

Michael C. Mahaney, Ph.D.

Professor

Department of Human Genetics
South Texas Diabetes and Obesity Institute
University of Texas Rio Grande Valley
School of Medicine

Contact Information

BCHGB 1.406
One University Drive,
Brownsville, Texas, 78520
Phone: 956-882-7492
Email: michael.mahaney@utrgv.edu

Education and Training

University of Alberta Edmonton, Canada	Posdoctoral Research Scientist	1984-87	Genetics, Medical Genetics
The Ohio State University Columbus, Ohio USA	Ph.D.	1984	Biological Anthropology <u>Dissertation:</u> “Development and Chronic Disease: Functional Adaptation in Cystic Fibrosis”
The Ohio State University Columbus, Ohio USA	M.A.	1979	Anthropology
The Ohio State University Columbus, Ohio USA	B.A.	1978	Physical Anthropology
Capital University Bexley, Ohio USA	ND	1972-74	History and Psychology

Research Focus

Dr. Mahaney has a broad educational background in genetics, human physiological and anatomical variation, and comparative primate biology and evolution, as well as 40 years of post-graduate research experience in quantitative biology and statistical genetics. His research since the late 1980s has focused on the genetics of complex traits related to human growth, development, aging and variation in susceptibility, severity, and progression of common diseases – especially cardiovascular disease and osteoporosis – in humans and nonhuman primates. A recurring interest has been identification and characterization of pleiotropic networks of disease risk factors, i.e., multiple traits affected by the same gene or set of genes.

More recent efforts have included participation in large studies of 1) the effects of a high cholesterol high fat diet, on atherosclerosis risk factors and cardiovascular disease endpoints in pedigree baboons; 2) genetic effects on cardiovascular risk factors in large Mexican American families in San Antonio, Texas; and 3) the effects of genes on co-variation between biomarkers of calcification and bone quality phenotypes in members of the Jirel population of eastern Nepal. 4) Also, Dr. Mahaney also has “kept his hand in” hominid evolutionary evolutionary biolog, collaborating with colleagues in biological anthropology in the quantitative genetics of developmental variation in the dentition and craniofacial complex of nonhuman primates.

Currently, Dr. Mahaney is the Coordinator of the Pilot Studies Program for the Rio Grande Valley Alzheimer’s Disease Resource Center for Minority Aging Research here at the UTRGV and member of the Research Education Core of the South Texas Alzheimer’s disease Research Center, a collaborative effort with the Glean Biggs Institute for Alzheimer’s & Neurodegenerative Diseases at UT Health San Antonio.

Research Foci (Current and Past)

Genetic Epidemiology:

Normal and pathological variation in complex phenotypes related to health and disease

<u>General Categories</u>	<u>Specific Examples</u>
Atherosclerosis and comorbidities	<ul style="list-style-type: none">• Metabolism and transport of lipoproteins and lipids• Oxidative stress and inflammation• Atherogenesis and arterial calcification• Arterial compliance
Age-related changes/diseases in bone (osteoporosis, osteoarthritis)	<ul style="list-style-type: none">• Bone mineral density• Bone quality (e.g., strength, elasticity, and stiffness)• Biomarkers of bone formation and turnover, and calcium metabolism
Craniofacial and dental variation and development	<ul style="list-style-type: none">• cranial/cephalometrics• odontometrics

- dental morphology

- Comparative genetics/genomics
 - Species
 - Humans
 - Nonhuman Primates
 - Baboons, Rhesus Macaques
 - Laboratory Opossum (*Monodelphis domestica*)

Publications

References to all of Dr. Mahaney's published peer reviewed research and review papers from 1983 through December 2024 can be found below. The majority of these and the references to newer peer reviewed papers can be found at the following link.

<https://www.ncbi.nlm.nih.gov/myncbi/1Psys5zF0xbUCp/bibliography/public/>

1. **Mahaney MC**, Sciulli PW. Hominid Pongid affinities: A multivariate analysis of hominoid odontometrics. *Curr Anthropol*. 1983; 24(3): 382-387.
2. **Mahaney MC**, Sciulli. On the classification of Homo: A reply to Marks. *Curr Anthropol* 1983; 25(1): 131-132.
3. Schneider KN, **Mahaney MC**, Sciulli PW. Comparative odontometrics of prehistoric Amerindians of Central and Eastern North America. *Anthropologie* 1984; 22(3): 217-221.
4. Sciulli PW, Schneider KN, **Mahaney MC**. Morphological variation in the permanent dentition of prehistoric Amerindians. *Anthropologie* 1984; 22(3): 211-216.
5. **Mahaney MC**, Sciulli PW, Schneider KN. Hominoid dental systematics: Multivariate analyses of allometrically correct odontometrics. *Anthropologie* 1984; 22(3): 203-210.
6. **Mahaney MC**. Meniere's disease. Evidence for genetic factors. *Bull Hered Dis Prog Alberta* 1985; 4(2): 7-8.
7. Sciulli PW, **Mahaney MC**. A model free comparative study of terminal late Archaic cranial variation in Ohio. *Toledo Area Aboriginal Res Soc Bull* 1985; 14: 1-19.
8. **Mahaney MC**, McCoy KS. Developmental delays and pulmonary disease severity in cystic fibrosis. *Hum Biol*. 1986, Jun;58(3):445-60.

9. **Mahaney MC.** Delayed dental development and pulmonary disease severity in children with cystic fibrosis. *Arch Oral Biol.* 1986;31(6):363-7.
10. Sciulli PW, **Mahaney MC.** Evidence of local biological continuity for an Ohio Hopewell Complex population. *Midcontinental J Archaeol* 1986; 11(2): 181-200.
11. **Mahaney MC.** Differentially delayed development in the hand-wrist skeletons of children with cystic fibrosis: Round vs. tubular bones. *Am J Hum Biol* 1991; 3(1): 17-24.
12. Berti PR, **Mahaney MC.** Quantifying the confidence interval of linear enamel hypoplasia chronologies. In: Recent Contributions to the Study of Enamel Developmental Defects. *J. Paleopathology Monographic Publications - 2*, AH Goodman & LL Capasso, editors. pp. 19-30; 1991.
13. Sciulli PW, Schneider KN, and **Mahaney MC.** Stature estimation in prehistoric Native Americans of Ohio. *Am J Phys Anthropol.* 1990, Nov;83(3):275-80.
14. **Mahaney MC**, Fujiwara TM, and Morgan K. Dental agenesis in the Dariusleut Hutterite Brethren: comparisons to selected Caucasoid population surveys. *Am J Phys Anthropol.* 1990, Jun; 82(2):165-77.
15. Sciulli PW and **Mahaney MC.** Phenotypic evolution in prehistoric Ohio Amerindians: natural selection versus random genetic drift in tooth size reduction. *Hum Biol.* 1991, Aug;63(4):499-511.
16. **Mahaney MC**, Leland MM, Williams-Blangero S, and Martinez YN. Cross-sectional growth standards for captive baboons: I. Organ weight by chronological age. *J Med Primatol.* 1993;22(7-8):400-14.
17. **Mahaney MC**, Leland MM, Williams-Blangero S, and Martinez YN. Cross-sectional growth standards for captive baboons: II. Organ weight by body weight. *J Med Primatol.* 1993;22(7-8): 415-27.
18. **Mahaney MC**, Williams-Blangero S, Blangero J, and Leland MM. Quantitative genetics of relative organ weight variation in captive baboons. *Hum Biol.* 1993, Dec;65(6):991-1003.
19. Blangero J, Williams-Blangero S, and **Mahaney MC.** Multivariate genetic analysis of apo AI concentration and HDL subfractions: evidence for major locus pleiotropy. *Genet Epidemiol.* 1993;10(6):617-22.
20. Comuzzie AG, Blangero J, **Mahaney MC**, Mitchell BD, Stern MP, and MacCluer JW. Genetic and environmental correlations among skinfold measures. *Int J Obes Relat Metab Disord.* 1994, Jun; 18(6):413-8.

21. **Mahaney MC**, Blangero J, Comuzzie AG, VandeBerg JL, Stern MP, and MacCluer JW. Plasma HDL cholesterol, triglycerides, and adiposity. A quantitative genetic test of the conjoint trait hypothesis in the San Antonio Family Heart Study. *Circulation*. 1995, Dec 1;92(11):3240-8.
22. **Mahaney MC**, Blangero J, Rainwater DL, Comuzzie AG, VandeBerg JL, Stern MP, et al. A major locus influencing plasma high-density lipoprotein cholesterol levels in the San Antonio Family Heart Study. Segregation and linkage analyses. *Arterioscler Thromb Vasc Biol*. 1995, Oct;15(10): 1730-9.
23. Comuzzie AG, Blangero J, **Mahaney MC**, Mitchell BD, Hixson JE, Samollow PB, et al. Major gene with sex-specific effects influences fat mass in Mexican Americans. *Genet Epidemiol*. 1995;12(5):475-88.
24. **Mahaney MC**, Jaquish CE, and Comuzzie AG. Statistical genetics of normal variation in family data for oligogenic diseases. *Genet Epidemiol*. 1995;12(6):783-7.
25. Berti PR, **Mahaney MC**. Conservative scoring and exclusion of the phenomenon of interest in linear enamel hypoplasia studies. *Am J Hum Biol*. 1995;7(3):313-320. doi: 10.1002/ajhb.1310070307. PMID: 28557035.
26. Comuzzie AG, Blangero J, **Mahaney MC**, Sharp RM, VandeBerg JL, Stern MP, and MacCluer JW. Triiodothyronine exerts a major pleiotropic effect on reverse cholesterol transport phenotypes. *Arterioscler Thromb Vasc Biol*. 1996, Feb;16(2):289-93.
27. Jaquish CE, **Mahaney MC**, Blangero J, Haffner SM, Stern MP, and MacCluer JW. Genetic correlations between lipoprotein phenotypes and indicators of sex hormone levels in Mexican Americans. *Atherosclerosis*. 1996, Apr 26;122(1):117-25.
28. Mitchell BD, Kammerer CM, **Mahaney MC**, Blangero J, Comuzzie AG, Atwood LD, et al. Genetic analysis of the IRS. Pleiotropic effects of genes influencing insulin levels on lipoprotein and obesity measures. *Arterioscler Thromb Vasc Biol*. 1996, Feb;16(2):281-8.
29. Comuzzie AG, Blangero J, **Mahaney MC**, Haffner SM, Mitchell BD, Stern MP, and MacCluer JW. Genetic and environmental correlations among hormone levels and measures of body fat accumulation and topography. *J Clin Endocrinol Metab*. 1996, Feb;81(2):597-600.
30. Blangero J, Williams-Blangero S, **Mahaney MC**, Comuzzie AG, Hixson JE, Samollow PB, Sharp RM, Stern MP, MacCluer JW. Effects of a major gene for apolipoprotein A-I concentration are thyroid hormone dependent in Mexican Americans. *Arterioscler Thromb Vasc Biol*. 1996, Sep;16(9):1177-83.

