, nutritional assessment, and serological markers from caste populations of Visakhapatnam, India.
- Conducted anthropological fieldwork in 1982 and collected dermatoglyphic data from Koya Dora (a tribe in India), Visakhapatnam, AP., India, as part of the MS dissertation project for the fulfillment of the graduate program.

**PROFESSIONAL ACTIVITIES:****Invited Talks and Participation in Conferences, Seminars, and Workshops:**

Invited Plenary Speaker, 47<sup>th</sup> Annual Conference of the Indian Society of Human Genetics (ISHG) & International Symposium on "New Genetics and its Contributions to Human Health and Wealth" & The Golden Jubilee Celebrations of the Department of Human Genetics, Andhra University from 23<sup>rd</sup> – 25<sup>th</sup> January 2023, Visakhapatnam, India.

Participant, the University of Kentucky/NIH/National Institute of General Medical Sciences Faculty Grant Writing Workshop, March 11- 13, 2019, The University of Kentucky, in Lexington.

Co-Chair, Symposium on "Obesity in Hispanic /Latino Populations: A Genetic and Epidemiological Perspective," Obesity 2010, 28<sup>th</sup> Annual Scientific Meeting, San Diego, CA, October 8-12.

Invited speaker, The XXXIII Annual Conference of the Indian Society for Human Genetics and International Symposium on Genetics Revisited: The Genomics and Proteomics Advent hosted by the Department of Human Genetics, Andhra University, Visakhapatnam, India, February 11-13, 2008.

Invited speaker, Training program on "Diversity to Discovery" sponsored by the Anthropological Survey of India, Mysore, India, February 15- 28, 2008.

Invited speaker, Training program on "Diversity to Discovery" sponsored by Anthropological Survey of India, Mysore, India from April 20 to 22, 2007.

Invited speaker, "International Conference on Bioinformatics and Diabetes" Andhra University, Visakhapatnam, India, April 24-26, 2006.

Invited speaker, International Symposium, "Genetics of Common Complex Diseases (obesity, type 2 diabetes, addictions)", Monterrey, Nuevo Leon, Mexico, September 14-15, 2005.

Invited speaker, Department of Medicine Research Conference, Genetics of Metabolic Syndrome Phenotypes in Mexican Americans, University of Texas Health Science Center at San Antonio, TX, March 22, 2005.

Invited speaker, Indo-US Workshop on Genetics of Complex Diseases with an Emphasis on Type 2 Diabetes, Andhra University, Visakhapatnam, India, March 30-31 and April 1, 2004.

Member, Analysis and Mapping Committee, Consortium Linkage Studies of Type 2 Diabetes, 1999-present. Participant, Genetic Analysis Workshops (GAW) 11, 12, 13, and 14.

Participant, American Association of Anthropological Genetics 2nd workshop in Anthropological Genetics (Topic: Statistical Genetic Methods in Anthropological Research), San Antonio, Texas, October 14-16, 1995.

### PROFESSIONAL AFFILIATIONS:

Fellow, The Obesity Society (TOS)

Member, American Diabetes Association (ADA)

Member, American Association of Anthropological Geneticists (AAA)

### PUBLICATIONS: *Journal Articles*

1. Busi BR, Modem S, **Arya R**, Jyothi GM. Food, dietary intake and feeding practices in urban slums of Visakhapatnam. *The Indian Journal of Nutrition and Dietetics* 1987; 24:163-169.
2. Busi BR, Modem S, **Arya R**, Puppala S. Growth pattern among pre-school children in urban slums of Visakhapatnam. *The Indian Journal of Nutrition and Dietetics* 1991;28:188-193.
3. Rao VV, Vasulu TS, **Arya R**. Possible paleopathological evidence of treponematosis from a megalithic site at Agripalle, India. *American Journal of Physical Anthropology* 1996;100: 49-55.
4. Picornell A, Miguel A, Castro JA, Misericordia Ramon M, **Arya R**, Crawford MH. Genetic variation in the population of Ibiza (Spain): Genetic structure, geography, and language. *Hum Biol* 1996 Dec; 68(6):899-913.
5. Duggirala R, Blangero J, Almasy L, **Arya R**, Dyer TD, Williams K, Leach R, Stern MP, O'Connell. A major locus for fasting insulin concentrations and insulin resistance on chromosome 6q with strong pleiotropic effects on obesity related phenotypes in non- diabetic Mexican Americans. *American Journal of Human Genetics* 2001; 68:1149-1164.
6. **Arya R**, Duggirala R, Williams JT, Almasy L, Blangero J. Power to localize the major gene for disease liability is increased after accounting for the effects of related quantitative phenotypes. *Genet Epidemiol* 2001;21 (S):774-778.
7. **Arya R**, Duggirala R, Almasy L, Rainwater D, Mahaney MC, Cole S, Dyer TD, Williams K, Leach RJ, Hixson JE, MacCluer JW, O'Connell P, Stern MP, Blangero J. Strong evidence for linkage of high-density lipoprotein cholesterol (HDL-C) concentrations to a genetic location on chromosome 9p in Mexican Americans. *Nature Genetics* 2002; 30:102-105.
8. **Arya R**, Blangero J, Williams K, Almasy L, Dyer TD, Leach RJ, O'Connell P, Stern MP, Duggirala R. Factors of insulin resistance syndrome-related phenotypes are linked to genetic locations on chromosomes 6 and 7 in nondiabetic Mexican-Americans. *Diabetes* 2002; 51(3):841-847.

9. **Arya R**, Duggirala R, Comuzzie AG, Puppala S, Modem S, Busi BR, Crawford MH. Heritability of anthropometric phenotypes in caste populations of Visakhapatnam, India. *Hum Biol* 2002; 74(3):325-344.
10. Duggirala R, Uttley M, Williams K, **Arya R**, Blangero J, Crawford MH. Genetic determination of biological age in the Mennonites of the Midwestern United States. *Genet Epidemiol* 2002; 23(2):97-109.
11. **Arya R**, Lehman D, Hunt KJ, Schneider J, Almasy L, Blangero J, Stern MP, Duggirala R. Evidence for bivariate linkage of obesity and HDL-C levels in the Framingham Heart Study. *BMC Genet* 2003; 4:52:278-282.
12. Duggirala R, Almasy L, Blangero J, Jenkinson CP, **Arya R**, DeFronzo RA, Stern M O'Connell P. Further evidence for a type 2 diabetes susceptibility locus on chromosome 11q. *Genet Epidemiol* 2003; 24(3):240-242.
13. **Arya R**, Duggirala R, Jenkinson CP, Almasy L, Blangero J, O'Connell P, Stern MP. Evidence of a novel quantitative-trait locus for obesity on chromosome 4p in Mexican Americans. *Am J Hum Genet* 2004; 74(2):272-282.
14. Hunt K, Lehman DM, **Arya R**, Fowler S, Leach RJ, Goring HHH, Almasy L, Blangero J, Dyer TD, Duggirala R, Stern MP. Genome-wide linkage analyses of type 2 diabetes in Mexican Americans: The San Antonio Family Diabetes/Gallbladder Study. *Diabetes* 2005; 54:2655-2662.
15. Lehman DM, **Arya R**, Blangero J, Almasy L, Puppala S, Dyer TD, Leach RJ, O'Connell P, Stern MP, Duggirala R. Bivariate linkage analysis of the insulin resistance syndrome phenotypes on chromosome 7q. *Hum Biol.* 2005; 77(2):231-46.
16. Qunibi WY, Abouzahr F, Mizani MR, Nolan CR, **Arya R**, Hunt KJ. Cardiovascular calcification in Hispanic Americans (HA) with chronic kidney disease (CKD) due to type 2 diabetes. *Kidney International* 2005; 68:271-277.
17. Lehman DM, Fu DJ, Freeman AB, Hunt KJ, Leach RJ, Johnson-Pais TL, Hamlington J, Dyer TD, **Arya R**, Abboud H, Göring HH, Duggirala R, Blangero J, Konrad RJ, Stern MP, Johnson-Pais TL. A single nucleotide polymorphism in MGEA5 encoding O-GlcNAc- selective N-acetyl-beta-D glucosaminidase is associated with type 2 diabetes in Mexican Americans. *Diabetes* 2005; 54(4):1214-1221.
18. Rincon-Choles, H, Thameem F, Lehman DM, **Arya R**, Arar NH, Duggirala R, Stern MP, Abboud HE. Genetic basis of diabetic nephropathy. *American Journal of Therapeutics* 2005; 12(6):555-561.
19. **Arya R**, Dyer TD, Warren DM, Jenkinson CP, Duggirala R, Almasy L. Effect of genotype x alcoholism interaction on linkage analysis of an alcoholism-related quantitative phenotype. *BMC Genet* 2005; 6 (Suppl.1): S120, 1-6.
20. Puppala S, Dodd GD, Fowler S, **Arya R**, Schneider J, Farook VS, Granato R, Dyer TD, Almasy L, Jenkinson CP, Diehl AK, Stern MP, Blangero J, Duggirala R. A genome-wide search finds major susceptibility loci for gallbladder disease on chromosome 1 in Mexican Americans. *Am J Hum Genet* 2006; 78(3):377-392.
21. **Arya R**, Demerath E, Jenkinson CP, Göring HH, Puppala S, Farook V, Fowler S, Schneider J, Granato R, Resendez RG, Dyer TD, Cole SA, Almasy L, Comuzzie AG, Siervogel RM, Bradshaw B, DeFronzo RA, MacCluer J, Stern MP, Towne B, Blangero J, Duggirala R. A quantitative trait locus

- (QTL) on chromosome 6q influences birth weight in two independent family studies. *Hum Mol Genet* 2006; 15(10):1569-1579.
22. Lehman DM, Hamlington J, Hunt KJ, Leach RJ, **Arya R**, Abboud HE, Duggirala R, Blangero J, Goring HH, Stern MP. A novel missense mutation in *ADRB3* increases risk for type 2 diabetes in a Mexican American family. *Diabetes Metab Res Rev* 2006; 22(4):331-336.
  23. Richardson DK, Schneider J, Fourcaudot MJ, Rodriguez LM, **Arya R**, Dyer TD, Almasy L, Blangero J, Stern MP, DeFronzo RA, Duggirala R, Jenkinson CP. Association between variants in the genes for adiponectin and its receptors with insulin resistance syndrome (IRS) - related phenotypes in Mexican Americans. *Diabetologia* 2006; 49(10):2317-2328.
  24. Lehman DM, Hunt KJ, Leach RJ, Hamlington J, **Arya R**, Abboud HE, Duggirala R, Blangero J, Göring HH, Stern MP. Haplotypes of transcription factor 7-like 2 (*TCF7L2*) gene and its upstream region are associated with type 2 diabetes and age of onset in Mexican Americans. *Diabetes* 2007; 56:389-393.
  25. Lehman DM, Richardson DK, Jenkinson CP, Hunt KJ, Dyer TD, Leach RJ, **Arya R**, Abboud HE, Blangero J, Duggirala R, Stern MP. P2 promoter variants of the hepatocyte nuclear factor 4alpha gene are associated with type 2 diabetes in Mexican Americans. *Diabetes* 2007; 56:513-517.
  26. Malhotra A, Elbein SC, Ng MC, Duggirala R, **Arya R**, Imperatore G, Adeyemo A, Pollin TI, Hsueh WC, Chan JC, Rotimi C, Hanson RL, Hasstedt SJ, Wolford JK. Meta-analysis of genome-wide linkage studies of quantitative lipid traits in families ascertained for type 2 diabetes. *Diabetes* 2007; 56(3):890-896.
  27. Saunders CL, Chiodini BD, Sham P, Lewis CM, Abkevich V, Adeyemo AA, de Andrade M, **Arya R**, Berenson GS, Blangero J, Boehnke M, Borecki IB, Chagnon YC, Chen W, Comuzzie AG, Deng HW, Duggirala R, Feitosa MF, Froguel P, Hanson RL, Hebebrand J, Huezo-Dias P, Kissebah AH, Li W, Luke A, Martin LJ, Nash M, Ohman M, Palmer LJ, Peltonen L, Perola M, Price RA, Redline S, Srinivasan SR, Stern MP, Stone S, Stringham H, Turner S, Wijmenga C, Collier DA. Meta-analysis of genome-wide linkage studies in BMI and obesity. *Obesity (Silver Spring)* 2007; 15(9):2263-2275.
  28. Puppala S, **Arya R**, Thameem F, Arar NH, Bhandari K, Lehman DM, Schneider J, Fowler S, Farook VS, Diego VP, Almasy L, Blangero J, Stern MP, Duggirala R, Abboud HE. Genotype by diabetes interaction effects on the detection of linkage of glomerular filtration rate to a region on chromosome 2q in Mexican Americans. *Diabetes* 2007; 56(11):2818-2828.
  29. Jenkinson CP, Coletta DK, Flechtner-Mors M, Hu SL, Fourcaudot MJ, Rodriguez LM, Schneider J, **Arya R**, Stern MP, Blangero J, Duggirala R, DeFronzo RA. Association of genetic variation in *ENPP1* with obesity-related phenotypes. *Obesity (Silver Spring)*. 2008; 16(7):1708-13. doi: 10.1038/oby.2008.262. Epub 2008 May 8.
  30. Guan W, Pluzhnikov A, Cox NJ, Boehnke M, Type 2 Diabetes Linkage Consortium (**Arya R**). Meta-analysis of 23 type 2 diabetes linkage studies from the international type 2 diabetes linkage analysis consortium. *Human Heredity* 2008; 66(1):35-46.
  31. Samudrala N, Farook VS, Dodd GD, Puppala S, Schneider J, Fowler S, Granato R, Dyer TD, **Arya R**, Almasy L, Jenkinson CP, Diehl AK, Blangero J, Duggirala R. Autosomal genome-wide linkage analysis to identify loci for gallbladder wall thickness in Mexican Americans. *Human Biology* 2008; 80(1):11-28.
  32. Coletta DK, Schneider J, Hu SL, Dyer TD, Puppala S, Farook VS, **Arya R**, Lehman DM, Blangero J,