31. Mitchell BD, Kammerer CM, Blangero J, **Mahaney MC**, Rainwater DL, Dyke B, Hixson JE, Henkel RD, Sharp RM, Comuzzie AG, VandeBerg JL, Stern MP, MacCluer JW. Genetic and environmental contributions to cardiovascular risk factors in Mexican Americans. The San Antonio Family Heart Study. *Circulation*. 1996, Nov 1;94(9):2159-70.
32. Hubbard GB, **Mahaney MC**, Gleiser CA, Taylor DE, and VandeBerg JL. Spontaneous pathology of the gray short-tailed opossum (*Monodelphis domestica*). *Lab Anim Sci*. 1997, Feb;47(1):19-26.
33. Rogers J, **Mahaney MC**, Beamer WG, Donahue LR, and Rosen CJ. Beyond one gene-one disease: alternative strategies for deciphering genetic determinants of osteoporosis. *Calcif Tissue Int*. 1997, Mar;60(3):225-8.
34. Comuzzie AG, **Mahaney MC**, Almasy L, Dyer TD, and Blangero J. Exploiting pleiotropy to map genes for oligogenic phenotypes using extended pedigree data. *Genet Epidemiol*. 1997;14(6): 975-80.
35. Rainwater DL, Mitchell BD, **Mahaney MC**, and Haffner SM. Genetic relationship between measures of HDL phenotypes and insulin concentrations. *Arterioscler Thromb Vasc Biol*. 1997, Dec;17(12):3414-9.
36. Wang XL, **Mahaney MC**, Sim AS, Wang J, Wang J, Blangero J, Almasy L, Badenhop RB, Wilcken DE. Genetic contribution of the endothelial constitutive nitric oxide synthase gene to plasma nitric oxide levels. *Arterioscler Thromb Vasc Biol*. 1997, Nov;17(11):3147-53.
37. Rainwater DL, Comuzzie AG, VandeBerg JL, **Mahaney MC**, and Blangero J. Serum leptin levels are independently correlated with two measures of HDL. *Atherosclerosis*. 1997, Jul 25;132(2): 237-43.
38. Dyke B, and **Mahaney MC**. Statistical Modeling Approaches to Genetic Analysis. *ILAR J*. 1997;38(2):76-82.
39. Comuzzie AG, Rainwater DL, Blangero J, **Mahaney MC**, VandeBerg JL, and MacCluer JW. Shared and unique genetic effects among seven HDL phenotypes. *Arterioscler Thromb Vasc Biol*. 1997, May;17(5):859-64.
40. Comuzzie AG, Hixson JE, Almasy L, Mitchell BD, **Mahaney MC**, Dyer TD, Stern MP, MacCluer JW, Blangero J. A major quantitative trait locus determining serum leptin levels and fat mass is located on human chromosome 2. *Nat Genet*. 1997, Mar;15(3):273-6.
41. Czerwinski SA, **Mahaney MC**, Williams JT, Almasy L, and Blangero J. Genetic analysis of personality traits and alcoholism using a mixed discrete continuous trait variance component model. *Genet Epidemiol*. 1999;17 Suppl 1S121-6.

42. Edwards KL, **Mahaney MC**, Motulsky AG, and Austin MA. Pleiotropic genetic effects on LDL size, plasma triglyceride, and HDL cholesterol in families. *Arterioscler Thromb Vasc Biol.* 1999, Oct;19(10):2456-64.
43. Katzmarzyk PT, **Mahaney MC**, Blangero J, Quek JJ, and Malina RM. Potential effects of ethnicity in genetic and environmental sources of variability in the stature, mass, and body mass index of children. *Hum Biol.* 1999, Dec;71(6):977-87.
44. **Mahaney MC**, Blangero J, Rainwater DL, Mott GE, Comuzzie AG, MacCluer JW, and VandeBerg JL. Pleiotropy and genotype by diet interaction in a baboon model for atherosclerosis: a multivariate quantitative genetic analysis of HDL subfractions in two dietary environments. *Arterioscler Thromb Vasc Biol.* 1999, Apr;19(4):1134-41.
45. Rogers J, **Mahaney MC**, Almasy L, Comuzzie AG, and Blangero J. Quantitative trait linkage mapping in anthropology. *Am J Phys Anthropol.* 1999;Suppl 29127-51.
46. Almasy L, Hixson JE, Rainwater DL, Cole S, Williams JT, **Mahaney MC**, et al. Human pedigree-based quantitative-trait-locus mapping: localization of two genes influencing HDL-cholesterol metabolism. *Am J Hum Genet.* 1999, Jun;64(6):1686-93.
47. MacCluer JW, Stern MP, Almasy L, Atwood LA, Blangero J, Comuzzie AG, Dyke B, Haffner SM, Henkel RD, Hixson JE, Kammerer CM, **Mahaney MC**, Mitchell BD, Rainwater DL, Samollow PB, Sharp RM, VandeBerg JL, Williams JT. Genetics of atherosclerosis risk factors in Mexican Americans. *Nutr Rev.* 1999, May;57(5 Pt 2):S59-65.
48. Hixson JE, Almasy L, Cole S, Birnbaum S, Mitchell BD, **Mahaney MC**, et al. Normal variation in leptin levels in associated with polymorphisms in the proopiomelanocortin gene, POMC. *J Clin Endocrinol Metab.* 1999, Sep;84(9):3187-91.
49. **Mahaney MC**, Czerwinski SA, Adachi T, Wilcken DE, and Wang XL. Plasma levels of extracellular superoxide dismutase in an Australian population: genetic contribution to normal variation and correlations with plasma nitric oxide and apolipoprotein A-I levels. *Arterioscler Thromb Vasc Biol.* 2000, Mar;20(3):683-8.
50. Rogers J, **Mahaney MC**, Witte SM, Nair S, Newman D, Wedel S, et al. A genetic linkage map of the baboon (*Papio hamadryas*) genome based on human microsatellite polymorphisms. *Genomics.* 2000, Aug 1;67(3):237-47.
51. Kammerer CM, Cox LA, **Mahaney MC**, Rogers J, and Shade RE. Sodium-lithium countertransport activity is linked to chromosome 5 in baboons. *Hypertension.* 2001, Feb;37(2 Part 2):398-402.

52. Martin LJ, Blangero J, Rogers J, **Mahaney MC**, Hixson JE, Carey KD, et al. A quantitative trait locus influencing estrogen levels maps to a region homologous to human chromosome 20. *Physiol Genomics*. 2001, Mar 8;5(2):75-80.
53. Wang XL, and **Mahaney MC**. Genotype-specific effects of smoking on risk of CHD. *Lancet*. 2001, Jul 14;358(9276):87-8.
54. Arya R, Duggirala R, Almasy L, Rainwater DL, **Mahaney MC**, Cole S, Dyer TD, Williams K, Leach RJ, Hixson JE, MacCluer JW, O'Connell P, Stern MP, Blangero J. Linkage of high-density lipoprotein-cholesterol concentrations to a locus on chromosome 9p in Mexican Americans. *Nat Genet*. 2002 Jan;30(1):102-5. doi: 10.1038/ng810. Epub 2001 Dec 17. PMID: 11743583.
55. Martin LJ, Blangero J, Rogers J, **Mahaney MC**, Hixson JE, Carey KD, and Comuzzie AG. A quantitative trait locus influencing activin-to-estrogen ratio in pedigree baboons maps to a region homologous to human chromosome 19. *Hum Biol*. 2001, Dec;73(6):787-800.
56. Wang XL, Rainwater DL, VandeBerg JF, Mitchell BD, and **Mahaney MC**. Genetic contributions to plasma total antioxidant activity. *Arterioscler Thromb Vasc Biol*. 2001, Jul;21(7):1190-5.
57. Dyer TD, Blangero J, Williams JT, Göring HH, and **Mahaney MC**. The effect of pedigree complexity on quantitative trait linkage analysis. *Genet Epidemiol*. 2001;21 Suppl 1S236-43.
58. Martin LJ, **Mahaney MC**, Bronikowski AM, Dee Carey K, Dyke B, and Comuzzie AG. Lifespan in captive baboons is heritable. *Mech Ageing Dev*. 2002, Sep;123(11):1461-7.
59. Rainwater DL, Kammerer CM, Cox LA, Rogers J, Carey KD, Dyke B, **Mahaney MC**, McGill HC Jr, VandeBerg JL. A major gene influences variation in large HDL particles and their response to diet in baboons. *Atherosclerosis*. 2002, Aug;163(2):241-8.
60. Rainwater DL, Kammerer CM, Carey KD, Dyke B, VandeBerg JF, Shelledy WR, Moore PH Jr, **Mahaney MC**, McGill HC Jr, VandeBerg JL. Genetic determination of HDL variation and response to diet in baboons. *Atherosclerosis*. 2002, Apr; 161(2):335-43.
61. Martin LJ, **Mahaney MC**, Almasy L, MacCluer JW, Blangero J, Jaquish CE, and Comuzzie AG. Leptin's sexual dimorphism results from genotype by sex interactions mediated by testosterone. *Obes Res*. 2002, Jan;10(1):14-21.

62. Deng HW, **Mahaney MC**, Williams JT, Li J, Conway T, Davies KM, et al. Relevance of the genes for bone mass variation to susceptibility to osteoporotic fractures and its implications to gene search for complex human diseases. *Genet Epidemiol.* 2002, Jan;22(1):12-25.
63. Martin LJ, Cole SA, Hixson JE, **Mahaney MC**, Czerwinski SA, Almasy L, et al. Genotype by smoking interaction for leptin levels in the San Antonio Family Heart Study. *Genet Epidemiol.* 2002, Feb;22(2):105-15.
64. Kammerer CM, Rainwater DL, Cox LA, Schneider JL, **Mahaney MC**, Rogers J, and VandeBerg JL. Locus controlling LDL cholesterol response to dietary cholesterol is on baboon homologue of human chromosome 6. *Arterioscler Thromb Vasc Biol.* 2002, Oct 1;22(10):1720-5.
65. Hlusko LJ, Weiss KM, and **Mahaney MC**. Statistical genetic comparison of two techniques for assessing molar crown size in pedigreed baboons. *Am J Phys Anthropol.* 2002, Feb;117(2):182-9. 54.
66. Martin LJ, **Mahaney MC**, Almasy L, Hixson JE, Cole SA, MacCluer JW, et al. A quantitative trait locus on chromosome 22 for serum leptin levels adjusted for serum testosterone. *Obes Res.* 2002, Jul;10(7):602-7.
67. Arya R, Duggirala R, Almasy L, Rainwater DL, **Mahaney MC**, Cole S, et al. Linkage of high-density lipoprotein-cholesterol concentrations to a locus on chromosome 9p in Mexican Americans. *Nat Genet.* 2002, Jan;30(1):102-5.
68. Kammerer CM, Rainwater DL, Schneider JL, Cox LA, **Mahaney MC**, Rogers J, VandeBerg JF. Two loci affect angiotensin I-converting enzyme activity in baboons. *Hypertension.* 2003 Mar;41(3 Pt 2):854-9. doi: 10.1161/01.HYP.0000046280.16849.BF. Epub 2002 Dec 2. PMID: 12624008.
69. Rainwater DL, Kammerer CM, **Mahaney MC**, Rogers J, Cox LA, Schneider JL, and VandeBerg JL. Localization of genes that control LDL size fractions in baboons. *Atherosclerosis.* 2003, May; 168(1):15-22.
70. Hlusko LJ, and **Mahaney MC**. Genetic contributions to expression of the baboon cingular remnant. *Arch Oral Biol.* 2003, Sep;48(9):663-72.
71. Comuzzie AG, Cole SA, Martin L, Carey KD, **Mahaney MC**, Blangero J, and VandeBerg JL. The baboon as a nonhuman primate model for the study of the genetics of obesity. *Obes Res.* 2003, Jan;11(1):75-80.
72. Havill LM, Snider CL, Leland MM, Hubbard GB, Theriot SR, and **Mahaney MC**. Hematology and blood biochemistry in infant baboons (*Papio hamadryas*). *J Med Primatol.* 2003, Jun;32(3):131-8. 60.