- DeFronzo RA, Duggirala R, Jenkinson CP. Genome-wide linkage scan for genes influencing plasma triglyceride levels in the Veterans Administration Genetic Epidemiology Study. *Diabetes* 2009; 58(1):279-284.
33. **Arya R**, Hare E, Del Rincon I, Jenkinson CP, Duggirala R, Almasy L, Escalante A. Effects of covariates and interactions on a genome-wide association analysis of rheumatoid arthritis. *BMC Proc* 2009 Dec;3 Sup: S84.
34. Puppala S, Coletta DK, Schneider J, Hu SL, Farook VS, Dyer TD, **Arya R**, Blangero J, Duggirala R, DeFronzo RA, Jenkinson CP. Genome-wide linkage screen for systolic blood pressure in the Veterans Administration Genetic Epidemiology Study (VAGES) of Mexican Americans and confirmation of a major susceptibility locus on chromosome 6q14.1. *Human Heredity* 2011; 71(1):1-10.
35. Beuten J, Halder I, Fowler S, Goring HH, Duggirala R, **Arya R**, Thompson, Jr. IM, Leach RJ, Lehman DM. Wide disparity in genetic admixture among Mexican Americans from San Antonio, TX. *Ann Hum Genet* 2011; 75(4):529-538.
36. Farook VS, Puppala S, Schneider J, Fowler SP, Chittoor G, Dyer TD, Allayee H, Cole SA, **Arya R**, Black MH, Curran JE, Almasy L, Buchanan TA, Jenkinson CP, Lehman DM, Watanabe RM, Blangero J, Duggirala R. Metabolic syndrome is linked to chromosome 7q21 and associated with genetic variants in CD36 and GNAT3 in Mexican Americans. *Obesity (Silver Spring)*. 2012 Oct;20(10):2083-92.
37. Thameem F, Puppala S, Schneider J, Bhandari B, **Arya R**, Arar NH, Vasylyeva TL, Farook VS, Fowler SP, Almasy L, Blangero J, Duggirala R, Abboud HE. The Gly(972)Arg variant of human IRS1 gene is associated with variation in glomerular filtration rate likely through impaired insulin receptor signaling. *Diabetes* 2012; 61(9):2385-2393.
38. Chittoor G, **Arya R**, Farook VS, David R, Resendez RG, Rivera-Chavira BE, Leal- Berumen I, Dhandayuthapani S, Blangero J, Crawford MH, Vlasich-De La Rosa EM, Escobedo L, Duggirala R. Epidemiologic investigation of tuberculosis in a Mexican population from Chihuahua State, Mexico: A pilot study. *Tuberculosis* 2013; 93(S1):S71- S77.
39. Fowler SP, Puppala S, **Arya R**, Chittoor G, Farook VS, Schneider J, Resendez RG, Upadhayay RP, Vandeberg J, Hunt KJ, Bradshaw B, Cersosimo E, Vandeberg JL, Almasy L, Curran JE, Comuzzie AG, Lehman DM, Jenkinson CP, Lynch JL, DeFronzo RA, Blangero J, Hale DE, Duggirala R. Genetic epidemiology of cardiometabolic risk factors and their clustering patterns in Mexican American children and adolescents: The SAFARI Study. *Hum Genet* 2013; 132(9):1059-1071.
40. Farook VS, Coletta DK, Puppala S, Schneider J, Chittoor G, Hu SL, Winnier DA, Norton L, Dyer TD, **Arya R**, Cole S, Carless M, Goring HH, Almasy L, Mahaney MC, Comuzzie AG, Curran JE, Blangero J, Duggirala R, Lehman DM, Jenkinson CP, DeFronzo RA. Linkage of type 2 diabetes on chromosome 9p24 in the Mexican Americans: Additional evidence from the Veterans Administration Genetic Epidemiology Study (VAGES) *Human Heredity* 2013; 76(1):36-46.
41. Farook VS, Reddivari L, Chittoor G, Puppala S, **Arya R**, Fowler SP, Hunt KJ, Curran JE, Comuzzie AG, Lehman DM, Jenkinson CP, Lynch JL, DeFronzo RA, Blangero J, Daniel HE, Duggirala R, Vanamala J. Metabolites as novel biomarkers for childhood obesity-related traits in Mexican American children. *Pediatric Obesity* 2015;10(4):320-7.
42. Mahajan A, Sim X, Ng HJ, Manning A, Rivas MA, Highland HM, Locke AE, Grarup N, Im HK,

- Cingolani P, Flannick J, Fontanillas P, Fuchsberger C, Gaulton KJ, Teslovich TM, Rayner NW, Robertson NR, Beer NL, Rundle JK, Bork-Jensen J, Ladenvall C, Blancher C, Buck D, Buck G, Burt NP, Gabriel S, Gjesing AP, Groves CJ, Hollensted M, Huyghe JR, Jackson AU, Jun G, Justesen JM, Mangino M, Murphy J, Neville M, Onofrio R, Small KS, Stringham HM, Syvänen AC, Trakalo J, Abecasis G, Bell GI, Blangero J, Cox NJ, Duggirala R, Hanis CL, Seielstad M, Wilson JG, Christensen C, Brandslund I, Rauramaa R, Surdulescu GL, Doney AS, Lannfelt L, Linneberg A, Isomaa B, Tuomi T, Jørgensen ME, Jørgensen T, Kuusisto J, Uusitupa M, Salomaa V, Spector TD, Morris AD, Palmer CN, Collins FS, Mohlke KL, Bergman RN, Ingelsson E, Lind L, Tuomilehto J, Hansen T, Watanabe RM, Prokopenko I, Dupuis J, Karpe F, Groop L, Laakso M, Pedersen, Florez JC, Morris AP, Altshuler D, Meigs JB, Boehnke M, McCarthy MI, Lindgren CM, Gloyn AL; T2D-GENES consortium and GoT2D consortium. [Consortium multi-author paper including **Arya R**]. Identification and functional characterization of G6PC2 coding variants influencing glycemic traits define an effector transcript at the G6PC2-ABCB11 locus. *PLoS Genet*. 2015. 11 (1):e1004876.
43. Rubicz R, Yolken R, Drigalenko E, Carless MA, Dyer TD, Kent J Jr, Curran JE, Johnson MP, Cole SA, Fowler SP, **Arya R**, Puppala S, Almasy L, Moses EK, Kraig E, Duggirala R, Blangero J, Leach CT, Göring HH. Genome-wide genetic investigation of serological measures of common infections. *Eur J Hum Genet*. 2015; 23 (11):1544-8.
44. **Arya R**, Del Rincon I, Farook VS, Restrepo JF, Winnier DA, Fourcaudot MJ, Battafarano DF, Kumar S, de Almeida MAA, Curran JE, Jenkinson CP, Blangero J, Duggirala R, Escalante A. Genetic variants influencing joint damage in Mexican Americans and European Americans with rheumatoid arthritis. *Genetic Epidemiology* 2015;39(8):678 - 688.
45. Curran JE, Kumar S, Cromack DT, Hu SL, Coletta DK, Dyer TD, **Arya R**, Carless M, Tripathy D, Blangero J, Duggirala R, Göring HH, DeFronzo RA, Jenkinson CP. Transcriptomic identification of *adh1b* as a novel candidate gene for obesity and insulin resistance in human adipose tissue in Mexican Americans from the Veterans Administration Genetic Epidemiology Study (VAGES). *World Biomedical Frontiers, Diabetes and Obesity Section* ISSN; published online. ISSN: 2328-0166. <http://biomedfrontiers.org/diabetes-obesity-2015-9-11/>
46. Winnier DA, Fourcaudot M, Norton L, Abdul-Ghani MA, Hu SL, Farook VS, Coletta DK, Kumar S, Puppala S, Chittoor G, Dyer TD, **Arya R**, Carless M, Lehman DM, Curran JE, Cromack DT, Tripathy D, Blangero J, Duggirala R, Göring HH, DeFronzo RA, Jenkinson CP. Transcriptomic identification of *ADH1B* as a novel candidate gene for obesity and insulin resistance in human adipose tissue in Mexican Americans from the Veterans Administration Genetic Epidemiology Study (VAGES). *PLoS One*. 2015; 10(4): e0119941. doi: 10.1371/journal.pone.0119941.
47. Jenkinson CP, Göring HH, **Arya R**, Blangero J, Duggirala R, DeFronzo RA. Transcriptomics in type 2 diabetes: Bridging the gap between genotype and phenotype. *Genome Data*. 2015. Dec 17;8:25- 36. doi:10.1016/j.gdata.2015.12.001.eCollection 2016 Jun.(<http://dx.doi.org/10.1016/j.gdata.2015.12.001>).
48. Horikoshi M, Pasquali L, Wiltshire S, Huyghe JR, Mahajan A, Asimit JL, Ferreira T, Locke AE, Robertson NR, Wang X, Sim X, Fujita H, Hara K, Young R, Zhang W, Choi S, Chen H, Kaur I, Takeuchi F, Fontanillas P, Thuillier D, Yengo L, Below JE, Tam CH, Wu Y, Abecasis G, Altshuler D, Bell GI, Blangero J, Burt NP, Duggirala R, Florez JC, Hanis CL, Seielstad M, Atzmon G, Chan JC, Ma RC, Froguel P, Wilson JG, Bharadwaj D, Dupuis J, Meigs JB, Cho YS, Park T, Kooner JS, Chambers JC, Saleheen D, Kadowaki T, Tai ES, Mohlke KL, Cox NJ, Ferrer J, Zeggini E, Kato N, Teo YY, Boehnke M, McCarthy MI, Morris AP; T2D-GENES Consortium. Trans-ancestral fine-mapping of four type 2 diabetes susceptibility loci highlights potential causal regulatory mechanisms. (**Arya R**, collaborator in T2D-GENES Consortium). *Hum Mol Genet*. 2016; 25(10):2070-2081.
49. Fuchsberger C, Flannick J, Teslovich TM, Mahajan A, Agarwala V, Gaulton KJ, Ma C, Fontanillas P,

Moutsianas L, McCarthy DJ, Rivas MA, Perry JR, Sim X, Blackwell TW, Robertson NR, Rayner NW, Cingolani P, Locke AE, Tajos JF, Highland HM, Dupuis J, Chines PS, Lindgren CM, Hartl C, Jackson AU, Chen H, Huyghe JR, van de Bunt M, Pearson RD, Kumar A, Müller-Nurasyid M, Grarup N, Stringham HM, Gamazon ER, Lee J, Chen Y, Scott RA, Below JE, Chen P, Huang J, Go MJ, Stitzel ML, Pasko D, Parker SC, Varga TV, Green T, Beer NL, Day-Williams AG, Ferreira T, Fingerlin T, Horikoshi M, Hu C, Huh I, Ikram MK, Kim BJ, Kim Y, Kim YJ, Kwon MS, Lee J, Lee S, Lin KH, Maxwell TJ, Nagai Y, Wang X, Welch RP, Yoon J, Zhang W, Barzilai N, Voight BF, Han BG, Jenkinson CP, Kuulasmaa T, Kuusisto J, Manning A, Ng MC, Palmer ND, Balkau B, Stančáková A, Abboud HE, Boeing H, Giedraitis V, Prabhakaran D, Gottesman O, Scott J, Carey J, Kwan P, Grant G, Smith JD, Neale BM, Purcell S, Butterworth AS, Howson JM, Lee HM, Lu Y, Kwak SH, Zhao W, Danesh J, Lam VK, Park KS, Saleheen D, So WY, Tam CH, Afzal U, Aguilar D, **Arya R**, Aung T, Chan E, Navarro C, Cheng CY, Palli D, Correa A, Curran JE, Rybin D, Farook VS, Fowler SP, Freedman BI, Griswold M, Hale DE, Hicks PJ, Khor CC, Kumar S, Lehne B, Thuillier D, Lim WY, Liu J, van der Schouw YT, Loh M, Musani SK, Puppala S, Scott WR, Yengo L, Tan ST, Taylor HA Jr, Thameem F, Wilson G, Wong TY, Njølstad PR, Levy JC, Mangino M, Bonnycastle LL, Schwarzmayr T, Fadista J, Surdulescu GL, Herder C, Groves CJ, Wieland T, Bork- Jensen J, Brandslund I, Christensen C, Koistinen HA, Doney AS, Kinnunen L, Esko T, Farmer AJ, Hakaste L, Hodgkiss D, Kravic J, Lyssenko V, Hollensted M, Jørgensen ME, Jørgensen T, Ladenvall C, Justesen JM, Käräjämäki A, Kriebel J, Rathmann W, Lannfelt L, Lauritzen T, Narisu N, Linneberg A, Melander O, Milani L, Neville M, Orho-Melander M, Qi L, Qi Q, Roden M, Rolandsson O, Swift A, Rosengren AH, Stirrups K, Wood AR, Mihailov E, Blancher C, Carneiro MO, Maguire J, Poplin R, Shakir K, Fennell T, DePristo M, Hrabé de Angelis M, Deloukas P, Gjesing AP, Jun G, Nilsson P, Murphy J, Onofrio R, Thorand B, Hansen T, Meisinger C, Hu FB, Isomaa B, Karpe F, Liang L, Peters A, Huth C, O'Rahilly SP, Palmer CN, Pedersen O, Rauramaa R, Tuomilehto J, Salomaa V, Watanabe RM, Syvänen AC, Bergman RN, Bharadwaj D, Bottinger EP, Cho YS, Chandak GR, Chan JC, Chia KS, Daly MJ, Ebrahim SB, Langenberg C, Elliott P, Jablonski KA, Lehman DM, Jia W, Ma RC, Pollin TI, Sandhu M, Tandon N, Froguel P, Barroso I, Teo YY, Zeggini E, Loos RJ, Small KS, Ried JS, DeFronzo RA, Grallert H, Glaser B, Metspalu A, Wareham NJ, Walker M, Banks E, Gieger C, Ingelsson E, Im HK, Illig T, Franks PW, Buck G, Trakalo J, Buck D, Prokopenko I, Mägi R, Lind L, Farjoun Y, Owen KR, Gloyn AL, Strauch K, Tuomi T, Kooner JS, Lee JY, Park T, Donnelly P, Morris AD, Hattersley AT, Bowden DW, Collins FS, Atzmon G, Chambers JC, Spector TD, Laakso M, Strom TM, Bell GI, Blangero J, Duggirala R, Tai ES, McVean G, Hanis CL, Wilson JG, Seielstad M, Frayling TM, Meigs JB, Cox NJ, Sladek R, Lander ES, Gabriel S, Burt NP, Mohlke KL, Meitinger T, Groop L, Abecasis G, Florez JC, Scott LJ, Morris AP, Kang HM, Boehnke M, Altshuler D, McCarthy MI. The genetic architecture of type 2 diabetes. *Nature* 2016 Aug 4; 536(7614):41-7.

50. Blangero J, Teslovich TM, Sim X, Almeida MA, Jun G, Dyer TD, Johnson M, Peralta JM, Manning A, Wood AR, Fuchsberger C, Kent JW Jr, Aguilar DA, Below JE, Farook VS, **Arya R**, Fowler S, Blackwell TW, Puppala S, Kumar S, Glahn DC, Moses EK, Curran JE, Thameem F, Jenkinson CP, DeFronzo RA, Lehman DM, Hanis C, Abecasis G, Boehnke M, Göring H, Duggirala R, Almasy L; T2D-GENES Consortium. Omics- squared: Human genomic, transcriptomic and phenotypic data for genetic analysis workshop 19. *BMC Proceedings* 2016, Oct 18,10 (Suppl 7):20, 71-77.
51. Manning A, Highland HM, Gasser J, Sim X, Tukiainen T, Fontanillas P, Grarup N, Rivas MA, Mahajan A, Locke AE, Cingolani P, Pers TH, Viñuela A, Brown AA, Wu Y, Flannick J, Fuchsberger C, Gamazon ER, Gaulton KJ, Im HK, Teslovich TM, Blackwell TW, Bork- Jensen J, Burt NP, Chen Y, Green T, Hartl C, Kang HM, Kumar A, Ladenvall C, Ma C, Moutsianas L, Pearson RD, Perry JR, Rayner NW, Robertson NR, Scott LJ, van de Bunt M, Eriksson JG, Jula A, Koskinen S, Lehtimäki T, Palotie A, Raitakari OT, Jacobs SB, Wessel J, Chu AY, Scott RA, Goodarzi MO, Blancher C, Buck G, Buck D, Chines PS, Gabriel S, Gjesing AP, Groves CJ, Hollensted M, Huyghe JR, Jackson AU, Jun G, Justesen JM, Mangino M, Murphy J, Neville M, Onofrio R, Small KS, Stringham HM, Trakalo J, Banks E, Carey J, Carneiro MO, DePristo M, Farjoun Y, Fennell T, Goldstein JL, Grant G, Hrabé de Angelis M, Maguire J, Neale BM, Poplin R, Purcell S, Schwarzmayr T, Shakir K, Smith JD, Strom

- TM, Wieland T, Lindstrom J, Brandslund I, Christensen C, Surdulescu GL, Lakka TA, Doney AS, Nilsson P, Wareham NJ, Langenberg C, Varga TV, Franks PW, Rolandsson O, Rosengren AH, Farook VS, Thameem F, Puppala S, Kumar S, Lehman DM, Jenkinson CP, Curran JE, Hale DE, Fowler SP, **Arya R**, DeFronzo RA, Abboud HE, Syvänen AC, Hicks PJ, Palmer ND, Ng MC, Bowden DW, Freedman BI, Esko T, Mägi R, Milani L, Mihailov E, Metspalu A, Narisu N, Kinnunen L, Bonnycastle LL, Swift A, Pasko D, Wood AR, Fadista J, Pollin TI, Barzilai N, Atzmon G, Glaser B, Thorand B, Strauch K, Peters A, Roden M, Müller- Nurasyid M, Liang L, Kriebel J, Illig T, Grallert H, Gieger C, Meisinger C, Lannfelt L, Musani SK, Griswold M, Taylor HA Jr, Wilson G Sr, Correa A, Oksa H, Scott WR, Afzal U, Tan ST, Loh M, Chambers JC, Sehmi J, Kooner JS, Lehne B, Cho YS, Lee JY, Han BG, Käräjämäki A, Qi Q, Qi L, Huang J, Hu FB, Melander O, Orho-Melander M, Below JE, Aguilar D, Wong TY, Liu J, Khor CC, Chia KS, Lim WY, Cheng CY, Chan E, Tai ES, Aung T, Linneberg A, Isomaa B, Meitinger T, Tuomi T, Hakaste L, Kravic J, Jørgensen ME, Lauritzen T, Deloukas P, Stirrups KE, Owen KR, Farmer AJ, Frayling TM, O'Rahilly SP, Walker M, Levy JC, Hodgkiss D, Hattersley AT, Kuulasmaa T, Stančáková A, Barroso I, Bharadwaj D, Chan J, Chandak GR, Daly MJ, Donnelly PJ, Ebrahim SB, Elliott P, Fingerlin T, Froguel P, Hu C, Jia W, Ma RC, McVean G, Park T, Prabhakaran D, Sandhu M, Scott J, Sladek R, Tandon N, Teo YY, Zeggini E, Watanabe RM, Koistinen HA, Kesaniemi YA, Uusitupa M, Spector TD, Salomaa V, Rauramaa R, Palmer CN, Prokopenko I, Morris AD, Bergman RN, Collins FS, Lind L, Ingelsson E, Tuomilehto J, Karpe F, Groop L, Jørgensen T, Hansen T, Pedersen O, Kuusisto J, Abecasis G, Bell GI, Blangero J, Cox NJ, Duggirala R, Seielstad M, Wilson JG, Dupuis J, Ripatti S, Hanis CL, Florez JC, Mohlke KL, Meigs JB, Laakso M, Morris AP, Boehnke M, Altshuler D, McCarthy MI, Gloyn AL, Lindgren CM. A low-frequency inactivating *Akt2* variant enriched in the Finnish population is associated with fasting insulin levels and type 2 diabetes risk. *Diabetes*. 2017 Mar 24. pii: db161329. doi: 10.2337/db16-1329.
52. Farook VS, Reddivari L, Mummidi S, Puppala S, **Arya R**, Lopez-Alvarenga JC, Fowler SP, Chittoor G, Resendez RG, Birunda MK, Comuzzie AG, Curran JE, Lehman DM, Jenkinson CP, Lynch JL, DeFronzo RA, Blangero J, Hale DE, Duggirala R, Vanamala JKP. Genetics of serum carotenoid levels and their correlation with obesity-related traits in Mexican American children. *American Journal of Clinical Nutrition*, 2017, 106: 52-58.
53. **Arya R**, Escalante A, Farook VS, Restrepo JF, Battafarano DF, Marcio de Almeida M, Kos MZ, Fourcaudot MJ, Mummidi S, Kumar S, Curran JE, Jenkinson CP, Blangero J, Duggirala R, del Rincon I. A genetic association study of carotid intima- media thickness (CIMT) and plaque in Mexican Americans and European Americans with rheumatoid arthritis. *Atherosclerosis*. 2017, 271:92-101.
54. Flannick J, Fuchsberger C, Mahajan A, Teslovich TM, Agarwala V, Gaulton KJ, Caulkins L, Koesterer R, Ma C, Moutsianas L, McCarthy DJ, Rivas MA, Perry JRB, Sim X, Blackwell TW, Robertson NR, Rayner NW, Cingolani P, Locke AE, Tajes JF, Highland HM, Dupuis J, Chines PS, Lindgren CM, Hartl C, Jackson AU, Chen H, Huyghe JR, van de Bunt M, Pearson RD, Kumar A, Müller-Nurasyid M, Grarup N, Stringham HM, Gamazon ER, Lee J, Chen Y, Scott RA, Below JE, Chen P, Huang J, Go MJ, Stitzel ML, Pasko D, Parker SCJ, Varga TV, Green T, Beer NL, Day-Williams AG, Ferreira T, Fingerlin T, Horikoshi M, Hu C, Huh I, Ikram MK, Kim BJ, Kim Y, Kim YJ, Kwon MS, Lee J, Lee S, Lin KH, Maxwell TJ, Nagai Y, Wang X, Welch RP, Yoon J, Zhang W, Barzilai N, Voight BF, Han BG, Jenkinson CP, Kuulasmaa T, Kuusisto J, Manning A, Ng MCY, Palmer ND, Balkau B, Stančáková A, Abboud HE, Boeing H, Giedraitis V, Prabhakaran D, Gottesman O, Scott J, Carey J, Kwan P, Grant G, Smith JD, Neale BM, Purcell S, Butterworth AS, Howson JMM, Lee HM, Lu Y, Kwak SH, Zhao W, Danesh J, Lam VKL, Park KS, Saleheen D, So WY, Tam CHT, Afzal U, Aguilar D, **Arya R**, Aung T, Chan E, Navarro C, Cheng CY, Palli D, Correa A, Curran JE, Rybin D, Farook VS, Fowler SP, Freedman BI, Griswold M, Hale DE, Hicks PJ, Khor CC, Kumar S, Lehne B, Thuillier D, Lim WY, Liu J, Loh M, Musani SK, Puppala S, Scott WR, Yengo L, Tan ST, Taylor HA, Thameem F, Wilson G, Wong TY, Njølstad PR, Levy JC, Mangino M,

- Bonnycastle LL, Schwarzmayr T, Fadista J, Surdulescu GL, Herder C, Groves CJ, Wieland T, Bork-Jensen J, Brandslund I, Christensen C, Koistinen HA, Doney ASF, Kinnunen L, Esko T, Farmer AJ, Hakaste L, Hodgkiss D, Kravic J, Lyssenko V, Hollensted M, Jørgensen ME, Jørgensen T, Ladenvall C, Justesen JM, Käräjämäki A, Kriebel J, Rathmann W, Lannfelt L, Lauritzen T, Narisu N, Linneberg A, Melander O, Milani L, Neville M, Orho-Melander M, Qi L, Qi Q, Roden M, Rolandsson O, Swift A, Rosengren AH, Stirrups K, Wood AR, Mihailov E, Blancher C, Carneiro MO, Maguire J, Poplin R, Shakir K, Fennell T, DePristo M, de Angelis MH, Deloukas P, Gjesing AP, Jun G, Nilsson P, Murphy J, Onofrio R, Thorand B, Hansen T, Meisinger C, Hu FB, Isomaa B, Karpe F, Liang L, Peters A, Huth C, O'Rahilly SP, Palmer CNA, Pedersen O, Rauramaa R, Tuomilehto J, Salomaa V, Watanabe RM, Syvänen AC, Bergman RN, Bharadwaj D, Bottinger EP, Cho YS, Chandak GR, Chan JCN, Chia KS, Daly MJ, Ebrahim SB, Langenberg C, Elliott P, Jablonski KA, Lehman DM, Jia W, Ma RCW, Pollin TI, Sandhu M, Tandon N, Froguel P, Barroso I, Teo YY, Zeggini E, Loos RJF, Small KS, Ried JS, DeFronzo RA, Grallert H, Glaser B, Metspalu A, Wareham NJ, Walker M, Banks E, Gieger C, Ingelsson E, Im HK, Illig T, Franks PW, Buck G, Trakalo J, Buck D, Prokopenko I, Mägi R, Lind L, Farjoun Y, Owen KR, Gloyn AL, Strauch K, Tuomi T, Kooner JS, Lee JY, Park T, Donnelly P, Morris AD, Hattersley AT, Bowden DW, Collins FS, Atzmon G, Chambers JC, Spector TD, Laakso M, Strom TM, Bell GI, Blangero J, Duggirala R, Tai ES, McVean G, Hanis CL, Wilson JG, Seielstad M, Frayling TM, Meigs JB, Cox NJ, Sladek R, Lander ES, Gabriel S, Mohlke KL, Meitinger T, Groop L, Abecasis G, Scott LJ, Morris AP, Kang HM, Altshuler D, Burt NP, Florez JC, Boehnke M, McCarthy MI. Sequence data and association statistics from 12,940 type 2 diabetes cases and controls. *Scientific Data*. 2017 Dec 19;4:170179. doi: 10.1038/sdata.2017.179.
55. Flannick J, Fuchsberger C, Mahajan A, Teslovich TM, Agarwala V, Gaulton KJ, Caulkins L, Koesterer R, Ma C, Moutsianas L, McCarthy DJ, Rivas MA, Perry JRB, Sim X, Blackwell TW, Robertson NR, Rayner NW, Cingolani P, Locke AE, Tajes JF, Highland HM, Dupuis J, Chines PS, Lindgren CM, Hartl C, Jackson AU, Chen H, Huyghe JR, van de Bunt M, Pearson RD, Kumar A, Müller-Nurasyid M, Grarup N, Stringham HM, Gamazon ER, Lee J, Chen Y, Scott RA, Below JE, Chen P, Huang J, Go MJ, Stitzel ML, Pasko D, Parker SCJ, Varga TV, Green T, Beer NL, Day-Williams AG, Ferreira T, Fingerlin T, Horikoshi M, Hu C, Huh I, Ikram MK, Kim BJ, Kim Y, Kim YJ, Kwon MS, Lee J, Lee S, Lin KH, Maxwell TJ, Nagai Y, Wang X, Welch RP, Yoon J, Zhang W, Barzilai N, Voight BF, Han BG, Jenkinson CP, Kuulasmaa T, Kuusisto J, Manning A, Ng MCY, Palmer ND, Balkau B, Stančáková A, Abboud HE, Boeing H, Giedraitis V, Prabhakaran D, Gottesman O, Scott J, Carey J, Kwan P, Grant G, Smith JD, Neale BM, Purcell S, Butterworth AS, Howson JMM, Lee HM, Lu Y, Kwak SH, Zhao W, Danesh J, Lam VKL, Park KS, Saleheen D, So WY, Tam CHT, Afzal U, Aguilar D, **Arya R**, Aung T, Chan E, Navarro C, Cheng CY, Palli D, Correa A, Curran JE, Rybin D, Farook VS, Fowler SP, Freedman BI, Griswold M, Hale DE, Hicks PJ, Khor CC, Kumar S, Lehne B, Thuillier D, Lim WY, Liu J, Loh M, Musani SK, Puppala S, Scott WR, Yengo L, Tan ST, Taylor HA, Thameem F, Wilson G, Wong TY, Njølstad PR, Levy JC, Mangino M, Bonnycastle LL, Schwarzmayr T, Fadista J, Surdulescu GL, Herder C, Groves CJ, Wieland T, Bork-Jensen J, Brandslund I, Christensen C, Koistinen HA, Doney ASF, Kinnunen L, Esko T, Farmer AJ, Hakaste L, Hodgkiss D, Kravic J, Lyssenko V, Hollensted M, Jørgensen ME, Jørgensen T, Ladenvall C, Justesen JM, Käräjämäki A, Kriebel J, Rathmann W, Lannfelt L, Lauritzen T, Narisu N, Linneberg A, Melander O, Milani L, Neville M, Orho-Melander M, Qi L, Qi Q, Roden M, Rolandsson O, Swift A, Rosengren AH, Stirrups K, Wood AR, Mihailov E, Blancher C, Carneiro MO, Maguire J, Poplin R, Shakir K, Fennell T, DePristo M, de Angelis MH, Deloukas P, Gjesing AP, Jun G, Nilsson P, Murphy J, Onofrio R, Thorand B, Hansen T, Meisinger C, Hu FB, Isomaa B, Karpe F, Liang L, Peters A, Huth C, O'Rahilly SP, Palmer CNA, Pedersen O, Rauramaa R, Tuomilehto J, Salomaa V, Watanabe RM, Syvänen AC, Bergman RN, Bharadwaj D, Bottinger EP, Cho YS, Chandak GR, Chan JCN, Chia KS, Daly MJ, Ebrahim SB, Langenberg C, Elliott P, Jablonski KA, Lehman DM, Jia W, Ma RCW, Pollin TI, Sandhu M, Tandon N, Froguel P, Barroso I, Teo YY, Zeggini E, Loos RJF, Small KS, Ried JS, DeFronzo RA, Grallert H, Glaser B, Metspalu A, Wareham NJ, Walker M, Banks E, Gieger C, Ingelsson E, Im HK, Illig T, Franks PW, Buck G, Trakalo J, Buck D, Prokopenko I, Mägi R, Lind L, Farjoun Y, Owen KR, Gloyn AL, Strauch K, Tuomi T, Kooner JS, Lee JY, Park T, Donnelly P, Morris AD, Hattersley AT, Bowden DW,