73. Havill LM, **Mahaney MC**, Czerwinski SA, Carey KD, Rice K, and Rogers J. Bone mineral density reference standards in adult baboons (*Papio hamadryas*) by sex and age. *Bone*. 2003, Dec;33(6): 877-88.
74. Kammerer CM, Rainwater DL, Schneider JL, Cox LA, **Mahaney MC**, Rogers J, and VandeBerg JF. Two loci affect angiotensin I-converting enzyme activity in baboons. *Hypertension*. 2003, Mar; 41(3 Pt 2):854-9.
75. **Mahaney MC**, Almasy L, Rainwater DL, VandeBerg JL, Cole SA, Hixson JE, et al. A quantitative trait locus on chromosome 16q influences variation in plasma HDL-C levels in Mexican Americans. *Arterioscler Thromb Vasc Biol*. 2003, Feb 1;23(2):339-45.
76. Austin MA, Edwards KL, Monks SA, Koprowicz KM, Brunzell JD, Motulsky AG, Motulsky AG, **Mahaney MC**, Hixson JE. Genome- wide scan for quantitative trait loci influencing LDL size and plasma triglyceride in familial hypertriglyceridemia. *J Lipid Res*. 2003, Nov;44(11):2161-8.
77. Havill LM, and **Mahaney MC**. Pleiotropic effects on cardiovascular risk factors within and between the fourth and sixth decades of life: implications for genotype x age interactions. *BMC Genet*. 2003;4 Suppl 1S54.
78. Samollow PB, Perez G, Kammerer CM, Finegold D, Zwartjes PW, Havill LM, Comuzzie AG, **Mahaney MC**, Göring HH, Blangero J, Foley TP, Barmada MM. Genetic and environmental influences on thyroid hormone variation in Mexican Americans. *J Clin Endocrinol Metab*. 2004, Jul;89(7):3276-84.
79. Havill LM, **Mahaney MC**, and Rogers J. Genotype-by-sex and environment-by-sex interactions influence variation in serum levels of bone-specific alkaline phosphatase in adult baboons (*Papio hamadryas*). *Bone*. 2004, Jul;35(1):198-203.
80. Hlusko LJ, Suwa G, Kono RT, and **Mahaney MC**. Genetics and the evolution of primate enamel thickness: a baboon model. *Am J Phys Anthropol*. 2004, Jul;124(3):223-33.
81. Szabo CA, Leland MM, Sztomak L, Restrepo S, Haines R, **Mahaney M***, Williams JT. Scalp EEG for the diagnosis of epilepsy and photosensitivity in the baboon. *Am J Primatol* 2004; 62: 95-106. [error: "Mahaney A" in author list of published paper should be "Mahaney MC." Revised above to "M."]
82. Tejero ME, Proffitt JM, Cole SA, Freeland-Graves JH, Cai G, Peebles KW, Cox LA, **Mahaney MC**, Rogers J, Vandeberg JL, Blangero J, Comuzzie AG. Quantitative genetic analysis of glucose transporter 4 mRNA levels in baboon adipose. *Obes Res*. 2004, Oct; 12(10):1652-7.

83. Wang XL, Rainwater DL, Leone A, and **Mahaney MC**. Effects of diabetes on plasma nitrotyrosine levels. *Diabet Med.* 2004, Jun;21(6):577-80.
84. Rainwater DL, **Mahaney MC**, VandeBerg JL, Brush G, Almasy L, Blangero J, Dyke B, Hixson JE, Cole SA, MacCluer JW. A quantitative trait locus influences coordinated variation in measures of ApoB-containing lipoproteins. *Atherosclerosis.* 2004, Oct;176(2):379-86.
85. Czerwinski SA, **Mahaney MC**, Rainwater DL, Vandeberg JL, MacCluer JW, Stern MP, and Blangero J. Gene by smoking interaction: evidence for effects on low-density lipoprotein size and plasma levels of triglyceride and high-density lipoprotein cholesterol. *Hum Biol.* 2004, Dec;76(6): 863-76.
86. Frost PA, Hubbard GB, Dammann MJ, Snider CL, Moore CM, Hodara VL, Giavedoni LD, Rohwer R, **Mahaney MC**, Butler TM, Cummins LB, McDonald TJ, Nathanielsz PW, Schlabritz-Loutsevitch NE.. White monkey syndrome in infant baboons (Papio species). *J Med Primatol.* 2004, Aug;33(4):197-213.
87. Wang XL, Rainwater DL, **Mahaney MC**, and Stocker R. Cosupplementation with vitamin E and coenzyme Q10 reduces circulating markers of inflammation in baboons. *Am J Clin Nutr.* 2004, Sep; 80(3):649-55.
88. Hlusko LJ, Maas ML, and **Mahaney MC**. Statistical genetics of molar cusp patterning in pedigree baboons: implications for primate dental development and evolution. *J Exp Zool B Mol Dev Evol.* 2004, May 15;302(3):268-83.
89. Kent JW, Comuzzie AG, **Mahaney MC**, Almasy L, Rainwater DL, VandeBerg JL, et al. Intercellular adhesion molecule-1 concentration is genetically correlated with insulin resistance, obesity, and HDL concentration in Mexican Americans. *Diabetes.* 2004, Oct;53(10):2691-5.
90. Havill LM, Cox LA, Rogers J, and **Mahaney MC**. Cross-species replication of a serum osteocalcin quantitative trait locus on human chromosome 16q in pedigree baboons. *Calcif Tissue Int.* 2005, Oct;77(4):205-11.
91. Tejero ME, Cole SA, Cai G, Peebles KW, Freeland-Graves JH, Cox LA, **Mahaney MC**, Rogers J, VandeBerg JL, Blangero J, Comuzzie AG.. Genome-wide scan of resistin mRNA expression in omental adipose tissue of baboons. *Int J Obes (Lond).* 2005, Apr;29(4):406-12.
92. **Mahaney MC**, Brugnara C, Lease LR, and Platt OS. Genetic influences on peripheral blood cell counts: a study in baboons. *Blood.* 2005, Aug 15;106(4):1210-4.

93. Almasy L, Rainwater DL, Cole S, **Mahaney MC**, Vandeberg JL, Hixson JE, et al. Joint linkage and association analysis of the hepatic lipase promoter polymorphism and lipoprotein size phenotypes. *Hum Biol.* 2005, Feb;77(1):17-25.
94. Havill LM, Dyer TD, Richardson DK, **Mahaney MC**, and Blangero J. The quantitative trait linkage disequilibrium test: a more powerful alternative to the quantitative transmission disequilibrium test for use in the absence of population stratification. *BMC Genet.* 2005;6 Suppl 1S91.
95. Rainwater DL, **Mahaney MC**, Wang XL, Rogers J, Cox LA, and Vandeberg JL. Determinants of variation in serum paraoxonase enzyme activity in baboons. *J Lipid Res.* 2005, Jul;46(7):1450-6.
96. Curran JE, Jowett JB, Elliott KS, Gao Y, Gluschenko K, Wang J, Abel Azim DM, Cai G, **Mahaney MC**, Comuzzie AG, Dyer TD, Walder KR, Zimmet P, MacCluer JW, Collier GR, Kisseebah AH, Blangero J. Genetic variation in selenoprotein S influences inflammatory response. *Nat Genet.* 2005, Nov;37(11):1234-41.
97. Lease LR, Winnier DA, Williams JT, Dyer TD, Almasy L, and **Mahaney MC**. Mitochondrial genetic effects on latent class variables associated with susceptibility to alcoholism. *BMC Genet.* 2005;6 Suppl 1S158.
98. Havill LM, **Mahaney MC**, Cox LA, Morin PA, Joslyn G, and Rogers J. A quantitative trait locus for normal variation in forearm bone mineral density in pedigreed baboons maps to the ortholog of human chromosome 11q. *J Clin Endocrinol Metab.* 2005, Jun;90(6):3638-45.
99. Warren DM, Dyer TD, Peterson CP, **Mahaney MC**, Blangero J, and Almasy L. A comparison of univariate, bivariate, and trivariate whole-genome linkage screens of genetically correlated electrophysiological endophenotypes. *BMC Genet.* 2005;6 Suppl 1S117.
100. Kent JW, Lease LR, **Mahaney MC**, Dyer TD, Almasy L, and Blangero J. X chromosome effects and their interactions with mitochondrial effects. *BMC Genet.* 2005;6 Suppl 1S157.
101. Havill LM, Rogers J, Cox LA, and **Mahaney MC**. QTL with pleiotropic effects on serum levels of bone-specific alkaline phosphatase and osteocalcin maps to the baboon ortholog of human chromosome 6p23-21.3. *J Bone Miner Res.* 2006, Dec;21(12):1888-96.
102. Winnier DA, Rainwater DL, Cole SA, Dyer TD, Blangero J, MacCluer JW, and **Mahaney MC**. Multiple QTLs influence variation in paraoxonase 1 activity in Mexican Americans. *Hum Biol.* 2006, Jun;78(3):341-52.