- Collins FS, Atzmon G, Chambers JC, Spector TD, Laakso M, Strom TM, Bell GI, Blangero J, Duggirala R, Tai ES, McVean G, Hanis CL, Wilson JG, Seielstad M, Frayling TM, Meigs JB, Cox NJ, Sladek R, Lander ES, Gabriel S, Mohlke KL, Meitinger T, Groop L, Abecasis G, Scott LJ, Morris AP, Kang HM, Altshuler D, Burt NP, Florez JC, Boehnke M, McCarthy MI. Erratum: Sequence data and association statistics from 12,940 type 2 diabetes cases and controls. *Sci Data*. 2018 Jan 23;5:180002. doi: 10.1038/sdata.2018.2. Erratum for: *Sci Data*. 2017 Dec 19;4:170179. PMID: 29360107; PMCID: PMC5779067.
56. **Arya R**, Escalante A, Farook VS, Restrepo JF, Battafarano DF, Almeida M, Kos MZ, Fourcaudot MJ, Mummidi S, Kumar S, Curran JE, Jenkinson CP, Blangero J, Duggirala R, del Rincon I. Data on genetic associations of carotid atherosclerosis markers in Mexican American and European American rheumatoid arthritis subjects. *Data In Brief*. 2018, 17:820-829.
57. **Arya R**, Farook VS, Fowler SP, Puppala S, Chittoor G, Resendez RG, Mummidi S, Vanamala J, Almasy L, Curran JE, Comuzzie AG, Lehman DM, Jenkinson CP, Lynch JL, DeFronzo RA, Blangero J, Hale DE, Duggirala R, Diego VP. Genetic and environmental (physical fitness and sedentary activity) interaction effects on cardiometabolic risk factors in Mexican American children and adolescents. *Genet Epidemiol*. 2018 Jun;42(4):378-393. doi: 10.1002/gepi.22114. Epub 2018 Feb 20.
58. Morales LD, Cromack DT, Tripathy D, Fourcaudot M, Kumar S, Joanne E. Curran JE, Carless M, Goring HHH, Hu SL, Lopez Alvarenga JC, Small K, Glastonbury C, Das SK, Langefeld C, Hanson R, Shueh, WC Norton L, **Arya R**, Mummidi S, Blangero J, DeFronzo RA, Duggirala R, Jenkinson CP. Further evidence supporting a potential role for ADH1B in obesity. *Sci Rep*. 2021 Jan 21;11(1):1932. doi: 10.1038/s41598-020-80563-z. PMID: 33479282; PMCID: PMC7820614.
59. Lopez-Alvarenga JC, Chittoor G, Paul SF, **Arya R**, Puppala S, Farook VS, Fowler SP, Resendez RG, Diaz-Badillo A, Lehman DM, Mummidi S, Jenkinson CP, Lynch JL, DeFronzo RA, Blangero J, Hale DE, Duggirala R. Acanthosis Nigricans as a Composite Marker of Cardiometabolic Risk and Its Complex Association with Obesity and Insulin Resistance in Mexican American Children. *PLoS One*. 2020 Oct 15;15(10):e0240467. doi: 10.1371/journal.pone.0240467. PMID: 33057385; PMCID: PMC7561152.
60. Mummidi S, Farook VS, Reddivari L, Hernandez-Ruiz J, Diaz-Badillo A, Fowler SP, Resendez RG, Akhtar F, Lehman DM, Jenkinson CP, **Arya R**, Lynch JL, DeFronzo RA, . Hale, DE, Blangero J, Lopez-Alvarenga JC, Duggirala R, Vanamala JK. Prediction of Insulin Sensitivity Using Serum Carotenoid Concentrations and Pediatric Metabolic Index in Mexican American Children. *Sci Rep*. 2021 Jan 13;11(1):871. doi: 10.1038/s41598-020-79387-8. PMID: 33441626; PMCID: PMC7806924.
61. Lopez-Alvarenga JC†, Martinez D†, Diaz-Badillo A, Morales LD, **Arya R**, Jenkinson CP, Curran JE, Lehman DM, Blangero J, Duggirala R, Mummidi S\*, Martinez R\* Association of HIV-1 Infection and Antiretroviral Therapy with Type 2 Diabetes in the Hispanic Population of the Rio Grande Valley, Texas, USA. *Front. Med.*, 05 July 2021 | <https://doi.org/10.3389/fmed.2021>.
62. Venkatesan V†, Lopez-Alvarenga JC†, **Arya R**†, Ramu D, Koshy T, Umarani Ravichandran U, Ponnala AR, Sharma SK, Lodha S, Sharma KK, Shaik MV, Roy G. Resendez RG, Venugopal P, Parthasarathy R, Noelta S, Ezeilo JA, Bejar CA, Wander GS, Ralhan S, Singh JR, Mehra NK, Vadlamudi RR, Almeida A, Mummidi S, Natesan C, Blangero J, Medicherla KM, Thanikachalam S, Panchatcharam TS, Dileep Kumar Kandregula DK, Gupta R, Sanghera DK and Duggirala R. Burden of Type 2 Diabetes and Associated Cardiometabolic Traits and Their Heritability Estimates in Endogamous Ethnic Groups of India: Findings from the INDIGENIUS Consortium (†equal contribution & first author). *Front. Endocrinol.*, 14 April 2022 | <https://doi.org/10.3389/fendo.2022.847692>.

63. **Arya R**, Lopez-Alvarenga JC, Almeida M, Kumar S, Peralta J, Diaz-Badillo A, Diego VP, Resendez RG, Sharon P, Fowler SP, Jenkinson CP, Lehman DM, Curran JE, Lynch JL, Hale D, DeFronzo RA, Mummidi S, Blangero J, Duggirala R. Exome-chip-wide Association Study of Biomarkers of Liver Function and Metabolic Dysfunction-Associated Fatty Liver Disease (MAFLD) in Mexican Americans. *Frontiers in Medicine*, section Gastroenterology. 2024 (In revision).
64. Akhtar F, Hernandez-Ruiz J, Liu Y-G, Resendez RG, Feliers D, Morales LD, Diaz-Badillo A, Lehman DM, **Arya R**, Lopez-Alvarenga J, Blangero J, Duggirala R, Mummidi S. Functional characterization of the disease-associated CCL2 rs1024611G-rs13900T haplotype: The role of the RNA-binding protein HuR. *bioRxiv*. Nov 2:2023 <https://doi.org/10.1101/2023.10.31.564937>. Preprint.
65. Diaz-Badillo A, Chittoor G, Lopez-Alvarenga JC, **Arya R**, Mummidi S, Puppala SR, Fowler SP, Resendez RG, Hernandez-Ruiz J, Akhtar F, Jenkinson CP, Lehman DM, Lynch JL, DeFronzo RA, Hale DE, Mitchell BD, Blangero J, Duggirala R. Genetics of bone mass related phenotypes and their correlation with cardiometabolic traits in Mexican American children. (Prepared/to be submitted).
66. Farook VS, Akhtar F, **Arya R**, Mummidi S, Lopez-Alvarenga JC, Resendez RG, Lynch JL, Jenkinson CP, Blangero J, Camann DE, Challa S, Duggirala R. Early life exposure to environmental pollutants as assessed in deciduous teeth and cardio-metabolic risk in Mexican American Children. (Prepared/to be submitted).
67. Ramu D, Lopez-Alvarenga JC, **Arya R**, Almeida M, Venkatesan V, Koshy T, Ravichandran U, Ponnala AR, Sharma SK, Lodha S, Sharma KK, Shaik MV, Resendez RG, Venugopal P, Parthasarathy R, Saju N, Ezeilo JA, Bejar CA, Wander GS, Ralhan S, Singh JR, Mehra NK, Vadlamudi RR, Mummidi S, Natesan C, Blangero J, Medicherla KM, Thanikachalam S, Panchatcharam TS, Kandregula DK, Gupta R, Sanghera DK, Duggirala R, Paul SFD. Phenotypic characterization and prevalence of latent autoimmune diabetes of adults (LADA) in Indian population (Submitted to Archives of Medical Research, 2024)
68. Rout M, Venkatesan V, **Arya R**, Lopez-Alvarenga JC, Koshy T, Ravichandran U, Sharma SK, Lodha S, Ponnala AR, Sharma KK, Shaik MV, Resendez RG, Ramu D, Venugopal P, Parthasarathy R, Noelta S, Ezeilo JA, Mummidi S, Natesan C, Mehra NK, Singh JR, Wander GS, Ralhan S, Blackett PR, Blangero J, Medicherla KM, Thanikachalam S, Panchatcharam TS, Kandregula DK, Gupta R, Paul SFD, Aston CE, Duggirala R, Sanghera DK. Sequencing analyses of diabetic families from Asian Indian endogamous ethnic groups reveal a high burden of rare variants in HNF4A, KCNJ11-ABCC8, SLC38A11, and ANPEP genes with low polygenic risk scores (Submitted to Communications Medicine).

### **PUBLICATIONS: Book Chapters**

1. Lam Y. W. F. Duggirala R, Jenkinson CP, **Arya R**. Chapter 9: The Role of Pharmacogenomics in Diabetes. In: *Pharmacogenomics*, 2nd Edition. Eds: Yui-Wing Francis Lam and Scott Stuart, Elsevier 2018.
2. **Arya R**, Puppala S, Farook VS, Chittoor G, Jenkinson CP, Blangero J, Hale DE, Duggirala R and Laura Almasy. Chapter 12: Mapping of susceptibility genes for obesity, type 2 diabetes, and the metabolic syndrome in human populations. In: *Genome Mapping and Genomics in Human and Non-Human Primates, Genome Mapping and Genomics in Animals Vol. 5*. R. Duggirala, Almasy L, Williams-Blangero S, Solomon FD, and Kole C (eds.). Springer-Verlag Berlin Heidelberg. 2015 (DOI 10.1007/978-3-662-46306-2\_12).
3. **Arya R**, Singh GK, Mosher MJ, Haas JD, and Crawford MH. Nutrition, obesity, and mortality in

Kansas Mennonites, Chapter 11, In: Different Seasons: Biological Aging Among the Mennonites of Midwestern United States. (Ed) Crawford MH. Anthropology 21, University of Kansas. Lawrence, Kansas: 2000. p. 127 - 153.

4. Duggirala R, **Arya R**, Blangero J, and Crawford MH. Genetic and environmental determinants of variation in phenotypes related to coronary heart disease and renal function in the Mennonites, Chapter 9, In: Different Seasons: Biological Aging Among the Mennonites of Midwestern United States. (Ed) Crawford MH. Publications in Anthropology 21, University of Kansas, Lawrence, KS: 2000. p. 83 -99.
5. Busi BR, Modem S, **Arya R**, Jyothi GM. Nutritional status of children in Visakhapatnam In: Sharma AN. Modern Trends in Anthropology. New Delhi: Northern Book Center; 1988. p. 185 - 193.

#### **PUBLICATIONS: *Monographs*:**

1. Busi BR, Modem S, **Arya R**, Puppala S. Nutritional status of preschool children: A study on the impact of the urban poverty in Visakhapatnam. Center for Urban Development Studies, Andhra University, Visakhapatnam, India; 1990. 12 p.
2. **Arya R**, Ying Z, Wilkinson A, Adrian M. The rise of the salad bar: Nutrition in Kansans Kansas Health Institute; 1997. 3 p.

#### **PUBLICATIONS: *Abstracts***

1. **Arya R**, Duggirala R, Almasy L, Stern MP, O'Connell P, and Blangero J. Strong evidence for linkage of high-density lipoprotein cholesterol (HDL-C) concentrations to a genetic location 1999. American Journal of Human Genetics; vol. 65, no. 4, p. A2.
2. **Arya R**, Duggirala R, Comuzzie AG, Busi BR, and Crawford MH. Heritability of anthropometric phenotypes in caste populations of Visakhapatnam, India. 1999. American Journal of Human Biology; vol. 11, no. 1, p. 103-104.
3. Duggirala, R. Williams K, **Arya R**, Blangero J, Stern MP. Genetics of the factors underlying the Insulin Resistance Syndrome in nondiabetic Mexican Americans 2000. American Journal of Human Biology; vol. 12. p. 274.
4. **Arya R**, Williams K, O'Connell P, Blangero J, Stern MP, Duggirala R. Factors of Insulin Resistance Syndrome (IRS) related phenotypes are linked to genetic locations on chromosomes 6 and 7 in nondiabetic Mexican Americans 2000. Diabetes; vol. 49, no.1, p. A199.
5. Duggirala R, Pergola PE, Williams K, **Arya R**, and Crawford MH. Genetic determination of variation in the estimates of creatinine clearance and glomerular filtration rate in the Mennonites. 2000. Journal of the American Society of Nephrology; vol. 11, p. A0777.
6. Kawalit I, Duggirala R, Bhandari K, **Arya R**, Fowler SP, Pergola PE, Plaetke R, Almasy L, Blangero J, Stern MP, Abboud HE. Blood pressure and albuminuria are influenced by common genetic factors in Mexican Americans. 2001. Diabetes; vol. 50, no. S2, p. A243.
7. **Arya R**, Bhandari K, Kawalit, I, Fowler S, Williams K, Pergola PE, Plaetke R, Almasy L, Blangero J, Abboud HE, Duggirala R. Bivariate genetic analysis of albuminuria and obesity in Mexican Americans 2001. Diabetes; vol. 50, no. S2, p. A241.