103. Hlusko LJ, Lease LR, and **Mahaney MC**. Evolution of genetically correlated traits: tooth size and body size in baboons. *Am J Phys Anthropol.* 2006, Nov;131(3):420-7.
104. Cox LA, **Mahaney MC**, Vandeberg JL, and Rogers J. A second-generation genetic linkage map of the baboon (*Papio hamadryas*) genome. *Genomics.* 2006, Sep;88(3):274-81.
105. Havill LM, Hale LG, Newman DE, Witte SM, and **Mahaney MC**. Bone ALP and OC reference standards in adult baboons (*Papio hamadryas*) by sex and age. *J Med Primatol.* 2006, Apr;35(2): 97-105.
106. Diego VP, Rainwater DL, Wang XL, Cole SA, Curran JE, Johnson MP, Jowett JB, Dyer TD, Williams JT, Moses EK, Comuzzie AG, Maccluer JW, **Mahaney MC**, Blangero J. Genotype x adiposity interaction linkage analyses reveal a locus on chromosome 1 for lipoprotein-associated phospholipase A2, a marker of inflammation and oxidative stress. *Am J Hum Genet.* 2007 Jan;80(1):168-77. doi: 10.1086/510497. Epub 2006 Nov 16. PMID: 17160904; PMCID: PMC1785310.
107. Karasik D, Dupuis J, Cupples LA, Beck TJ, **Mahaney MC**, Havill LM, et al. Bivariate linkage study of proximal hip geometry and body size indices: the Framingham study. *Calcif Tissue Int.* 2007, Sep;81(3):162-73.
108. Winnier DA, Rainwater DL, Cole SA, Williams JT, Dyer TD, Blangero J, MacCluer JW, **Mahaney MC**. Sex-specific QTL effects on variation in paraoxonase 1 (PON1) activity in Mexican Americans. *Genet Epidemiol.* 2007, Jan;31(1):66-74.
109. Göring HH, Curran JE, Johnson MP, Dyer TD, Charlesworth J, Cole SA, Jowett JB, Abraham LJ, Rainwater DL, Comuzzie AG, **Mahaney MC**, Almasy L, MacCluer JW, Kisseebah AH, Collier GR, Moses EK, Blangero J. Discovery of expression QTLs using large-scale transcriptional profiling in human lymphocytes. *Nat Genet.* 2007, Oct;39(10):1208-16.
110. Hlusko LJ, and **Mahaney MC**. A multivariate comparison of dental variation in wild and captive populations of baboons (*Papio hamadryas*). *Arch Oral Biol.* 2007, Feb;52(2):195-200. 96.
111. Hlusko LJ, Do N, and **Mahaney MC**. Genetic correlations between mandibular molar cusp areas in baboons. *Am J Phys Anthropol.* 2007, Mar;132(3):445-54.
112. Diego VP, Rainwater DL, Wang XL, Cole SA, Curran JE, Johnson MP, Jowett JB, Dyer TD, Williams JT, Moses EK, Comuzzie AG, Maccluer JW, **Mahaney MC**, Blangero J. Genotype x adiposity interaction linkage analyses reveal a locus on chromosome 1 for lipoprotein-associated phospholipase A2, a marker of inflammation and oxidative stress. *Am J Hum Genet.* 2007, Jan; 80(1):168-77.

113. Cox LA, Birnbaum S, **Mahaney MC**, Rainwater DL, Williams JT, and VandeBerg JL. Identification of promoter variants in baboon endothelial lipase that regulate high-density lipoprotein cholesterol levels. *Circulation*. 2007, Sep 4;116(10):1185-95.
114. Bertin A, **Mahaney MC**, Cox LA, Rogers J, VandeBerg JL, Brugnara C, and Platt OS. Quantitative trait loci for peripheral blood cell counts: a study in baboons. *Mamm Genome*. 2007, May;18(5):361-72.
115. Havill LM, **Mahaney MC**, L Binkley T, and Specker BL. Effects of genes, sex, age, and activity on BMC, bone size, and areal and volumetric BMD. *J Bone Miner Res*. 2007, May;22(5):737-46. 101.
116. Rainwater DL, **Mahaney MC**, VandeBerg JL, and Wang XL. Vitamin E dietary supplementation significantly affects multiple risk factors for cardiovascular disease in baboons. *Am J Clin Nutr*. 2007, Sep;86(3):597-603.
117. Santamaría A, Diego VP, Almasy L, Rainwater DL, **Mahaney MC**, Comuzzie AG, et al. Quantitative trait locus on chromosome 12q14.1 influences variation in plasma plasminogen levels in the San Antonio Family Heart Study. *Hum Biol*. 2007, Oct;79(5):515-23.
118. Kent JW, **Mahaney MC**, Comuzzie AG, Göring HH, Almasy L, Dyer TD, et al. Quantitative trait locus on Chromosome 19 for circulating levels of intercellular adhesion molecule-1 in Mexican Americans. *Atherosclerosis*. 2007, Dec;195(2):367-73.
119. Tejero ME, Voruganti VS, Rodríguez-Sánchez IP, Proffitt JM, Blangero J, Cox LA, **Mahaney MC**, Rogers J, VandeBerg JL, Cole SA, Comuzzie AG. Genetics of variation in adiponectin in pedigree baboons: evidence for pleiotropic effects on adipocyte volume and serum adiponectin. *Heredity (Edinb)*. 2008, Apr;100(4):382-9.
120. Voruganti VS, Tejero ME, Proffitt JM, Cole SA, Cox LA, **Mahaney MC**, et al. Characterization of ghrelin in pedigree baboons: evidence for heritability and pleiotropy. *Obesity (Silver Spring)*. 2008, Apr;16(4):804-10.
121. Sherwood RJ, Duren DL, Havill LM, Rogers J, Cox LA, Towne B, and **Mahaney MC**. A genomewide linkage scan for quantitative trait loci influencing the craniofacial complex in baboons (*Papio hamadryas* spp.). *Genetics*. 2008, Sep;180(1):619-28.
122. Vinson A, **Mahaney MC**, Diego VP, Cox LA, Rogers J, VandeBerg JL, and Rainwater DL. Genotype-by-diet effects on co-variation in Lp-PLA2 activity and LDL-cholesterol concentration in baboons fed an atherogenic diet. *J Lipid Res*. 2008, Jun;49(6):1295-302.

123. Havill LM, Levine SM, Newman DE, and **Mahaney MC**. Osteopenia and osteoporosis in adult baboons (*Papio hamadryas*). *J Med Primatol*. 2008, Jun;37(3):146-53.
124. Tejero ME, Voruganti VS, Proffitt JM, Curran JE, Göring HH, Johnson MP, Dyer TD, Jowett JB, Collier GR, Moses EK, MacCluer JW, **Mahaney MC**, Blangero J, Comuzzie AG, Cole SA. Cross-species replication of a resistin mRNA QTL, but not QTLs for circulating levels of resistin, in human and baboon. *Heredity (Edinb)*. 2008, Jul;101(1):60-6.
125. Vinson A, **Mahaney MC**, Cox LA, Rogers J, VandeBerg JL, and Rainwater DL. A pleiotropic QTL on 2p influences serum Lp-PLA2 activity and LDL cholesterol concentration in a baboon model for the genetics of atherosclerosis risk factors. *Atherosclerosis*. 2008, Feb;196(2):667-73.
126. Hansen HL, Bredbenner TL, Nicolella DP, **Mahaney MC**, and Havill LM. Cross-sectional geometry of the femoral midshaft in baboons is heritable. *Bone*. 2009, Nov;45(5):892-7.
127. Havill LM, Allen MR, Bredbenner TL, Burr DB, Nicolella DP, Turner CH, Warren DM, **Mahaney MC**. Heritability of lumbar trabecular bone mechanical properties in baboons. *Bone*. 2010 Mar;46(3):835-40. doi: 10.1016/j.bone.2009.11.002. Epub 2009 Nov 10. PMID: 19900599; PMCID: PMC3005696.
128. Bose T, Voruganti VS, Tejero ME, Proffitt JM, Cox LA, VandeBerg JL, **Mahaney MC**, Rogers J, Freeland-Graves JH, Cole SA, Comuzzie AG. Quantitative loci regulating plasma levels of gamma glutamyl transferase and albumin and their genetic correlations with cardiovascular risk factors. *Exp Biol Med (Maywood)*. 2009, Dec;234(12):vi, 1519-24.
129. Doubleday AF, Kaestle FA, Cox LA, Birnbaum S, **Mahaney MC**, and Havill LM. LRP5 sequence and polymorphisms in the baboon. *J Med Primatol*. 2009, Apr;38(2):97-106.
130. Rainwater DL, Rutherford S, Dyer TD, Rainwater ED, Cole SA, Vandeberg JL, Almasy L, Blangero J, Maccluer JW, **Mahaney MC**. Determinants of variation in human serum paraoxonase activity. *Heredity (Edinb)*. 2009, Feb; 102(2):147-54.
131. Rainwater DL, Cox LA, Rogers J, VandeBerg JL, and **Mahaney MC**. Localization of multiple pleiotropic genes for lipoprotein metabolism in baboons. *J Lipid Res*. 2009, Jul;50(7):1420-8.
132. Hlusko LJ, and **Mahaney MC**. Quantitative Genetics, Pleiotropy, and Morphological Integration in the Dentition of *Papio hamadryas*. *Evol Biol*. 2009, Mar;36(1):5-18.

133. Bozaoglu K, Segal D, Shields KA, Cummings N, Curran JE, Comuzzie AG, **Mahaney MC**, Rainwater DL, VandeBerg JL, MacCluer JW, Collier G, Blangero J, Walder K, Jowett JB. Chemerin is associated with metabolic syndrome phenotypes in a Mexican-American population. *J Clin Endocrinol Metab*. 2009, Aug;94(8):3085-8.
134. Diego VP, Almasy L, Rainwater DL, **Mahaney MC**, Comuzzie AG, Cole SA, et al. A quantitative trait locus on chromosome 5p influences d-dimer levels in the san antonio family heart study. *Int J Vasc Med*. 2010;2010490241.
135. Chan J, **Mahaney MC**, Kushwaha RS, VandeBerg JF, and VandeBerg JL. ABCB4 mediates diet- induced hypercholesterolemia in laboratory opossums. *J Lipid Res*. 2010, Oct;51(10):2922-8.
136. Frazier-Bowers SA, Puranik CP, and **Mahaney MC**. The etiology of eruption disorders - further evidence of a 'genetic paradigm'. *Semin Orthod*. 2010, Sep 1;16(3):180-185.
137. Koh C, Bates E, Broughton E, Do NT, Fletcher Z, **Mahaney MC**, and Hlusko LJ. Genetic integration of molar cusp size variation in baboons. *Am J Phys Anthropol*. 2010, Jun;142(2): 246-60.
138. Rainwater DL, VandeBerg JL, and **Mahaney MC**. Effects of diet on genetic regulation of lipoprotein metabolism in baboons. *Atherosclerosis*. 2010, Dec;213(2):499-504.
139. Havill LM, Allen MR, Bredbenner TL, Burr DB, Nicolella DP, Turner CH, Warren DM, **Mahaney MC**. Heritability of lumbar trabecular bone mechanical properties in baboons. *Bone*. 2010, Mar;46(3):835-40.
140. Charlesworth JC, Curran JE, Johnson MP, Göring HH, Dyer TD, Diego VP, Kent JW Jr, **Mahaney MC**, Almasy L, MacCluer JW, Moses EK, Blangero J. Transcriptomic epidemiology of smoking: the effect of smoking on gene expression in lymphocytes. *BMC Med Genomics*. 2010;329.
141. Bose T, Voruganti VS, Tejero ME, Proffit JM, Cox LA, VandeBerg JL, **Mahaney MC**, Rogers J, Freeland-Graves JH, Cole SA, Comuzzie AG. Identification of a QTL for adipocyte volume and of shared genetic effects with aspartate aminotransferase. *Biochem Genet*. 2010, Jun;48(5-6):538-47.
142. Rainwater DL, Shi Q, **Mahaney MC**, Hodara V, Vandeberg JL, and Wang XL. Genetic regulation of endothelial inflammatory responses in baboons. *Arterioscler Thromb Vasc Biol*. 2010, Aug; 30(8):1628-33.
143. Sherwood RJ, Duren DL, **Mahaney MC**, Blangero J, Dyer TD, Cole SA, Czerwinski SA, Chumlea WC, Siervogel RM, Choh AC, Nahhas RW, Lee M, Towne