8. Bhandari K, Duggirala R, Kawalit, I, **Arya R**, Fowler S, Williams K, Pergola PE, Plaetke R, Almasy L, O'Connell, Blangero J, Abboud HE, Stern MP. Genome-wide search for albuminuria susceptibility genes in Mexican Americans 2001. *Diabetes*; vol. 50, S2, p. A240.
9. **Arya R**, Blangero J, Almasy L, O'Connell, Stern MP, Duggirala R. A major locus for body mass index (BMI) on chromosome 4p in Mexican Americans. 2001. *Obesity Research*; vol. 9, S3, p. 70S.
10. Lehman DM, Duggirala R, Bhandari K, **Arya R**, Fowler SP, Almasy L, O'Connell P, Blangero J, Abboud HE, Stern MP. Bivariate linkage analysis for albuminuria and mean arterial pressure in Mexican Americans. 2002. p. 1082P. *Diabetes*; vol. 51, S2. A266.
11. Bhandari K, **Arya R**, Fowler SP, Almasy L, Blangero J, Stern MP, Abboud HE, Duggirala R. Serum Creatinine, Blood Urea Nitrogen and Creatinine Clearance are influenced by genetic factors in Mexican Americans. 2002. *J Am Soc Nephrol*; vol. 13. p. 518A.
12. Bhandari K, Kawalit I, Fowler S, **Arya R**, Pergola PE, Plaetke R, Arar NH, Almasy L, O'Connell P, Blangero J, Stern MP, Duggirala R, Abboud HE. A major susceptibility locus influencing albuminuria in Mexican Americans on chromosome 15q. 2002. *J Am Soc Nephrol*; vol. 13, p. 695A.
13. **Arya R**, Dodd, GD, Fowler S, Lehman DM, Diehl AK, Almasy L, Blangero J, Stern MP, Duggirala R. Genetics of the clinical triad of type 2 diabetes, obesity, and gallbladder disease in Mexican Americans 2002. *Diabetes*; vol. 51, S2, p. A259.
14. Fowler S Duggirala R. Williams K, **Arya R**, Lehman DM, Hazuda HP, J, Stern MP. Genetics of self-esteem and its relationship to type 2 diabetes. 2002. *Diabetes*; vol. 51, S2, p. A446.
15. Richardson D, **Arya R**, Rodriguez L, Bynum J, Duggirala R, Stern MP, Mandarino L, DeFronzo R, Jenkinson C. Association of Enpp-1 polymorphisms with insulin resistance in nondiabetic Mexican Americans. 2003. *Diabetes*; vol. 52, S1, p. A515.
16. Duggirala R. Fowler S, Schneider J, **Arya R**, Almasy L, O'Connell P, Stern MP, Blangero J. Total serum cholesterol levels are influenced by a major locus on chromosome 9q in Mexican Americans 2003. *Diabetes*; vol. 52, S1, p. A249.
17. **Arya R**, Fowler S, Schneider J, Almasy L, O'Connell P, Blangero J, Stern MP, Duggirala R. Evidence of a novel major locus for adiponectin levels on chromosome 3q in Mexican Americans 2003. *Diabetes*; vol. 52, S1, p. A248.
18. **Arya R**, Williams K, Bhandari K, Lehman D, Pergola P, Fowler S, Almasy L, Comuzzie AG, Blangero J, Abboud H, Stern MP, Duggirala R. Albuminuria as a component of metabolic syndrome in Mexican Americans. 2003. *Obesity Research*; vol. 11, p. A58.
19. Puppala S, Schneider J, **Arya R**, Dyer T, Fowler S, Almasy L, Blangero J, Stern MP, Duggirala R. Linkage of the metabolic syndrome to a genetic location on chromosome 7q in Mexican Americans. 2004. *The American Journal of Human Genetics*; vol. 54. p. 354.
20. **Arya R**, Schneider J, Puppala S, Dyer T, Fowler S, Almasy L, Blangero J, Stern MP, Duggirala R. A genome-wide scan for quantitative trait loci linked to waist circumference in Mexican Americans. 2004. *The American Journal of Human Genetics*; vol. 54, p. 376.
21. Farook VS, Puppala S, **Arya R**, Schneider J, Fowler S, Dyer TD, Almasy L, Blangero J, Cole S, Stern MP, Duggirala R. Screening of positional candidate genes in the 9q chromosomal region linked to total cholesterol and other diabetes related traits in Mexican Americans. 2005. *Diabetes*; vol. 54, S1,

p. A293.

22. **Arya R**, Schneider J, Puppala S, Fowler S, Dyer TD, Jenkinson CP, Almasy L, Blangero J, Stern MP, Duggirala R. Evidence for a major gene for abdominal obesity in Mexican Americans. 2005. *Obesity Research*; vol. 13, p. 201.
23. Blaum W, Hamlington J, Hunt KJ, Leach RJ, Abboud HE, **Arya R**, Duggirala R, Stern MP, Lehman DM. No evidence for mutations of HNF4a in family with autosomal dominant type 2 diabetes linkage to 20q. 2005. *Diabetes*; vol. 54, S1, p.1169P.
24. Puppala S, Bhandari K, **Arya R**, Schneider J, Fowler SP, Almasy L, Abboud HE, Blangero J, Stern MP, Duggirala R. Genetics of liver function markers and their correlations with the metabolic syndrome-related phenotypes in Mexican Americans. (SA-PO665) 2005. *Diabetes*; vol. 53, S2, p. A278.
25. Farook VS, Puppala S, **Arya R**, Schneider J, Fowler S, Dyer TD, Cole SA, Almasy L, Blangero J, Stern MP, Duggirala R. Search for genetic variants in positional candidate genes on chromosome 7q21 for association with metabolic syndrome in Mexican Americans. 2006. *Diabetes*; vol. 55, S1, p. A256.
26. **Arya R**, Puppala S, Farook VS, Schneider J, Fowler S, Arar N, Almasy L, Blangero J, Abboud HE, Stern MP, Duggirala R. Genetic factors commonly influence chronic kidney disease and the metabolic syndrome phenotypes in Mexican Americans. 2006. *Diabetes*; vol. 55, S1, p. A176.
27. Puppala S, Duggirala R, Farook VS, Thameem F, Lehman D, Schneider J, Fowler S, Arar NH, **Arya R**, Almasy L, Blangero J, Stern M, Abboud HE. Strong evidence for linkage of albuminuria in the presence of genotype by diabetes interaction to a region on chromosome 5p in Mexican Americans. 2006. *Diabetes*; vol. 55, S1, p. A183
28. Jenkinson CP, Coletta DK, Schneider J, Hu SL, Dyer TD, **Arya R**, Almasy L, Blangero J, Stern MP, Duggirala R, DeFronzo RA. Identification of multiple genes contributing to type 2 diabetes and obesity related traits at chromosome 6q23 in Mexican Americans 2007 *Diabetes*; vol. 56, S1, p. A95.
29. Farook VS, Coletta DK, Schneider J, Puppala S, Hu SL, Sathyanarayana P, Dyer TD, **Arya R**, Blangero J, Duggirala R, Jenkinson CP, DeFronzo RA. Genome-wide scan for type 2 diabetes susceptibility genes in the Mexican Americans: The Veterans Administration Genetic Epidemiology Study (VAGES). 2007. *Diabetes*; vol. 56, S1, A303.
30. Duggirala R, Fowler SP, Schneider J, Puppala S, Farook VS, Hunt KJ, **Arya R**, Bradshaw B, Almasy L, Comuzzie AG, Lynch JL, Jenkinson CP, MacCluer JW, DeFronzo RA, Blangero J, Hale DE. The metabolic syndrome in Mexican American children: Preliminary findings from the San Antonio Family Assessment of Metabolic Risk Indicators in Youth (SAFARI) study. 2007, *Diabetes*; vol. 56, S1, A489.
31. Farook VS, Fowler SP, Schneider J, Puppala S, Hunt KJ, Bradshaw B, **Arya R**, Almasy L, Comuzzie AG, Jenkinson CP, MacCluer JW, Lynch JL, DeFronzo RA, Blangero J, Hale DE, Duggirala R. Complex genetic relationships among obesity phenotypes, resting energy expenditure, and physical fitness in Mexican American children. 2008. *Diabetes*; vol. 57, S1, p. A490
32. Puppala S, Fowler SP, Schneider J, Farook VS, Hunt KJ, Bradshaw B, Cersosimo E, **Arya R**, Almasy L, Comuzzie AG, Jenkinson CP, MacCluer JW, Lynch JL, DeFronzo RA, Blangero J, Hale DE, Duggirala R. Increased prevalence of type 2 diabetes related phenotypes and their genetic determinants in Mexican American children. 2008 *Diabetes*; vol. 57, S1.

33. Farook VS, Schneider J, Fowler SP, Puppala S, Mendoza C, Hunt KJ, Curran JE, **Arya R**, Almasy L, Comuzzie AG, Jenkinson CP, Lehman DM, DeFronzo RA, Blangero J, Hale DE, Duggirala R, Lynch JL. Increased prevalence of elevated hepatic ALT enzyme activity in obesity and related condition and its genetic determinants in Mexican American children. 2009. *Diabetes*; vol. 58, S1, p. A455.
34. Fowler SP, Diego VP, Puppala S, Schneider J, Farook VS, Lynch JL, Hunt KJ, Curran JE, **Arya R**, Lehman DM, Almasy L, Comuzzie AG, Jenkinson CP, Stern MP, DeFronzo RA, Blangero J, Duggirala R, Hale DE. Interaction between genotype and sedentary lifestyle influences obesity and insulin resistance measures in Mexican American children. 2009. *Diabetes*; vol. 58, S1, p. A308.
35. Puppala S, Schneider J, Fowler S, Farook VS, Cersosimo E, Lynch JL, **Arya R**, Almasy L, Comuzzie AG, Jenkinson CP, Lehman DM, DeFronzo R, Blangero J, Duggirala R, Hale DE. Increased occurrence of childhood obesity and its correlates and their genetic architecture in Mexican American children. 2009. *Diabetes*; vol. 58, S1, p. A1770.
36. Mummidi S, Reddivari L, Farook VS, Lopez-Alvarenga JC, **Arya R**, Puppala S, Fowler SP, Resendez RG, Curran JE, Lehman DM, Jenkinson CP, Lynch JL, DeFronzo RA, Blangero J, Hale, DE, Lopez-Alvarenga JC, Duggirala R, Vanamala J. Genetic determinants of serum carotenoid concentrations and their relationship with obesity and related traits in Mexican American children. Research Symposium, Aug 12, 2017, UTRGV School of Medicine, Edinburg, p. 27.
37. Akhtar F, Farook VS, **Arya R**, Mummidi S, Lopez-Alvarenga JC, Resendez RG, Blangero J, Camann DE, Challa S, Duggirala R. Early life exposure to environmental pollutants as assessed in deciduous teeth and cardio-metabolic risk in Mexican American children. Research Symposium, UTRGV School of Medicine, Edinburg, Aug 12, 2017, p. 74.
38. Lopez-Alvarenga JC, Mummidi S, Farook VS, **Arya R**, Puppala S, Diaz-Badillo A, Fowler SP, Resendez RG, Curran JE, Lehman DM, Jenkinson CP, Dodd GD, Diehl AK, Blangero J, Duggirala R. Identification of genetic variants under linkage peaks associated with gallbladder disease in Mexican Americans. Research Symposium, UTRGV School of Medicine, Edinburg, Aug 12, 2017, p. 85.
39. Mummidi S., Hernandez-Ruiz J, Farook V, Reddivari L, Diaz-Badillo A, Resendez R, Akhtar F, Curran JE, Jenkinson CP, **Arya R**, Lehman D, DeFronzo R, Hale, DE, Blangero J, Vanamala J, Lopez-Alvarenga JC, Duggirala R. Serum Carotenoids and Pediatric Adiposity Index Predict Insulin Sensitivity in Mexican American Children. Poster Session III, FSO-036. Research Symposium. UTRGV. Edinburg. Sep 15, 2018. p. 161.
40. Akhtar F, Hernandez Ruiz J, Liu Y-G, Resendez RG, Feliars D, Lim Jiyun, Diaz-Badillo A, **Arya R**, Jenkinson CP, Lopez Alvarenga JC, Duggirala R, Mummidi S. Role of RNA binding protein HuR in CCL2 allelic expression imbalance. Poster Session III, FSO-028. Research Symposium. UTRGV. Edinburg. Sep 15, 2018. p. 156-157.
41. Hernandez Ruiz J, Akhtar F, Resendez RG, Feliars D, Lim Jiyun, Diaz-Badillo A, **Arya R**, Jenkinson CP, Lopez Alvarenga JC, Duggirala R, Mummidi S. The disease modifying IL13 haplotype is associated with allelic expression imbalance. Oral Session 4, P001. Research Symposium. UTRGV. Edinburg. Sep 15, 2018. p. 47.
42. Diaz-Badillo A, Lopez-Alvarenga JC, Mummidi S, **Arya R**, Fowler SP, Jenkinson CP, Resendez RG, Hernandez-Ruiz J, Akhtar F, Dyer TD, Curran JE, Lehman DM, Lynch JL, DeFronzo RA, Hale DE, Mitchell BD, Blangero J, Duggirala R. Genetics of bone mass related phenotypes and their correlation with cardiometabolic traits in Mexican American children. Poster Session III, FSO-016. Research Symposium. UTRGV. Edinburg. Sep 15, 2018. p. 153.
43. Lopez-Alvarenga JC, Diaz-Badillo A, Totomoch-Serra A, **Arya R**, Mummidi S, Hernandez- Ruiz J,

- Akhtar F, Resendez RG, Jenkinson CP, Curran JE, Dyer TD, Lehman DM, Blangero J, Duggirala R. Sarcopenic obesity and its paradoxical association with cardiometabolic risk factors in Mexican Americans. Oral Session 5, FSO-017. UTRGV Research Symposium, UTRGV. Sep 15, 2018. p. 52.
44. Morales LD, Cromack DT, Tripathy D, Fourcaudot M, Kumar S, Joanne E. Curran JE, Carless M, Goring HHH, Hu SL, Lopez Alvarenga JC, Small K, Glastonbury C, Das SK, Langefeld C, Hanson R, Shueh, WC Norton L, **Arya R**, Mummidi S, Blangero J, DeFronzo RA, Duggirala R, Jenkinson CP. Further evidence supporting a potential role for ADH1B in obesity. *Diabetes* 2019; 68 (S1): 1770-P. <https://doi.org/10.2337/db19-1770-P>.
45. Lopez-Alvarenga JC, Chittoor G, Paul SF, **Arya R**, Puppala S, Farook VS, Fowler SP, Resendez RG, Diaz-Badillo A, Lehman DM, Mummidi S, Jenkinson CP, Lynch JL, DeFronzo RA, Blangero J, Hale DE, Duggirala R. Acanthosis Nigricans as a composite marker of cardiometabolic risk and its complex association with obesity and insulin resistance in Mexican American children. *Diabetes* 2019; 68(S1): <https://doi.org/10.2337/db19-2093-P>.
46. Mummidi S, Farook VS, Reddivari L, Hernandez-Ruiz J, Diaz-Badillo A, Fowler SP, Resendez RG, Akhtar F, Lehman DM, Jenkinson CP, **Arya R**, Lynch JL, DeFronzo RA, . Hale, DE, Blangero J, Lopez-Alvarenga JC, Duggirala R, Vanamala JK. Prediction of insulin sensitivity using serum carotenoid concentrations and pediatric metabolic index in Mexican American children. *Diabetes* 2019; 68(S1), <https://doi.org/10.2337/db19-1337P>.
47. Venkatesan V, Lopez-Alvarenga JC, **Arya R**, Koshy T, Umarani Ravichandran U, Sharma S, Lodha S, Ponnala AR, Sharma KK, Shaik MV, Resendez RG, Ramu D, Venugopal P, Parthasarathy R, Noelta S., Ezeilo JA, Bejar CA, Mummidi S, Natesan C, Blangero J, Medicherla KM, Thanikachalam S, Panchatcharam TS, Kumar DK, Gupta R, Sanghera, DK, Duggirala R, Solomon FP. Burden of type 2 diabetes and its genetic determinants in Indian populations: Findings from the INDIGENIUS Consortium." Presented at the ADA 79th Scientific Session. San Francisco, June 7-11, 2019. *Diabetes* 2019 Jun; 68 (S1):1717-P. <https://doi.org/10.2337/db19-1717-P>.
48. Koshy T, **Arya R**, Lopez-Alvarenga JC, Venkatesan V, Ravichandran U, Sharma S, Lodha S, Ponnala AR, Sharma KK, Shaik MV, Resendez RG, Ramu D, Venugopal P, Parthasarathy R, Noelta S, Ezeilo JA, Cynthia A. Bejar CA, Mummidi S, Natesan C, Blangero J, Medicherla KM, Thanikachalam S (SR), Panchatcharam TS, Kumar DK, Gupta R, Duggirala R, Sanghera DK, Solomon FP. Effect of educational status on fasting glucose and HbA1c concentrations independent of income and population differences in Indian populations. Presented at the ADA 79th Scientific Session. San Francisco, June 7- 11, 2019. *Diabetes* 2019 Jun; 68 (S1):1639-P. <https://doi.org/10.2337/db19-1639-P>.
49. Mummidi S\*, Farook\* VS, **Arya R**, Lopez-Alvarenga JC, Almeida M, Puppala S, Akhtar F, Fowler SP, Resendez RG, Kumar S, Curran JE, Lehman DM, Jenkinson CP, Dodd GD; Diehl DK\*\*, Blangero J, Duggirala R; \*equal contribution; Identification of potential functional genetic variants under linkage peaks associated with gallbladder disease in Mexican Americans. Research Symposium. School of Medicine, UTRGV. Edinburg/McAllen, TX. Sept 13 - 14, 2019.
50. Lopez-Alvarenga JC, **Arya R**, Mummidi S\*, Resendez RG, Fowler SP, Akhtar F, Diaz-Badillo A, Lehman DM, Lynch JL, Jenkinson CP, DeFronzo RA, Blangero J, Duggirala R. Obesity and insulin resistance predict liver dysfunction in Mexican American children. Research Symposium. School of Medicine, UTRGV. Edinburg/McAllen, TX. Sept 13 - 14, 2019.
51. Akhtar F, Hernandez Ruiz J, Liu Y-G, Resendez RG, Feliers D, Diaz-Badillo A, **Arya R**, Jenkinson CP, Lopez Alvarenga JC, Duggirala R, Mummidi S. RNA binding protein HuR regulates CCL2 allelic expression imbalance. Research Symposium. School of Medicine, UTRGV. Edinburg/McAllen, TX.

Sept 13 - 14, 2019.

**PRESENTATIONS: Regional, National, and International Scientific Conferences**

- 03/2023 Duggirala R, and the Public Health Genetics and Genomics Group (PHGGG), presented a talk titled "San Antonio Mexican American Family Studies: Genetics and Genomics of Complex Diseases." at CVRI-Michael E. DeBakey Institute Research Symposium, School of Medicine, Texas A&M University, Bryan, Texas
- 03/2023 Diaz-Badillo A, **Arya R**, Almeida M, Mummidi S, Lopez-Alvarenga JC, Akhtar F, Resendez RG, Farook V, Kumar S, Curran JE, Lehman DM, DeFronzo RA, Blangero J, Duggirala R, "Genetics of Birth Weight and Its Association with Adult Complex Diseases in Mexican Americans" poster presented August 2nd and 3rd, 2023 at CVRI-Michael E. DeBakey Institute Research Symposium, School of Medicine, Texas A&M University, Bryan, Texas
- 03/2023 Akhtar F, Ruiz JH, Liu Y-G, Resendez RG, Feliars D, Morales LD, Diaz-Badillo A, Lehman DM, **Arya R**, Lopez-Alvarenga JC, Blangero J, Duggirala R, and Mummidi S, Poster titled "Functional characterization of the disease-associated CCL2 rs1024611G-rs13900T haplotype: The role of the RNA-binding protein HuR" presented on August 2nd and 3rd, 2023 at CVRI-Michael E. DeBakey Institute Research Symposium, School of Medicine, Texas A&M Health University, Bryan, Texas
- 06/2023 Diaz-Badillo A, Mummidi S, **Arya R**, Lehman D, *Golla V Maria de Lourdes Muñoz ML, Duggirala R. The Epidemiological Burden of Dengue Fever in Mexico.* Presented at the World Applied Anthropology Conference (WAAC), May 31 - June 3, 2023, University of Kansas (KU), Lawrence, Kansas, USA
- 01/2023 **Arya R.** *Genetics of Biomarkers of Metabolic Dysfunction-Associated Fatty Liver Disease in Mexican Americans.* Presented at the 47<sup>th</sup> Annual Conference of the Indian Society of Human Genetics (ISHG) & International Symposium on "New Genetics and its Contributions to Human Health and Wealth" & The Golden Jubilee Celebrations of the Department of Human Genetics, Andhra University from 23<sup>rd</sup> – 25<sup>th</sup> January 2023, Visakhapatnam, India.
- 09/2019 **Arya R**, Diego VP, Mummidi S, Puppala S, Resendez RG, Fowler SP, Lehman DM, Lynch JL, Jenkinson CP, Lopez Alvarenga JC, DeFronzo RA, Blangero, and Duggirala R. *Biomarkers of nonalcoholic fatty liver disease (NAFLD) exhibit genotype-by-environment interaction effects on metabolic abnormalities in Mexican American children.* Presented at the Research Symposium. School of Medicine, UTRGV. Edinburg/McAllen, TX. Sept 13 - 14, 2019.
- 09/2019 Mummidi S\*, Farook\* VS, **Arya R**, Lopez-Alvarenga JC, Almeida M, Puppala S, Akhtar F, Fowler SP, Resendez RG, Kumar S, Curran JE, Lehman DM, Jenkinson CP, Dodd GD; Diehl DK\*\*, Blangero J, Duggirala R; \*equal contribution: *Identification of potential functional genetic variants under linkage peaks associated with gallbladder disease in Mexican Americans.* Research Symposium. School of Medicine, UTRGV. Edinburg/McAllen, TX. Sept 13 - 14, 2019. (Contributed poster presentation by Mummidi S)
- 09/2019 Lopez-Alvarenga JC, **Arya R**, Mummidi S\*, Resendez RG, Fowler SP, Akhtar F, Diaz-Badillo A, Lehman DM, Lynch JL, Jenkinson CP, DeFronzo RA, Blangero J, Duggirala R. *Obesity and insulin resistance predict liver dysfunction in Mexican*

*American children*. Research Symposium. School of Medicine, UTRGV. Edinburg/McAllen, TX. Sept 13 - 14, 2019. (Contributed poster presentation by Lopez-Alvarenga JC)

- 09/2019 Akhtar F, Hernandez Ruiz J, Liu Y-G, Resendez RG, Feliers D, Diaz-Badillo A, **Arya R**, Jenkinson CP, Lopez Alvarenga JC, Duggirala R, Mummidi S. *RNA binding protein HuR regulates CCL2 allelic expression imbalance*. Research Symposium. School of Medicine, UTRGV. Edinburg/McAllen, TX. Sept 13 - 14, 2019. (Contributed poster presentation by Akhtar F)
- 09/2019 Morales LD, Kumar S, Curran JE, Göring HHH, Hu SL, Lopez-Alvarenga JC, Small K, Glastonbury C, Das SK, Langefeld C, Hanson R, Hsueh WC, **Arya R**, Mummidi S, Blangero J, Duggirala R, Jenkinson CP. *Further Evidence Supporting A Potential Role for Alcohol Dehydrogenase 1b (ADH1b) In Obesity*. (Flash Talk Presentation by Morales LD).
- 09/2019 Lopez Alvarenga JC, **Arya R**, Mummidi S, Resendez RG, Fowler SP, Akhtar F, Diaz-Badillo A, Lehman DM, Lynch JL, Jenkinson CP, DeFronzo RA, Blangero J, Duggirala R. *Obesity and Insulin Resistance Predict Liver Dysfunction in Mexican American Children*. (Contributed poster presentation by Lopez-Alvarenga).
- 09/2019 Diaz-Badillo A, Lopez-Alvarenga JC, Totomoch-Serra A, Hernandez-Ruiz J, Akhtar F, Mummidi S, **Arya R**, Jenkinson CP, Comuzzie AG, Curran JE, Dyer TD, Lehman DM, Blangero J, Duggirala R. *Sarcopenic Obesity and Metabolic Risk in Mexican Americans: Paradoxical Role of Adiponectin*. (Poster Presentation by Lopez-Alvarenga JC).
- 09/2019 Lopez-Alvarenga JC, Ramirez-Pfeiffer C, Castillo-Ruiz O, Diaz-Badillo A, Garcia-Oropesa E, Hernandez-Ruiz J, Leal-Rodriguez L, Munguia-Cisneros CX, Nava-Gonzalez EJ, Perales-Torres AA, Perez-Navarro MM, Ramirez-Quintanilla LY, Rosas-Diaz M, Tejero-Barrera E, **Arya R**, Mummidi S, Duggirala R. *Relative Contributions of Obesity and Alcohol to Liver Abnormalities in Young University Students*. (Poster Presentation by Lopez-Alvarenga JC).
- 09/2019 Hernandez-Ruiz J, Lopez-Alvarenga JC, Garces MJ, Garibay-Nieto N, Villanueva-Ortega E, Queipo G, Resendez RG, **Arya R**, Mummidi S, Comuzzie AG, Jenkinson CP, Lehman DM, Lynch JL, Hale DE, DeFronzo RA, Blangero J, Duggirala R. *Different Obesity-Related Liver Function Profiles Exhibited by Mexican American and Mexican Children*. (Poster Presentation by Lopez-Alvarenga JC).
- 08/2017 **Arya R**, Puppala S, Lopez-Alvarenga JC, Mummidi S, Diaz-Badillo A, Fowler SP, Resendez RG, Curran JE, Lehman DM, Jenkinson CP, Bradshaw BS, DeFronzo RA, Blangero J, Duggirala R. *Evidence for common genetic loci for birth weight and adulthood cardio-metabolic traits in Mexican Americans*. Presented at The Research Symposium, School of Medicine, UTRGV, Edinburg, TX, Aug 12, 2017.
- 10/2016 **Arya R**, Puppala S, Fowler S, Mummidi S, Farook VS, Dyer TD, Almeida M, Peralta J, Resendez RG, Lopez-Alvarenga JC, Jenkinson CP, Comuzzie AG, Goring HHH, Mahaney M, Almasy L, Lehman DM, Curran JE, Duggirala R, Blangero J. *Genome-wide association analysis localizes a novel locus for abdominal obesity in Mexican Americans*. Presented at the Obesity Society meeting at ObesityWeek in New Orleans, October 31- November 4, 2016.

- 10/2015 **Arya R**, del Rincon I, Farook VS, Restrepo JF, Winnier DA, Fourcaudot MJ, Battafarano DF, Kumar S, de Almeida MAA, Curran JE, Jenkinson CP, Blangero J, Duggirala R, and Escalante. *Cumulative association of genetic variants with rheumatoid joint damage progression in Mexican Americans and European Americans*. This abstract has been presented at the American College of Rheumatology Meeting, November 6-11, 2015, San Francisco, CA.
- 11/2014 **Arya R**, del Rincon I, Farook VS, Restrepo JF, Winnier DA, Battafarano DF, Kumar S, De Almeida MAA, Curran JE, Jenkinson C, Blangero J, Duggirala R, Escalante A. *Genetic variants influencing joint damage in Mexican Americans and European Americans with rheumatoid arthritis, Presented at American College of Rheumatology (ACR/ARHP) Annual Meetings 2014, Session: Genetics, Genomics, and Proteomics II, November 14-19, Boston, MA.*
- 09/2012 **Arya R**, Fowler SP, Puppala S, Farook VS, Chittoor G, Resendez RG, Mummidi S, Vanamala J, Almasy L, Curran JE, Comuzzie AG, Lehman DM, Jenkinson, Lynch JL, DeFronzo RA, Blangero J, Hale DE, Duggirala R, and Diego VP. *Gene-by-physical activity interaction effects on cardiometabolic risk factors in Mexican American children*, Obesity 2012 30th Annual Scientific Meeting, Physical Activity Epidemiology, The Obesity Society, San Antonio, TX
- 06/2012 **Arya R**, Puppala S, Farook VS, Fowler SP, Schneider J, Curran JE, Almasy L, Comuzzie AG, Jenkinson CP, Lynch JL, Lehman DM, Ralph A. DeFronzo, Blangero J, Hale DE, Duggirala R. *The factor structure of the metabolic syndrome and its genetic basis in Mexican American children*, American Diabetes Association 72nd Scientific Sessions, 20-C Pediatrics -Type 2 Diabetes, American Diabetes Association, Philadelphia, PA
- 10/2009 **Arya R**, Puppala S, Farook VS, Fowler SP, Schneider J, Curran JE, Almasy L, Comuzzie AG, Jenkinson CP, Lynch JL, Lehman DM, Ralph A. DeFronzo, Blangero J, Hale DE, Duggirala R. *Genetic influences on childhood obesity, insulin resistance, and metabolic syndrome phenotypes in Mexican American children*, Obesity Society's 27th Annual Meeting, Population Studies, The Obesity Society, Washington, DC
- 09/2008 **Arya R**, Hare E., del Rincon I, Jenkinson CP, Duggirala R. *Effects of covariates and interactions on genome-wide association analysis (GWAA) of rheumatoid arthritis*, The Genetic Analysis Workshop 16 Meeting, Genetic-Environmental Interactions Group, The Genetic Analysis Workshop, St. Louis, MO.
- 06/2007 **Arya R**, Puppala S, Coletta DK, Schneider J, Hu SL, Farook VS, Sathyanarayana P, Dyer TD, Blangero J, Duggirala R. Defronzo RA, Jenkinson CP. *Search for susceptibility genes influencing pathophysiological measures of type 2 diabetes: The Veterans Administration Genetic Epidemiology Study (VAGES)*. American Diabetes Association 67th Annual Meeting, Genetics of Type 2 Diabetes, American Diabetes Association, Chicago, IL
- 06/2006 **Arya R**, Puppala S, Farook VS, Schneider J, Fowler S, Arar N, Almasy L, Blangero J, Abboud HE, Stern MP, Duggirala R. *Genetic factors commonly influence chronic kidney disease and the metabolic syndrome phenotypes in Mexican Americans*. the American Diabetes Association 66th Annual Meeting, Diabetes Complications, American Diabetes Association, Washington, DC