- B. A genome-wide linkage scan for quantitative trait loci influencing the craniofacial complex in humans (*Homo sapiens sapiens*). *Anat Rec (Hoboken)*. 2011, Apr;294(4):664-75.
144. Vinson A, Curran JE, Johnson MP, Dyer TD, Moses EK, Blangero J, Cox LA, Rogers J, Havill LM, Vandeberg JL, **Mahaney MC**. Genetical genomics of Th1 and Th2 immune response in a baboon model of atherosclerosis risk factors. *Atherosclerosis*. 2011, Aug;217(2):387-94.
145. Hlusko LJ, Sage RD, and **Mahaney MC**. Modularity in the mammalian dentition: mice and monkeys share a common dental genetic architecture. *J Exp Zool B Mol Dev Evol*. 2011, Jan 15;316(1):21-49.
146. Kent JW, Göring HH, Charlesworth JC, Drigalenko E, Diego VP, Curran JE, Johnson MP, Dyer TD, Cole SA, Jowett JB, **Mahaney MC**, Comuzzie AG, Almasy L, Moses EK, Blangero J, Williams-Blangero S. Genotypexage interaction in human transcriptional ageing. *Mech Ageing Dev*. 2012, Sep;133(9-10): 581-90.
147. Quillen EE, Rainwater DL, Dyer TD, Carless MA, Curran JE, Johnson MP, Göring HH, Cole SA, Rutherford S, Maccluer JW, Moses EK, Blangero J, Almasy L, **Mahaney MC**. Novel associations of nonstructural Loci with paraoxonase activity. *J Lipids*. 2012;2012189681.
148. Karere GM, Glenn JP, Birnbaum S, Rainwater DL, **Mahaney MC**, Vanderberg JL, and Cox LA. Identification of candidate genes encoding an LDL-C QTL in baboons. *J Lipid Res*. 2013, Apr 17; 133.
149. Weir JM, Wong G, Barlow CK, Greeve MA, Kowalczyk A, Almasy L, Comuzzie AG, **Mahaney MC**, Jowett JB, Shaw J, Curran JE, Blangero J, Meikle PJ. Plasma lipid profiling in a large population-based cohort. *J Lipid Res*. 2013, Oct;54(10):2898-908.
150. Meikle PJ, Wong G, Barlow CK, Weir JM, Greeve MA, MacIntosh GL, Almasy L, Comuzzie AG, **Mahaney MC**, Kowalczyk A, Haviv I, Grantham N, Magliano DJ, Jowett JB, Zimmet P, Curran JE, Blangero J, Shaw J. Plasma lipid profiling shows similar associations with prediabetes and type 2 diabetes. *PLoS One*. 2013;8(9):e74341.
151. Mamani M, Meikle PJ, Kulkarni H, Weir JM, Barlow CK, Jowett JB, Bellis C, Dyer TD, Almasy L, **Mahaney MC**, Duggirala R, Comuzzie AG, Blangero J, Curran JE. Plasma dihydroceramide species associate with waist circumference in Mexican American families. *Obesity (Silver Spring)*. 2013 Aug 8.
152. Melton PE, Carless MA, Curran JE, Dyer TD, Göring HH, Kent JW, Drigalenko E, Johnson MP, Maccluer JW, Moses EK, Comuzzie AG, **Mahaney MC**, O'Leary DH,

- Blangero J, Almasy L. Genetic architecture of carotid artery intima-media thickness in mexican americans. *Circ Cardiovasc Genet*. 2013, Apr 1;6(2):211-21.
153. Blackburn A, Göring HH, Dean A, Carless MA, Dyer T, Kumar S, Fowler S, Curran JE, Almasy L, **Mahaney MC**, Comuzzie A, Duggirala R, Blangero J, Lehman DM. Utilizing extended pedigree information for discovery and confirmation of copy number variable regions among Mexican Americans. *Eur J Hum Genet*. 2013, Apr;21(4):404-9.
154. Havill LM, Allen MR, Harris JA, Levine SM, Coan HB, **Mahaney MC**, and Nicolella DP. Intracortical bone remodeling variation shows strong genetic effects. *Calcif Tissue Int*. 2013, Nov; 93(5):472-80.
155. Mamtani M, Kulkarni H, Dyer TD, Almasy L, **Mahaney MC**, Duggirala R, et al. Correction: Waist Circumference Independently Associates with the Risk of Insulin Resistance and Type 2 Diabetes in Mexican American Families. *PLoS One*. 2013;8(11)
156. Cox LA, Comuzzie AG, Havill LM, Karere GM, Spradling KD, **Mahaney MC**, Nathanielsz PW, Nicolella DP, Shade RE, Voruganti S, VandeBerg JL. Baboons as a model to study genetics and epigenetics of human disease. *ILAR J*. 2013;54(2):106-21.
157. Mamtani M, Kulkarni H, Dyer TD, Almasy L, **Mahaney MC**, Duggirala R, et al. Waist circumference independently associates with the risk of insulin resistance and type 2 diabetes in mexican american families. *PLoS One*. 2013;8(3):e59153.
158. Farook VS, Coletta DK, Puppala S, Schneider J, Chittoor G, Hu SL, Winnier DA, Norton L, Dyer TD, Arya R, Cole SA, Carless M, Göring HH, Almasy L, **Mahaney MC**, Comuzzie AG, Curran JE, Blangero J, Duggirala R, Lehman DM, Jenkinson CP, DeFranzo RA. Linkage of type 2 diabetes on chromosome 9p24 in Mexican Americans: additional evidence from the Veterans Administration Genetic Epidemiology Study (VAGES). *Hum Hered*. 2013;76(1):36-46.
159. Kulkarni H, Meikle PJ, Mamtani M, Weir JM, Barlow CK, Jowett JB, Bellis C, Dyer TD, Johnson MP, Rainwater DL, Almasy L, **Mahaney MC**, Comuzzie AG, Blangero J, Curran JE. Variability in associations of phosphatidylcholine molecular species with metabolic syndrome in mexican- american families. *Lipids*. 2013, May;48(5):497-503.
160. Kulkarni H, Meikle PJ, Mamtani M, Weir JM, Barlow CK, Jowett JB, Bellis C, Dyer TD, Johnson MP, Rainwater DL, Almasy L, **Mahaney MC**, Comuzzie AG, Blangero J, Curran JE. Plasma lipidomic profile signature of hypertension in Mexican American families: specific role of diacylglycerols. *Hypertension*. 2013 Sep;62(3):621-6.

161. Voruganti VS, Kent JW, Debnath S, Cole SA, Haack K, Göring HH, Carless MA, Curran JE, Johnson MP, Almasy L, Dyer TD, Maccluer JW, Moses EK, Abboud HE, **Mahaney MC**, Blangero J, Comuzzie AG. Genome-wide association analysis confirms and extends the association of SLC2A9 with serum uric acid levels to Mexican Americans. *Front Genet.* 2013;4:279.
162. Carless MA, Kulkarni H, Kos MZ, Charlesworth J, Peralta JM, Göring HH, Curran JE, Almasy L, Dyer TD, Comuzzie AG, **Mahaney MC**, Blangero J. Genetic effects on DNA methylation and its potential relevance for obesity in Mexican Americans. *PLoS One.* 2013;8(9):e73950.
163. Mamtani M, Kulkarni H, Dyer TD, Almasy L, **Mahaney MC**, Duggirala R, Comuzzie AG, Blangero J, Curran JE. Waist circumference is genetically correlated with incident Type 2 diabetes in Mexican-American families. *Diabet Med.* 2014, Jan;31(1):31-5.
164. Kulkarni H, Meikle PJ, Mamtani M, Weir JM, Almeida M, Diego V, Peralta JM, Barlow CK, Bellis C, Dyer TD, Almasy L, **Mahaney MC**, Comuzzie AG, Göring HH, Curran JE, Blangero J. Plasma lipidome is independently associated with variability in metabolic syndrome in Mexican American families. *J Lipid Res.* 2014 May;55(5):939-46.
165. Mamtani M, Kulkarni H, Dyer TD, Almasy L, **Mahaney MC**, Duggirala R, Comuzzie AG, Samollow PB, Blangero J, Curran JE. Increased waist circumference is independently associated with hypothyroidism in Mexican Americans: replicative evidence from two large, population-based studies. *BMC Endocr Disord.* 2014 Jun 10;14:46.
166. Havill LM, Coan HB, **Mahaney MC**, Nicolella DP. Characterization of complex, co-adapted skeletal biomechanics phenotypes: a needed paradigm shift in the genetics of bone structure and function. *Curr Osteoporos Rep.* 2014 Jun;12(2):174-80.
167. Bellis C, Kulkarni H, Mamtani M, Kent JW Jr, Wong G, Weir JM, Barlow CK, Diego V, Almeida M, Dyer TD, Göring HH, Almasy L, **Mahaney MC**, Comuzzie AG, Williams-Blangero S, Meikle PJ, Blangero J, Curran JE. Human plasma lipidome is pleiotropically associated with cardiovascular risk factors and death. *Circ Cardiovasc Genet.* 2014 Dec;7(6):854-63.
168. Blackburn A, Almeida M, Dean A, Curran JE, Johnson MP, Moses EK, Abraham LJ, Carless MA, Dyer TD, Kumar S, Almasy L, **Mahaney MC**, Comuzzie A, Williams-Blangero S, Blangero J, Lehman DM, Göring HH. Effects of copy number variable regions on local gene expression in white blood cells of Mexican Americans. *Eur J Hum Genet.* 2015 Jan 14.