- 10/2005 **Arya R**, Fowler S, Schneider J, Puppala S, Farook V, Granato R, Jenkinson CP, Almasy L, Comuzzie AG, Bradshaw B, DeFronzo RA, MacCluer J, Stern MP, Blangero J, Duggirala R. *Complex genetic architecture of birth weight in Mexican Americans revealed by oligogenic linkage analysis*. The American Society of Human Genetics 55<sup>th</sup> Annual Meeting, 2005, Salt Lake City, UT.
- 06/2005 **Arya R**, Fowler S, Schneider J, Puppala S, Farook V, Granato R, Jenkinson CP, Almasy L, Comuzzie AG, Bradshaw B, DeFronzo RA, MacCluer J, Stern MP, Blangero J, Duggirala R. *Evidence for a major gene for birth weight in Mexican Americans*. The American Diabetes Association 65<sup>th</sup> Annual meeting, the American Diabetes Association, San Diego, CA
- 11/2004 **Arya R**, Schneider J, Puppala S, Fowler S, Dyer T, Jenkinson CP, Almasy L, Blangero J, Stern MP, Duggirala R. *Evidence for a major gene for abdominal obesity in Mexican Americans*, The North American Association for Study of Obesity (The NAASO), Genetics of obesity, The North American Association for Study of Obesity, Las Vegas, NE
- 10/2004 **Arya R**, Schneider J, Puppala S, Dyer T, Fowler S, Almasy L, Blangero J, Stern MP, Duggirala R. *A genome-wide scan for quantitative trait loci linked to waist circumference in Mexican Americans*. 54th Annual Meeting of The American Society of Human Genetics, The American Society of Human Genetics, Toronto, Canada.
- 09/2004 **Arya R**, Dyer T, Warren DM, Jenkinson CP, Duggirala R, Almasy L. *Effect of Genotype-by-alcoholism interaction on linkage analysis of an alcoholism-related quantitative phenotype*, The Genetic Analysis Workshop (GAW) 14, The University of Texas Health Science Center, Noordwijkerhout, Netherlands.
- 06/2004 **Arya R**, Bradshaw B, Jenkinson CJ, Schneider J, Fowler S, Puppala S, Almasy L, Comuzzie AG, MacCluer J, Defronzo RA, Blangero J, Stern MP, Duggirala R. *Genetic correlations between birth weight and the insulin resistance syndrome-related phenotypes in Mexican Americans*. The American Diabetes Association (ADA) 64th Scientific Sessions, Genetics of Type 2 Diabetes-Related Phenotypes, The American Diabetes Association (ADA), Orlando, FL
- 10/2003 **Arya R**, Williams K, Bhandari K, Lehman D, Fowler S, Almasy L, Blangero J, Hanna A, Stern MP Duggirala R. *Albuminuria as a component of metabolic syndrome in Mexican Americans*. North American Association for the Study of Obesity (NAASO). Annual Scientific Meeting, North American Association for the Study of Obesity (NAASO), Ft. Lauderdale, FL
- 06/2003 **Arya R**, Fowler S, Schneider J, Almasy L, O'Connell P, Blangero J, Stern MP, Duggirala R. *Evidence of a novel major locus for adiponectin levels on chromosome 3q in Mexican Americans*, 63<sup>rd</sup> American Diabetes Association Scientific Sessions, American Diabetes Association (ADA), New Orleans, LA
- 11/2002 **Arya R**, Lehman D, Kelly H, Schneider J, Almasy L, Blangero J, Stern MP, Duggirala R. *Evidence for bivariate linkage of obesity and HDL-C levels in the Framingham Heart Study*, Genetic Analysis Workshop 13, New Orleans, LA
- 06/2002 **Arya R**, Dodd GD, Fowler S, Lehman DM, Diehl AK, Blangero J, Stern MP,

Duggirala R. *Genetics of the clinical triad of type 2 diabetes, obesity, and gallbladder disease in Mexican Americans*, 62nd Scientific Sessions, American Diabetes Association, San Francisco, CA

- 10/2001 **Arya R**, Blangero J, Almasy L, O'Connell P, Stern MP, Duggirala RA. *Major locus for body mass index (BMI) on chromosome 4p in Mexican Americans*, North American Association for the Study of Obesity Annual Meeting, North American Association for the Study of Obesity, Quebec City, Canada
- 06/2001 **Arya R**, Bhandari K, Kawalit, I, Fowler S, Williams K, Pergola PE, Plaetke R, Almasy L, Blangero J, Abboud HE, Duggirala R. *Bivariate genetic analysis of albuminuria and obesity in Mexican Americans*, 61st Scientific Sessions, American Diabetes Association, Philadelphia, PA
- 10/2000 **Arya R**, Duggirala R, Williams JT, Almasy L, Blangero J. *Power to localize the major gene for disease liability is increased after accounting for the effects of related quantitative phenotypes*, Genetic Analysis Workshop 12, Genetic Analysis Workshop 12, San Antonio, TX
- 06/2000 **Arya R**, Williams K, O'Connell P, Blangero J, Stern MP, and Duggirala R. *Factors of insulin resistance syndrome (IRS)-related phenotypes are linked to genetic locations on chromosomes 6 and 7 in non-diabetic Mexican Americans*, The American Diabetes Association 60th Scientific Sessions, Genetics of Type 2 Diabetes, American Diabetes Association, San Antonio, TX
- 10/1999 **Arya R**, Duggirala R, Almasy L, Stern MP, O'Connell P, and Blangero J. *Strong evidence for linkage of high-density lipoprotein cholesterol concentrations to a genetic location on chromosome 9p in Mexican Americans*, 49<sup>th</sup> Annual Meeting Plenary Session, American Society of Human Genetics, San Francisco, CA

## RESEARCH GRANTS

### ACTIVE

#### **Baptist Health Foundation of San Antonio (UTHSA)**

Title: Identification of a marker and therapeutic target for pediatric obesity and diabetes

PI: Dong, LQ

Period: 12/15/20-12/14/25

Direct Costs: \$135,000

Indirect Costs: \$15,000

Total Costs: \$150,000

Role: Co-Investigator

Effort: 3%

Source: TAMUSA Research Council grant

Title: Gene by Lifestyle Interaction Effect on Childhood Obesity in Mexican American Children

Period: 5/1/2024 - 4/30/2025

Role: Principal Investigator

Source: Local Institutional Funding (PI: Duggirala R and Co-PI: Lehman DM)

Title: The Gut Microbiome, Host Genetics, and Type 2 Diabetes Risk in Mexican Americans: A Pilot Study

Period: 11-30-2023 to 12/31/2024

Role: Co-Investigator

**R01 MD012564**

NIH/NIMHD

Title: Identification of the Exposome in Fatty Liver Disease in Mexican American Families  
(PIs: Blangero, Clark (MPIs)

Using Genetic Correction.

Period: 04/27/218–11/30/22 (NCE)

Role: Co-Investigator

**U01 DK085524**

NIH/NIDDK

Title: Discovery of Functional Variants in Type 2 Diabetes Genes in Mexican Americans.

(PI [Contact]): Duggirala, R

Period: 04/01/15 – 04/30/2022 [2NCE]

Role: Co-Investigator

**PENDING Grants (Under review/To be submitted)**

**Submitted/Pending Review**

Source: NIH-RFA-AT-24-008 (Contact PI: Arya R and PIs: Reddivari L and Lynch JL)

Title: Impact of the complex interactions of carotenoids, gut microbiome, and their derived metabolites on cardiometabolic health in Mexican Americans

Period: 04-01-2025 to 03-31-2030

Role: Principal Investigator

Total Costs Requested: \$3,518,032

Role: PI (Contact)

Status: Submitted and Review Pending

Source: NIH-RFA-NR-24-006 (Contact PI: Duggirala R and PIs: Mummidi S and C Haynes Davison

Title: Determination of Epigenomic Signatures of Intersection of Social Inequities Affecting Cardiometabolic Health in Mexican Americans

Period: 04-01-2025 to 03-31-2030

Role: Co-Investigator

Total Costs Requested: \$3,657,032

Role: Co-Investigator

Status: Submitted and Review Pending

**To Be Revised and Resubmitted**

**1R01MD019681-01 (PAR-23-122)**

NIH/NIMHD

Title: Determinants of Metabolic Dysfunction-Associated Fatty Liver Disease in Mexican American Children and Adolescents: An Integrative Multi-Omic Approach.

PI: (Contact PI: **Arya R** and MPIS: Rayas Maria, Reddivari L)

Period: 07/01/2024 - 06/30/2029

Direct Costs: \$ 3,181,189

Indirect Costs: \$494,295

Total Costs: \$3,675,484

Role: PI

Status: To be resubmitted

**NIH/NIDDK R01 (RFA DK-21-025)**

Title: The role of the gut microbiome and its associated metabolome in early childhood obesity in Mexican Americans

Period: 12/01/2022 - 11/30/2027

Direct Costs: \$1,473,834

Indirect Costs: \$731,441

Total Costs: \$3,707,603 (2,205,275 + 1,502,326 [Sub])

Role: Principal Investigator (Contact)

PI: (Contact PI: **Arya R** and MPIs: Mummidi S, Lynch, JL, Reddivari L)

Status: To be resubmitted

**NIH R01 EY034356-01**

Title: Genetic and Functional Evaluation of Diabetic Retinopathy: an Indo-US Collaboration

Period: 7/1/2022 – 6/30/2025

Direct Costs: \$204,000

Indirect Costs: \$97,920

Total Costs: \$301,920

Role: Co-Investigator

Principal Investigators: Dharambir [contact], Duggirala, MPI

Status: To be resubmitted

**U01 RFA-DK-21-002**

NIH/NIDDK

Title: Determination of the Risk Factors Contributing to the Development of Type 2 Diabetes in Mexican Americans.

Period: 12/01/2022 – 11/30/2027

Direct Costs: \$1,942,565

Indirect Costs: \$944,430

Total Costs: \$3,730,928 (2,886,995 +843,933 [Sub])

Role: Co-Investigator

Principal Investigator (PI): (Contact PI: Duggirala and MPI: Lynch JL)

Status: To be resubmitted

**R01 DK117351**

NIH/NIDDK

Title: OMIC Signatures of Metabolic Dysfunction-Associated Fatty Liver Disease in Mexican Americans.

Principal Investigator (Contact): **R. Arya** and MPI: GD. Clarke)

Period: 04/01/22 – 03/31/27

Direct Costs: \$1,500,106

Indirect Costs: \$768,050

Total Costs: \$3,737,414 (2,268,156 +1,469,258 [Sub])

Role: PI (Contact)

Status: To be resubmitted

**R01 DK127016**

NIH/NIDDK

Title: Increased burden of obesity and type 2 diabetes in Mexican Americans of rural colonias of the Lower Rio Grande Valley: the role of environmental stressors, genetic, and epigenetic factors.

PI: (Contact PI: **R. Arya** and MPI: S. Mummidi)

Grant period: 09/01/2020 - 08/31/2025

Direct Costs: \$2,342,598

Indirect Costs: \$1,063,213  
Total Costs: \$3,505,939 (3,405,811 + 100,128 [Sub])  
Role: Principal Investigator (Contact)  
Status: To be resubmitted

**R01 MD014995-01A1**

NIH/NIMHD

Title: Effects of Mixed Carotenoid Supplementation on Gut Microbiome and Dysmetabolic Obesity in Mexican American Youth: A Randomized Controlled Trial

Period: 07-01-2020 to 06-30-2025

Direct Costs: \$2,048,217

Indirect Costs: \$950,493

Total Costs: \$3656,319 (2,998,710 + 657,609 [Sub])

Role: PI (Contact)

PI: Contact PI: **R. Arya** and MPIs: S. Mummidi, H.H.H. Goring, A. Canas)

Status: To be revised for resubmission

**NIH R01 (PAS-21-031)**

Title: Metabolic signatures of T2D risk in HIV-1 Infected Mexican Americans on Antiretroviral Therapy

Period: 04/01/2022-03/31/2027

UTRGV Direct Costs: \$1,557,277

Subcontract Direct Costs: \$1,145,536

UTRGV Indirect costs: \$759,495

Total costs: \$3,462,308.00 (2,316,772.00 + 1,145,536.00 [Sub])

Role: Co-Investigator

Principal Investigator (PI): (Contact PI: S. Mummidi and MPIs: D. Martinez, R. Duggirala, and H.H.H. Goring)

Status: To be resubmitted

**R01 AG068851**

NIH/NIA

Title: Age-Related Microbial Signatures for Diabetes Risk in Mexican Americans

Period: 07-01-2020 to 06-30-2025

Direct Costs: \$1,905,164

Indirect Costs: \$885,689

Total costs: \$3,681,769 (2,790,853 + 890,916 [Sub])

Role: Co-Investigator

PI: (PI: R. Duggirala (contact) and MPIs: J. Blangero and H. Yadav)

Status: To be resubmitted.

**CPRIT**

Title: Defining TC-PTP-mediated mechanisms in the prevention of environmental skin cancer

Period: 03/01/2022-02/28/2025

Direct Costs: \$ 33,576.00

Indirect Costs: \$35,343

Total Costs: \$68,919

Role: Co-Investigator

Principal Investigator: (PI: Kim)

Status: To be resubmitted

**PAST**

**R21 DK105913** (Duggirala, PI)

NIH/NIDDK

Title: Genetics of Type 2 Diabetes in Indian Populations: US-India Collaboration Project  
The major objective of this study was to establish a Collaborative Research Partnership (CRP) between two US institutions and three Indian institutions to evaluate genetic determinants of type 2 diabetes (T2D) among four Endogamous Ethnic Groups (EEGs) using pedigree-based data sets from North and South Indian states.

Period: 04/08/16 – 03/31/18

Role: Co-Investigator

**R01HD037151-06A** (PI: Escalante)

NIH/NICHD

Title: The Disablement Process in Rheumatoid Arthritis

Inflammation damages the joints of rheumatoid arthritis (RA) patients. They experience pain, loss of motion, physical disability and a shortened lifespan. Despite estimates suggesting Mexican Americans (MA) may be more susceptible to RA compared to other U.S. ethnic groups, little is known about the clinical expression or outcome in RA in MA. Our goals are to identify optimal points for intervention to retard disablement in RA, and to understand the mechanisms of ethnic disparities.

Period: 08/2008 - 07/2012

Role: Co-Investigator

**R01HL085742** (PI: del Rincon)

NIH/NHLBI

Title: Effect of Chronic Inflammation on Atherosclerosis Outcomes in Rheumatoid Arthritis

The major goal of this research is to examine candidate genes for association with atherosclerosis and cardiovascular outcomes in rheumatoid arthritis.

Period: 03/2008 - 02/2016

Role: Co-Investigator

**R01 HD049051** (PI: Duggirala)

NIH/NICHD

Title: The metabolic syndrome in Mexican American children

The purpose of this project was to establish the precursors of the MS in Mexican American children. Given that family history of type 2 diabetes is an important factor associated with the MS risk, plans to establish the precursors of the MS in children could be greatly advanced by examining the children of previously established adult family-based cohorts such as ours that are enriched with prediabetic and diabetic individuals.

Period: 03/2005 - 02/2010

Role: Co-Investigator

**R01AG022-435** (PI: Jenkinson)

NIH

Title: Diabetes gene discovery at chromosome 6q23

The purpose of this project was to investigate the genetic basis of type 2 diabetes and obesity in Mexican Americans, focusing on locating and identifying a putative diabetes gene at chromosome 6q23.

Period: 03/2005 - 02/2010

Role: Co-Investigator

**GCRC-IC-019** (PI: Arya)

General Clinical Research Center (GCRC-VAH)

Title: Genetics of visceral adiposity in Mexican Americans

The purpose of this project was to conduct preliminary study by implementing the MRI protocol and to generate preliminary results for the major NIH grant application.

Period: 11/2003 - 10/2004

Role: Principal Investigator

#### **R01HD41111**

NIH/NICHH

Title: Genetics of birth weight in Mexican Americans

The goal of this project was to conduct a multidisciplinary study utilizing birth weight and its related adult phenotypic data, molecular genetic data, and statistical genetic techniques to examine the genetic determinants of birth weight and its associated adult disease phenotypes in Mexican American families.