169. Johnson Z, Brent L, Alvarenga JC, Comuzzie AG, Shelldy W, Ramirez S, Cox L, **Mahaney MC**, Huang YY, Mann JJ, Kaplan JR, Rogers J. Genetic influences on response to novel objects and dimensions of personality in papio baboons. *Behav Genet.* 2015 Mar;45(2):215-27.
170. Williams KD, Blangero J, **Mahaney MC**, Subedi J, Jha B, Williams-Blangero S, Towne B. Axial quantitative ultrasound assessment of pediatric bone quality in eastern Nepal. *Osteoporos Int.* 2015 Apr 11. [Epub ahead of print]
171. Atkinson EG, Rogers J, **Mahaney MC**, Cox LA, Cheverud JM. Cortical Folding of the Primate Brain: An Interdisciplinary Examination of the Genetic Architecture, Modularity, and Evolvability of a Significant Neurological Trait in Pedigreed Baboons (Genus Papio). *Genetics.* 2015 Jun;200(2):651-65.
172. Kulkarni H, Kos MZ, Neary J, Dyer TD, Göring HH, Cole SA, Comuzzie AG, Almasy L, **Mahaney MC**, Curran JE, Blangero J, Carless MA. Novel epigenetic determinants of type 2 diabetes in mexican american families. *Hum Mol Genet.* 2015 Sep 15;24(18):5330-44.
173. Mamtani M, Kulkarni H, Dyer TD, Göring HH, Neary JL, Cole SA, Kent JW, Kumar S, Glahn DC, **Mahaney MC**, Comuzzie AG, Almasy L, Curran JE, Duggirala R, Blangero J, Carless MA. Genome- and epigenome-wide association study of hypertriglyceridemic waist in Mexican American families. *Clin Epigenetics.* 2016 Jan 20;8:6.
174. Kulkarni H, Mamtani M, Peralta J, Almeida M, Dyer TD, Goring HH, Johnson MP, Duggirala R, **Mahaney MC**, Olvera RL, Almasy L, Glahn DC, Williams-Blangero S, Curran JE, Blangero J. Soluble Forms of Intercellular and Vascular Cell Adhesion Molecules Independently Predict Progression to Type 2 Diabetes in Mexican American Families. *PLoS One.* 2016 Mar 23;11(3):e0151177.
175. Mamtani M, Kulkarni H, Wang G, Weir JM, Barlow CK, Dyer TD, Almasy L, **Mahaney MC**, Comuzzie AG, Glahn DC, Magliano DJ, Zimmet P, Shaw J, Williams-Blangero S, Duggirala R, Blangero J, Mielke PJ, Curran JE. Lipidomic Risk Score Independently and Cost-Effectively Predicts Risk of Future Type 2 Diabetes: Results from Diverse Cohorts. *Lipids in Health and Disease.* 15(1):67; doi: 10.1186/s12944-016-0234-3.
176. Chittoor G, Kent JW Jr, Almeida M, Puppala S, Farook VS, Cole SA, Haack K, Göring HH, MacCluer JW, Curran JE, Carless MA, Johnson MP, Moses EK, Almasy L, **Mahaney MC**, Lehman DM, Duggirala R, Comuzzie AG, Blangero J, Voruganti VS. GWAS and transcriptional analysis prioritize ITPR1 and CNTN4 for a serum uric acid 3p26 QTL in Mexican Americans. *BMC Genomics.* 2016 Apr 2;17(1):276. doi: 10.1186/s12864-016-2594-5.

177. Schlabritz-Loutsevitch NE, Comuzzie AG, **Mahaney M***, Hubbard GB, Dick EJ, Kocak M, Gupta S, Carrillo M, Schenone M, Postlethwaite A, Slominski A. Serum Vitamin D Concentrations in Baboons (*Papio* spp.) during Pregnancy and Obesity. *Comp Med.* 2016;66(2):137-42. [*error: “*Mahaney MM*” in author list in published paper should be “*Mahaney MC*.” Revised above to “*Mahaney M*”]
178. Hlusko LJ, Schmitt CA, Monson TA, Brasil MF, **Mahaney MC**. The integration of quantitative genetics, paleontology, and neontology reveals genetic underpinnings of primate dental evolution. *2016 Aug 16;113(33):9262-7.* doi: 10.1073/pnas.1605901113.
179. Kulkarni H, Mamtani M, Peralta JM, Diego V, Dyer TD, Goring H, Almasy L, **Mahaney MC**, Williams-Blangero S, Duggirala R, Curran JE, Blangero J. Lack of Association between SLC30A8 Variants and Type 2 Diabetes in Mexican American Families. *J Diabetes Res.* 2016;2016:6463214.
180. Hlusko LJ, Schmitt CA, Monson TA, Brasil MF, **Mahaney MC**. The integration of quantitative genetics, paleontology, and neontology reveals genetic underpinnings of primate dental evolution. *Proc Natl Acad Sci U S A.* 2016 Aug 16;113(33):9262-7. doi: 10.1073/pnas.1605901113. Epub 2016 Jul 11.
181. Kulkarni H, Mamtani M, Wong G, Weir JM, Barlow CK, Dyer TD, Almasy L, **Mahaney MC**, Comuzzie AG, Duggirala R, Meikle PJ, Blangero J, Curran JE. Genetic correlation of the plasma lipidome with type 2 diabetes, prediabetes and insulin resistance in Mexican American families. *BMC Genet.* 2017 May 19;18(1):48.
182. Lake NJ, Taylor RL, Trahair H, Harikrishnan KN, Curran JE, Almeida M, Kulkarni H, Mukhamedova N, Hoang A, Low H, Murphy AJ, Johnson MP, Dyer TD, **Mahaney MC**, Göring HHH, Moses EK, Sviridov D, Blangero J, Jowett JBM, Bozaoglu K. TRAK2, a novel regulator of ABCA1 expression, cholesterol efflux and HDL biogenesis. *Eur Heart J.* 2017 Dec 21;38(48):3579-3587.
183. **Mahaney MC**, Karere GM, Rainwater DL, Voruganti VS, Dick EJ Jr, Owston MA, Rice KS, Cox LA, Comuzzie AG, VandeBerg JL. Diet-induced early-stage atherosclerosis in baboons: Lipoproteins, atherogenesis, and arterial compliance. *J Med Primatol.* 2018 Feb;47(1):3-17.
184. Joganic JL, Willmore KE, Richtsmeier JT, Weiss KM, **Mahaney MC**, Rogers J, Cheverud JM. Additive genetic variation in the craniofacial skeleton of baboons (genus *Papio*) and its relationship to body and cranial size. *Am J Phys Anthropol.* 2018 Feb;165(2):269-285.
185. Zekavat SM, Ruotsalainen S, Handsaker RE, Alver M, Bloom J, Poterba T, Seed C, Ernst J, Chaffin M, Engreitz J, Peloso GM, Manichaikul A, Yang C, Ryan KA, Fu M, Johnson WC, Tsai M, Budoff M, Vasan RS, Cupples LA, Rotter JI, Rich SS, Post W, Mitchell BD, Correa A, Metspalu A, Wilson JG, Salomaa V, Kellis M, Daly MJ,

- Neale BM, McCarroll S, Surakka I, Esko T, Ganna A, Ripatti S, Kathiresan S, Natarajan P; NHLBI TOPMed Lipids Working Group [...**Mahaney MC**]. Deep coverage whole genome sequences and plasma lipoprotein(a) in individuals of European and African ancestries. *Nat Commun.* 2018 Jul 4;9(1):2606. Erratum in: *Nat Commun.* 2018 Aug 23;9(1):3493.
186. Knowles EEM, Curran JE, Meikle PJ, Huynh K, Mathias SR, Göring HHH, VandeBerg JL, **Mahaney MC**, Jalbrzikowski M, Mosior MK, Michael LF, Olvera RL, Duggirala R, Almasy L, Glahn DC, Blangero J. Disentangling the genetic overlap between cholesterol and suicide risk. *Neuropsychopharmacology.* 2018 Dec;43(13):2556-2563.
187. Natarajan P, Peloso GM, Zekavat SM, Montasser M, Ganna A, Chaffin M, Khera AV, Zhou W, Bloom JM, Engreitz JM, Ernst J, O'Connell JR, Ruotsalainen SE, Alver M, Manichaikul A, Johnson WC, Perry JA, Poterba T, Seed C, Surakka IL, Esko T, Ripatti S, Salomaa V, Correa A, Vasan RS, Kellis M, Neale BM, Lander ES, Abecasis G, Mitchell B, Rich SS, Wilson JG, Cupples LA, Rotter JI, Willer CJ, Kathiresan S; NHLBI TOPMed Lipids Working Group [...**Mahaney MC**]. Deep-coverage whole genome sequences and blood lipids among 16,324 individuals. *Nat Commun.* 2018 Aug 23;9(1):3391.
188. Bao EL, Lareau CA, Brugnara C, Fulcher IR, Barau C, Moutereau S, Habibi A, Badaoui B, Berkenou J, Bartolucci P, Galactéros F, Platt OS, **Mahaney M**, Sankaran VG. Heritability of fetal hemoglobin, white cell count, and other clinical traits from a sickle cell disease family cohort. *Am J Hematol.* 2019 May;94(5):522-527.
189. Misra BB, Puppala SR, Comuzzie AG, **Mahaney MC**, VandeBerg JL, Olivier M, Cox LA. Analysis of serum changes in response to a high fat high cholesterol diet challenge reveals metabolic biomarkers of atherosclerosis. *PLoS One.* 2019 Apr 5;14(4):e0214487.
190. Blackburn NB, Michael LF, Meikle PJ, Peralta JM, Mosior M, McAahren S, Bui HH, Bellinger MA, Giles C, Kumar S, Leandro AC, Almeida M, Weir JM, **Mahaney MC**, Dyer TD, Almasy L, VandeBerg JL, Williams-Blangero S, Glahn DC, Duggirala R, Kowala M, Blangero J, Curran JE. Rare DEGS1 variant significantly alters de novo ceramide synthesis pathway. *J Lipid Res.* 2019 Sep;60(9):1630-1639. doi: 10.1194/jlr.P094433.
191. Kachroo P, Hecker J, Chawes BL, Ahluwalia TS, Cho MH, Qiao D, Kelly RS, Chu SH, Virkud YV, Huang M, Barnes KC, Burchard EG, Eng C, Hu D, Celedón JC, Daya M, Levin AM, Gui H, Williams LK, Forno E, Mak ACY, Avila L, Soto-Quiros ME, Cloutier MM, Acosta-Pérez E, Canino G, Bønnelykke K, Bisgaard H, Raby BA, Lange C, Weiss ST, Lasky-Su JA; National Heart, Lung, and Blood Institute Trans-Omics for Precision Medicine (TOPMed) Consortium [...**Mahaney MC**]. Whole

Genome Sequencing Identifies CRISPLD2 as a Lung Function Gene in Children with Asthma. *Chest*. 2019 Dec;156(6):1068-1079.

192. Karere GM, **Mahaney MC**, Newman DE, Riojas AM, Christensen C, Birnbaum S, VandeBerg JL, Cox L. Diet-induced leukocyte telomere shortening in a baboon model for early stage atherosclerosis. *Sci Rep*. 2019 Dec 12;9(1):19001.
193. Li X, Li Z, Zhou H, Gaynor SM, Liu Y, Chen H, Sun R, Dey R, Arnett DK, Aslibekyan S, Ballantyne CM, Bielak LF, Blangero J, Boerwinkle E, Bowden DW, Broome JG, Conomos MP, Correa A, Cupples LA, Curran JE, Freedman BI, Guo X, Hindy G, Irvin MR, Kardia SLR, Kathiresan S, Khan AT, Kooperberg CL, Laurie CC, Liu XS, **Mahaney MC**, Manichaikul AW, Martin LW, Mathias RA, McGarvey ST, Mitchell BD, Montasser ME, Moore JE, Morrison AC, O'Connell JR, Palmer ND, Pampana A, Peralta JM, Peyser PA, Psaty BM, Redline S, Rice KM, Rich SS, Smith JA, Tiwari HK, Tsai MY, Vasan RS, Wang FF, Weeks DE, Weng Z, Wilson JG, Yanek LR; NHLBI Trans-Omics for Precision Medicine (TOPMed) Consortium; TOPMed Lipids Working Group, Neale BM, Sunyaev SR, Abecasis GR, Rotter JI, Willer CJ, Peloso GM, Natarajan P, Lin X. Dynamic incorporation of multiple in silico functional annotations empowers rare variant association analysis of large whole-genome sequencing studies at scale. *Nat Genet*. 2020 Sep;52(9):969-983. doi: 10.1038/s41588-020-0676-4. Epub 2020 Aug 24. PMID: 32839606; PMCID: PMC7483769.
194. Bick AG, Weinstock JS, Nandakumar SK, Fulco CP, Bao EL, Zekavat SM, Szeto MD, Liao X, Leventhal MJ, Nasser J, Chang K, Laurie C, Burugula BB, Gibson CJ, Lin AE, Taub MA, Aguet F, Ardlie K, Mitchell BD, Barnes KC, Moscati A, Fornage M, Redline S, Psaty BM, Silverman EK, Weiss ST, Palmer ND, Vasan RS, Burchard EG, Kardia SLR, He J, Kaplan RC, Smith NL, Arnett DK, Schwartz DA, Correa A, de Andrade M, Guo X, Konkle BA, Custer B, Peralta JM, Gui H, Meyers DA, McGarvey ST, Chen IY, Shoemaker MB, Peyser PA, Broome JG, Gogarten SM, Wang FF, Wong Q, Montasser ME, Daya M, Kenny EE, North KE, Launer LJ, Cade BE, Bis JC, Cho MH, Lasky-Su J, Bowden DW, Cupples LA, Mak ACY, Becker LC, Smith JA, Kelly TN, Aslibekyan S, Heckbert SR, Tiwari HK, Yang IV, Heit JA, Lubitz SA, Johnsen JM, Curran JE, Wenzel SE, Weeks DE, Rao DC, Darbar D, Moon JY, Tracy RP, Buth EJ, Rafaels N, Loos RJF, Durda P, Liu Y, Hou L, Lee J, Kachroo P, Freedman BI, Levy D, Bielak LF, Hixson JE, Floyd JS, Whitsel EA, Ellinor PT, Irvin MR, Fingerlin TE, Raffield LM, Armasu SM, Wheeler MM, Sabino EC, Blangero J, Williams LK, Levy BD, Sheu WH, Roden DM, Boerwinkle E, Manson JE, Mathias RA, Desai P, Taylor KD, Johnson AD; **NHLBI Trans-Omics for Precision Medicine Consortium [Mahaney MC]**, Auer PL, Kooperberg C, Laurie CC, Blackwell TW, Smith AV, Zhao H, Lange E, Lange L, Rich SS, Rotter JI, Wilson JG, Scheet P, Kitzman JO, Lander ES, Engreitz JM, Ebert BL, Reiner AP, Jaiswal S, Abecasis G, Sankaran VG, Kathiresan S, Natarajan P. Inherited causes of clonal haematopoiesis in 97,691 whole genomes. *Nature*. 2020 Oct;586(7831):763-768. doi: 10.1038/s41586-020-2819-2. Epub 2020 Oct 14. Erratum in: *Nature*. 2021 Mar;591(7851):E27. PMID: 33057201; PMCID: PMC7944936.

195. Blackburn NB, Meikle PJ, Peralta JM, Kumar S, Leandro AC, Bellinger MA, Giles C, Huynh K, **Mahaney MC**, Göring HHH, VandeBerg JL, Williams-Blangero S, Glahn DC, Duggirala R, Blangero J, Michael LF, Curran JE. Identifying the Lipidomic Effects of a Rare Loss-of-Function Deletion in ANGPTL3. *Circ Genom Precis Med.* 2021 Jun;14(3):e003232. doi: 10.1161/CIRCGEN.120.003232. Epub 2021 Apr 22. PMID: 33887960; PMCID: PMC8206021.
196. Hardin AM, Knigge RP, Duren DL, Williams-Blangero S, Subedi J, **Mahaney MC**, Sherwood RJ. Genetic influences on dentognathic morphology in the Jirel population of Nepal. *Anat Rec (Hoboken)*. 2022 Jan 3. doi: 10.1002/ar.24857. Epub ahead of print. PMID: 34981668.
197. Puppala S, Spradling-Reeves KD, Chan J, Birnbaum S, Newman DE, Comuzzie AG, **Mahaney MC**, VandeBerg JL, Olivier M, Cox LA. Hepatic transcript signatures predict atherosclerotic lesion burden prior to a 2-year high cholesterol, high fat diet challenge. *PLoS One.* 2022 Aug 4;17(8):e0271514. doi: 10.1371/journal.pone.0271514. PMID: 35925965.
198. Monson TA, Brasil MF, **Mahaney MC**, Schmitt CA, Taylor CE, Hlusko LJ. Keeping 21st Century Paleontology Grounded: Quantitative Genetic Analyses and Ancestral State Reconstruction Re-Emphasize the Essentiality of Fossils. *Biology (Basel)*. 2022 Aug 13;11(8):1218. doi: 10.3390/biology11081218. PMID: 36009845.
199. Wong WJ, Emdin C, Bick AG, Zekavat SM, Niroula A, Pirruccello JP, Dichtel L, Griffin G, Uddin MM, Gibson CJ, Kovalcik V, Lin AE, McConkey ME, Vromman A, Sellar RS, Kim PG, Agrawal M, Weinstock J, Long MT, Yu B, Banerjee R, Nicholls RC, Dennis A, Kelly M, Loh PR, McCarroll S, Boerwinkle E, Vasan RS, Jaiswal S, Johnson AD, Chung RT, Corey K, Levy D, Ballantyne C; **NHLBI TOPMed Hematology Working Group**; Ebert BL, Natarajan P. Clonal haematopoiesis and risk of chronic liver disease. *Nature.* 2023 Apr 12. doi: 10.1038/s41586-023-05857-4. Epub ahead of print. PMID: 37046084.
200. Weinstock JS, Gopakumar J, Burugula BB, Uddin MM, Jahn N, Belk JA, Bouzid H, Daniel B, Miao Z, Ly N, Mack TM, Luna SE, Prothro KP, Mitchell SR, Laurie CA, Broome JG, Taylor KD, Guo X, Sinner MF, von Falkenhausen AS, Kääb S, Shuldiner AR, O'Connell JR, Lewis JP, Boerwinkle E, Barnes KC, Chami N, Kenny EE, Loos RJF, Fornage M, Hou L, Lloyd-Jones DM, Redline S, Cade BE, Psaty BM, Bis JC, Brody JA, Silverman EK, Yun JH, Qiao D, Palmer ND, Freedman BI, Bowden DW, Cho MH, DeMeo DL, Vasan RS, Yanek LR, Becker LC, Kardia SLR, Peyser PA, He J, Rienstra M, Van der Harst P, Kaplan R, Heckbert SR, Smith NL, Wiggins KL, Arnett DK, Irvin MR, Tiwari H, Cutler MJ, Knight S, Muhlestein JB, Correa A, Raffield LM, Gao Y, de Andrade M, Rotter JI, Rich SS, Tracy RP, Konkle BA, Johnsen JM, Wheeler MM, Smith JG, Melander O, Nilsson PM, Custer BS, Duggirala R, Curran JE, Blangero J, McGarvey S, Williams LK, Xiao S, Yang M, Gu CC, Chen YI, Lee WJ, Marcus GM, Kane JP, Pullinger CR, Shoemaker MB, Darbar

D, Roden DM, Albert C, Kooperberg C, Zhou Y, Manson JE, Desai P, Johnson AD, Mathias RA; **NHLBI Trans-Omics for Precision Medicine (TOPMed) Consortium**; Blackwell TW, Abecasis GR, Smith AV, Kang HM, Satpathy AT, Natarajan P, Kitzman JO, Whitsel EA, Reiner AP, Bick AG, Jaiswal S. Aberrant activation of TCL1A promotes stem cell expansion in clonal haematopoiesis. *Nature*. 2023 Apr 12. doi: 10.1038/s41586-023-05806-1. Epub ahead of print. PMID: 37046083.