Period: 09/2001 - 06/2006

Role: Co-Investigator

#### **R01DK47482**

NIH

Title: NIDDM susceptibility genes in Mexican Americans

The major goal of this project was to fine map a region on chromosome 10q linked to type 2 diabetes using single nucleotide polymorphisms to discover gene variants responsible for the linkage signal.

Period: 09/2000 - 08/2005

Role: Co-Investigator

#### **U01DK58026**

NIH

Title: Consortium Linkage Studies of Type 2 Diabetes

The goal of this project was to pool data from 15 genetic studies from 5 different countries in order to improve localization of susceptibility genes for type 2 diabetes.

Period: 08/1999 - 07/2005

Role: Co-Investigator

#### **R01DK53889**

NIH/NIDDK

Title: Genetics of gallbladder disease in Mexican Americans

The purpose of this project was to examine the genetic basis of gallbladder disease in Mexican Americans.

Period: 10/1998 - 09/2004

Role: Co-Investigator

#### **PRIVATE Grants:**

##### **American Heart Association Scientific Development Grant -National (AHASDG/NATL) 0730468N (PI: Arya)**

Title: Identification of genes influencing chronic kidney disease (CKD) in Mexican Americans

The purpose of this study is to identify pleiotropic genes influencing the association between the CKD phenotypes (Albuminuria and GFR) and MS phenotypes in Mexican Americans using multivariate linkage and association analyses.

Period: 01/2007 - 12/2010

Role: Principal Investigator

#### **STATE Grants:**

**Borderplex Obesity Diabetes Council 123047-08-B (PI: Arya)**

Title: Genetic determinants of Obesity/Abdominal Obesity (AO) and Related Phenotypes in the Rio Grande Valley (RGV) Population.

The purpose of this study was to recruit unrelated Mexican American subjects living in Rio Grande Valley area to obtain data on obesity/AO related phenotypes using the most reliable noninvasive and sophisticated MRI technique and examine the specific genetic determinants of AO in Mexican Americans.

Period: 01/2009 - 07/2010

Role: Principal Investigator

**EXTRAMURAL ACADEMIC SERVICES****SERVICE TO THE INSTITUTION:**

<b>Dates</b>	<b>Role Description</b>
05/2023-05/2024	Vice-Chair, Institutional Review Board, TAMU-SA
02/2021–01/2022	Vice-Chair, Institutional Review Board – Biomedical Panel
10/2020-10/2021	Member, Jean MacCluer and Bennett Dyke Endowed Lectureship for 2020-2021.
04/2016-present 09/2012-09/2015	Member, Institutional Review Board (Panel 2) UTRGV Alternate Member, Institutional Review Board, UTHSCSA
09/2014	Editorial Board Member, Frontiers of Nutrition and Research, Editorial Board
05/2014-05/2014	Poster Judge, School Pediatrics Research Day 2014 Judged Medical Student/Residents/Fellows Research Posters in an Annual Competition to select the best poster presentations.
04/2014-04/2014	Poster Judge, School Passport 2014 Judged Medical Student/Residents/Fellows research posters in an annual competition to select the best poster presentations.
11/2012-11/2012	Poster Judge, School Medical Student Research Day Judged medical student research posters in an annual competition to select the best poster presentations.

**SERVICE TO THE PROFESSION:****Abstract Reviewer for Professional Societies:**

02/2023-05/2023	Served as an abstract reviewer for the World Applied Anthropology Congress (WAAC), May 31-June 3, 2023, Kansas University, Lawrence, KS
05/2011-Present	Served as an abstract reviewer for The Obesity Society meetings.

**Grant Reviewer for Granting Agencies (National level):**

10/2010-10/2015	Reviewed grants for Commonwealth Pennsylvania Department of Health Formula Grant Final Performance Reviews, and Pennsylvania Department of Health Translational Genomics Peer Review
09/2016	Reviewer for Shota Rustaveli National Science Foundation Proposals 08/2016 Reviewer for The Collaborative Research Project (compatriots call) Award
01/2017 -	Reviewer for the Ralph E. Powe Junior Faculty Award
09/2019 -	Reviewer, Letters of Intent for the Early Career Research Grant and the WW Karen Miller-Kovach Research Grant, The Obesity Society.
07/2020	Served as a reviewer for the Pennsylvania Department of Health Formula Grants Final Performance Review 20-21 Cycle A.
11/2020	Served as a reviewer of research grants for the Florida Department of Health Biomedical Research Programs 20-21.

#### **Manuscript Reviewer for Scientific Journals:**

09/2004-Present	Diabetes, Diabetes Care, Diabetologia, Obesity, Obesity Research, American Journal of Human Genetics, Human Heredity, Human Biology, Human Genetics, Genetic Epidemiology, Annals of Human, Biology BMC Genetics, BMC Medical Genetics, International Journal of Tropical Disease and Health, Human Molecular Genetics, International Journal of Obesity, PLOS One, Scientific Reports, World Journal of Pediatrics, BMC Endocrine Disorders, Scandinavian Journal of Medicine and Science in Sports, Food Science & Nutrition, and Scientific Data, Frontiers in Genetics
-----------------	---

#### **Service on Scientific Committees:**

<b>Date</b>	<b>Committee</b>
05/2023-06/2023	Co-Chair, Program, Publications, and Proceedings Committee, World Applied Anthropology Conference (WAAC), May 31 - June 3, 2023 Kansas University, Lawrence, Kansas, USA
04/2018–04/2020	Member, The Obesity Society (TOS) – Scientific Research Committee
04/2015-03/2019	Member, Amp-T2D consortium phenotype harmonization working group
03/2010-03/2011	Member, Diversity Section of the Obesity Society, TOS
08/2008-01/2012	Member, Diversity Committee of the Obesity Society, TOS
09/1999-08/2004	Member, Analysis and Mapping Committee, Consortium Linkage Studies of Type 2 Diabetes

## **Educational Activities including Mentorship and Training:**

Trained and/or mentored the following students, postdocs and junior faculty in genetic epidemiological studies focusing on the statistical genetic data analysis using a variety of software and statistical packages individually and collectively together with other colleagues from STDOI.

- 09/2007- 08/2010      Participated in an Innovative Research and Development Training Program (RDTPG) from 2007 to 2010. The purpose of this program was to develop a group of researchers (MD and PhD), at the Edinburg- Regional Academic Health Center (E-RAHC) of UTHSCSA located in Edinburg, Texas, with special expertise in translational genetic research in the U.S. Latino population.
- 03/2008 - 08/2010      Served on Ph.D Thesis committee of Amitabh Sharma as an External Examiner for the evaluation of the Ph.D. thesis titled “In silico and Genetic Studies of Type 2 Diabetes Mellitus, with Special Emphasis on Protein-Protein Interactions” submitted to University of Pune, Ganeshkhind, Pune, India for the award of PhD degree in Biotechnology, 2009
- 05/2009 - 06/2010      Mentored a graduate student, Dr. Rohita Inturi, MS in Medical Laboratory Sciences, working on her research project, while serving on her supervising committee as an expert UTHSCSA faculty. Also, served as an expert UTHSCSA faculty member on Dr. Rohitha Inturi's Supervising Committee. My role was to mentor Dr. Inturi on her research project titled "Genetic and Environmental influences on growth, motor, cognitive behavioral and language development of premature infants.”

### **1. Undergraduate Students Mentored:**

Naba Asif, a pre-med student at UTRGV, 2016 - 2017

Umer Jalil, a pre-med student at UTRGV, 2016

Sunil Athyala, a pre-med student at UTRGV, 2016-2017

Continued to mentor SOM and UTRGV students: Sunil Athyala - A pre-med student at UTRGV, and Melissa Ku – Nursing student at UTRGV/(currently at UTHSA), 2018-2019

### **2. Graduate Students Mentored and Trained:**

Mentored Mr. Armando Totomoch-Serra, MD, a visiting Ph.D. student from CINVESTAV (Center for Research and Advanced Studies of the National Polytechnic Institute, which is a Mexican non-governmental scientific research institution), Mexico (Oct- Dec 2016).

Introduced him to statistical genetic analyses including genome-wide association analysis using PLINK along with other colleagues at STDOI.

Trained Alden, Sarah Dale, Graduate Student, Department of Anthropology, University of Kansas, Lawrence, KS, 2016

Swathi Balaji, MBBS, Graduate Research Assistant, School of Public Health, Brownsville, UTHealth, Houston, TX, 2018

### 3. Post-Doctoral Fellows and Research Associates Mentored:

I contributed as a faculty mentor to Alvaro Diaz-Badillo, Ph.D. Department of Human Genetics/STDOI, Edinburg, TX, 2016-2018

I have mentored and guided Dr. Diaz-Badillo on two of his projects (i.e., SAFARI and SAMAFS) in terms of different genetic analyses using SOLAR and interpretation of results and in the preparation of poster presentations for the Research symposium 2018:

1) "Genetics of bone mass related phenotypes and their correlation with cardiometabolic traits in Mexican American children." Presented at the Research Symposium. UTRGV. Edinburg. Sep 15, 2018.

2) "Sarcopenic obesity and its paradoxical association with cardiometabolic risk factors in Mexican Americans." Presented at the Research Symposium, UTRGV. Sep 15, 2018. The related two manuscripts are being prepared for publication purpose.

Contributed as a faculty mentor to Feroz Akhtar, Ph.D. Research Associate II Department of Human Genetics/STDOI, Edinburg, TX, 2017 to present

I have been mentoring Dr. Akhtar ever since he started working on our tooth pilot study in terms of data analysis, interpretation of results, and manuscript preparation titled "Early Life Exposure to Environmental Pollutants as Assessed in Deciduous Teeth and Cardio-metabolic Risk in Mexican American Children". This manuscript has been prepared and getting ready for submission.

### 4. Junior Faculty and Staff Mentored:

I am a co-investigator on the US-India Bilateral Collaborative Research Partnership (CRP) study on Diabetes Research titled Genetics of type 2 diabetes in Indian populations: US-India collaboration project (PIs: Drs. Duggirala and Sanghera) from 2016 - present.

The major focus of this Collaborative Research Partnership (CRP) between two US and three Indian institutions was to evaluate genetic determinants of type 2 diabetes (T2D) using pedigree-based data sets from four distinct Endogamous Ethnic Groups (EEGs) representing the North and South Indian states. Indian EEGs are ideal to conduct genetic studies of complex diseases such as T2D, given their high levels of endogamy, large family structures, and a high degree of genetic differentiation among them reflecting the importance of local genetic histories.

I have been interacting with Indian investigators mainly junior faculty, Drs. Venkatesan and Koshy, the Sri Ramachandra University, Chennai, Tamil Nadu, India, regarding genetic data analyses that include T2D association analyses, and other statistical analyses of family data, and epidemiological and genetic profile comparisons among Indian populations and between Indian and the US populations. Two abstracts have been presented at the ADA 2019 meetings and currently working on the manuscripts.

Mihwa Kim, Ph.D. Assistant Professor, Department of Molecular Science, School of Medicine, UTRGV, Edinburg, TX, 2019. I mentored Dr. Kim, on a couple of projects relating to Identification of variants influencing cervical cancer in Hispanics. Following our recent meeting, I guided her to conduct association analysis using SNP data from

candidate genes implicated in cervical cancer causation and progression as part of her grant application.

### **Other Academic/Educational Activities:**

#### **5. Coordinator, Complex Disease Journal Club (CDJC) Presentations:**

As one of the coordinators of the CDJC, Department of Human Genetics and STDOI, School of Medicine, UTRGV since its inception in 2016, I have been actively involved in the CDJC activities. Interacting with graduate students, postdocs, and research faculty from various departments.

About 20-30 students and faculty members attend these seminars and have opportunities to present their research as well.

#### **6. Professional Training, Mentoring, Interviewing Experience:**

- a) Attended UTRGV Institutional Review Board (IRB) Training Retreat and involved in training sessions for new IRB members.
- b) Participated in the Equity and Diversity Advocate (EDA) training on May 14<sup>th</sup>, 2019.
- c) Served on School of Nursing (SON) Faculty Search Committee as an Equity and Diversity Advocate Member, interviewed candidates for two faculty positions (FRGV 0894 SON Faculty Clinical Coordinator).
- d) Interviewer for School of Medicine Admissions, UTRGV, for entry year of 2020.
- e) Attended a day-long webinar "2020 IRB VIRTUAL CONFERENCE - JULY 30, 2020", Thu, Jul 30, 2020, 9:30 AM - 8:00 PM CDT conducted by NWABR and its conference partners, the WIRB-Copernicus Group and Advarra including featured presentations by the Office for Human Research Protections (OHRP).

#### **7. Service (Internal and External) Activities for the Year 2023:**

I have served the institution and the scientific community in terms of the following professional, mentoring, moderating, reviewing, and interviewing activities in the academic year 2023.

##### **Internal Service Activities:**

- a) Vice-Chair, Institutional Review Board, TAMU-SA from May 2023 to April 2026
- b) Moderator, Student Research Symposium, held on April 21, 2023, at Texas A&M University - San Antonio.
- c) Co-organized the Obesity Awareness Event (Sponsored by the Office of Research and Health Sciences) on March 6, 2023, at Texas A&M University-San Antonio.
- d) Co-organized the American Diabetes Alert Day Distinguished Lecture (Sponsored by the Office of Research and Health Sciences, TAMUSA) on March 28, 2023, at Texas A&M University-San Antonio.

- e) Served on the Curriculum Committee for the new B.S. Degree in Community Health.
- f) Served as a search committee member for the R-059689 Associate or Full Professor in Community Health/Program Director position.

### **External Service Activities**

- a. Co-Chair, Plenary Session, the 47<sup>th</sup> Annual Conference of the Indian Society of Human Genetics (ISHG) & International Symposium on “New Genetics and its Contributions to Human Health and Wealth” & The Golden Jubilee Celebrations of the Department of Human Genetics, Andhra University from 23<sup>rd</sup> – 25<sup>th</sup> January 2023, Visakhapatnam, India.
- b. Served as an abstract reviewer for the World Applied Anthropology Conference (WAAC), May 31 - June 3, 2023, University of Kansas (KU), Lawrence, Kansas, USA
- c. Member, Organizing Committee, World Applied Anthropology Conference (WAAC), May 31 - June 3, 2023, University of Kansas (KU), Lawrence, Kansas, USA
- d. Member, Governing Council, Anthropological Association for Humankind (AAfH), Hyderabad, India
- e. Served as Co-Chair, Program, Proceedings, and Publication Committee, The World Applied Anthropology Conference (WAAC), May 31 - June 3, 2023, University of Kansas (KU), Lawrence, Kansas, USA.
- f. Manuscript Reviewer: I have reviewed three manuscripts for scientific journals: Scientific Reports, Pediatric Obesity, and World Journal of Pediatrics.
- g. Served as Judge, Poster Session, CVRI Research Symposium, August 1 - 3, 2023. Texas A&M University, College Station, Texas