201. Selvaraj MS, Li X, Li Z, Pampana A, Zhang DY, Park J, Aslibekyan S, Bis JC, Brody JA, Cade BE, Chuang LM, Chung RH, Curran JE, de Las Fuentes L, de Vries PS, Duggirala R, Freedman BI, Graff M, Guo X, Heard-Costa N, Hidalgo B, Hwu CM, Irvin MR, Kelly TN, Kral BG, Lange L, Li X, Lisa M, Lubitz SA, Manichaikul AW, Michael P, Montasser ME, Morrison AC, Naseri T, O'Connell JR, Palmer ND, Peyser PA, Reupena MS, Smith JA, Sun X, Taylor KD, Tracy RP, Tsai MY, Wang Z, Wang Y, Bao W, Wilkins JT, Yanek LR, Zhao W, Arnett DK, Blangero J, Boerwinkle E, Bowden DW, Chen YI, Correa A, Cupples LA, Dutcher SK, Ellinor PT, Fornage M, Gabriel S, Germer S, Gibbs R, He J, Kaplan RC, Kardia SLR, Kim R, Kooperberg C, Loos RJF, Viaud-Martinez KA, Mathias RA, McGarvey ST, Mitchell BD, Nickerson D, North KE, Psaty BM, Redline S, Reiner AP, Vasan RS, Rich SS, Willer C, Rotter JI, Rader DJ, Lin X; **NHLBI Trans-Omics for Precision Medicine (TOPMed) Consortium**; Peloso GM, Natarajan P. Whole genome sequence analysis of blood lipid levels in >66,000 individuals. *Nat Commun*. 2022 Oct 11;13(1):5995. doi: 10.1038/s41467-022-33510-7. PMID: 36220816; PMCID: PMC9553944.
202. Li X, Quick C, Zhou H, Gaynor SM, Liu Y, Chen H, Selvaraj MS, Sun R, Dey R, Arnett DK, Bielak LF, Bis JC, Blangero J, Boerwinkle E, Bowden DW, Brody JA, Cade BE, Correa A, Cupples LA, Curran JE, de Vries PS, Duggirala R, Freedman BI, Göring HHH, Guo X, Haessler J, Kalyani RR, Kooperberg C, Kral BG, Lange LA, Manichaikul A, Martin LW, McGarvey ST, Mitchell BD, Montasser ME, Morrison AC, Naseri T, O'Connell JR, Palmer ND, Peyser PA, Psaty BM, Raffield LM, Redline S, Reiner AP, Reupena MS, Rice KM, Rich SS, Sitlani CM, Smith JA, Taylor KD, Vasan RS, Willer CJ, Wilson JG, Yanek LR, Zhao W; NHLBI Trans-Omics for Precision Medicine (TOPMed) Consortium, **TOPMed Lipids Working Group**; Rotter JI, Natarajan P, Peloso GM, Li Z, Lin X. Powerful, scalable and resource-efficient meta-analysis of rare variant associations in large whole genome sequencing studies. *Nat Genet*. 2023 Jan;55(1):154-164. doi: 10.1038/s41588-022-01225-6. Epub 2022 Dec 23. PMID: 36564505; PMCID: PMC10084891.
203. Weinstock JS, Gopakumar J, Burugula BB, Uddin MM, Jahn N, Belk JA, Bouzid H, Daniel B, Miao Z, Ly N, Mack TM, Luna SE, Prothro KP, Mitchell SR, Laurie CA, Broome JG, Taylor KD, Guo X, Sinner MF, von Falkenhhausen AS, Kääb S, Shuldiner AR, O'Connell JR, Lewis JP, Boerwinkle E, Barnes KC, Chami N, Kenny EE, Loos RJF, Fornage M, Hou L, Lloyd-Jones DM, Redline S, Cade BE, Psaty BM, Bis JC, Brody JA, Silverman EK, Yun JH, Qiao D, Palmer ND, Freedman BI, Bowden DW, Cho MH, DeMeo DL, Vasan RS, Yanek LR, Becker LC, Kardia SLR, Peyser PA, He J, Rienstra M, Van der Harst P, Kaplan R, Heckbert SR, Smith NL, Wiggins KL, Arnett DK, Irvin MR, Tiwari H, Cutler MJ, Knight S, Muhlestein JB,

Correa A, Raffield LM, Gao Y, de Andrade M, Rotter JI, Rich SS, Tracy RP, Konkle BA, Johnsen JM, Wheeler MM, Smith JG, Melander O, Nilsson PM, Custer BS, Duggirala R, Curran JE, Blangero J, McGarvey S, Williams LK, Xiao S, Yang M, Gu CC, Chen YI, Lee WJ, Marcus GM, Kane JP, Pullinger CR, Shoemaker MB, Darbar D, Roden DM, Albert C, Kooperberg C, Zhou Y, Manson JE, Desai P, Johnson AD, Mathias RA; **NHLBI Trans-Omics for Precision Medicine (TOPMED) Consortium**; Blackwell TW, Abecasis GR, Smith AV, Kang HM, Satpathy AT, Natarajan P, Kitzman JO, Whitsel EA, Reiner AP, Bick AG, Jaiswal S. Aberrant activation of TCL1A promotes stem cell expansion in clonal haematopoiesis. *Nature*. 2023 Apr;616(7958):755-763. doi: 10.1038/s41586-023-05806-1. Epub 2023 Apr 12. PMID: 37046083; PMCID: PMC10360040.

204. Fongang B, Satizabal C, Kautz TF, Wadop YN, Muhammad JAS, Vasquez E, Mathews J, Gireud-Goss M, Saklad AR, Himali J, Beiser A, Cavazos JE, **Mahaney MC**, Maestre G, DeCarli C, Shipp EL, Vasan RS, Seshadri S. Cerebral small vessel disease burden is associated with decreased abundance of gut *Barnesiella intestihominis* bacterium in the Framingham Heart Study. *Sci Rep*. 2023 Aug 21;13(1):13622. doi: 10.1038/s41598-023-40872-5. PMID: 37604954; PMCID: PMC10442369.
205. Georgakis MK, Malik R, Hasbani NR, Shakt G, Morrison AC, Tsao NL, Judy R, Mitchell BD, Xu H, Montasser ME, Do R, Kenny EE, Loos RJF, Terry JG, Carr JJ, Bis JC, Psaty BM, Longstreth WT, Young KA, Lutz SM, Cho MH, Broome J, Khan AT, Wang FF, Heard-Costa N, Seshadri S, Vasan RS, Palmer ND, Freedman BI, Bowden DW, Yanek LR, Kral BG, Becker LC, Peyser PA, Bielak LF, Ammous F, Carson AP, Hall ME, Raffield LM, Rich SS, Post WS, Tracy RP, Taylor KD, Guo X, **Mahaney MC**, Curran JE, Blangero J, Clarke SL, Haessler JW, Hu Y, Assimes TL, Kooperberg C, Damrauer SM, Rotter JI, de Vries PS, Dichgans M. Carriers of rare damaging CCR2 genetic variants are at lower risk of atherosclerotic disease. *medRxiv [Preprint]*. 2023 Aug 16:2023.08.14.23294063. doi: 10.1101/2023.08.14.23294063. PMID: 37645892; PMCID: PMC10462211.
206. Recto K, Kachroo P, Huan T, Van Den Berg D, Lee GY, Bui H, Lee DH, Gereige J, Yao C, Hwang SJ, Joehanes R, Weiss ST; **NHLBI Trans-Omics in Precision Medicine (TOPMed) Consortium**; O'Connor GT, Levy D, DeMeo DL. Epigenome-wide DNA methylation association study of circulating IgE levels identifies novel targets for asthma. *EBioMedicine*. 2023 Sep;95:104758. doi: 10.1016/j.ebiom.2023.104758. Epub 2023 Aug 18. PMID: 37598461; PMCID: PMC10462855.
207. Diego VP, Manusov EG, Mao X, Curran JE, Göring H, Almeida M, **Mahaney MC**, Peralta JM, Blangero J, Williams-Blangero S. Genotype-by-socioeconomic status interaction influences heart disease risk scores and carotid artery thickness in Mexican Americans: the predominant role of education in comparison to household income and socioeconomic index. *Front Genet*. 2023 Sep 14;14:1132110. doi: 10.3389/fgene.2023.1132110. PMID: 37795246; PMCID: PMC10547145.

208. Wang Y, Selvaraj MS, Li X, Li Z, Holdcraft JA, Arnett DK, Bis JC, Blangero J, Boerwinkle E, Bowden DW, Cade BE, Carlson JC, Carson AP, Chen YI, Curran JE, de Vries PS, Dutcher SK, Ellinor PT, Floyd JS, Fornage M, Freedman BI, Gabriel S, Germer S, Gibbs RA, Guo X, He J, Heard-Costa N, Hildalgo B, Hou L, Irvin MR, Joehanes R, Kaplan RC, Kardia SL, Kelly TN, Kim R, Kooperberg C, Kral BG, Levy D, Li C, Liu C, Lloyd-Jone D, Loos RJ, **Mahaney MC**, Martin LW, Mathias RA, Minster RL, Mitchell BD, Montasser ME, Morrison AC, Murabito JM, Naseri T, O'Connell JR, Palmer ND, Preuss MH, Psaty BM, Raffield LM, Rao DC, Redline S, Reiner AP, Rich SS, Ruepena MS, Sheu WH, Smith JA, Smith A, Tiwari HK, Tsai MY, Viaud-Martinez KA, Wang Z, Yanek LR, Zhao W; NHLBI Trans-Omics for Precision Medicine (TOPMed) Consortium; Rotter JI, Lin X, Natarajan P, Peloso GM. Rare variants in long non-coding RNAs are associated with blood lipid levels in the TOPMed whole-genome sequencing study. *Am J Hum Genet.* 2023 Oct 5;110(10):1704-1717. doi: 10.1016/j.ajhg.2023.09.003. PMID: 37802043; PMCID: PMC10577076.
209. Li X, Chen H, Selvaraj MS, Van Buren E, Zhou H, Wang Y, Sun R, McCaw ZR, Yu Z, Arnett DK, Bis JC, Blangero J, Boerwinkle E, Bowden DW, Brody JA, Cade BE, Carson AP, Carlson JC, Chami N, Chen YI, Curran JE, de Vries PS, Fornage M, Franceschini N, Freedman BI, Gu C, Heard-Costa NL, He J, Hou L, Hung YJ, Irvin MR, Kaplan RC, Kardia SLR, Kelly T, Konigsberg I, Kooperberg C, Kral BG, Li C, Loos RJF, **Mahaney MC**, Martin LW, Mathias RA, Minster RL, Mitchell BD, Montasser ME, Morrison AC, Palmer ND, Peyser PA, Psaty BM, Raffield LM, Redline S, Reiner AP, Rich SS, Sitlani CM, Smith JA, Taylor KD, Tiwari H, Vasan RS, Wang Z, Yanek LR, Yu B; NHLBI Trans-Omics for Precision Medicine (TOPMed) Consortium; Rice KM, Rotter JI, Peloso GM, Natarajan P, Li Z, Liu Z, Lin X. A statistical framework for powerful multi-trait rare variant analysis in large-scale whole-genome sequencing studies. *bioRxiv* [Preprint]. 2023 Nov 2:2023.10.30.564764. doi: 10.1101/2023.10.30.564764. PMID: 37961350; PMCID: PMC10634938.
210. Hasbani NR, Westerman KE, Kwak SH, Chen H, Li X, Di Corpo D, Wessel J, Bis JC, Sarnowski C, Wu P, Bielak LF, Guo X, Heard-Costa N, Kinney GL, **Mahaney MC**, Montasser ME, Palmer ND, Raffield LM, Terry JG, Yanek LR, Bon J, Bowden DW, Brody JA, Duggirala R, Jacobs DR, Kalyani RR, Lange LA, Mitchell BD, Smith JA, Taylor KD, Carson AP, Curran JE, Fornage M, Freedman BI, Gabriel S, Gibbs RA, Gupta N, Kardia SLR, Kral BG, Momin Z, Newman AB, Post WS, Viaud-Martinez KA, Young KA, Becker LC, Bertoni AG, Blangero J, Carr JJ, Pratte K, Psaty BM, Rich SS; NHLBI Trans-Omics for Precision Medicine (TOPMed) Consortium; TOPMed Atherosclerosis Working Group; TOPMed Diabetes Working Group; Wu JC, Malhotra R, Peyser PA, Morrison AC, Vasan RS, Lin X, Rotter JI, Meigs JB, Manning AK, de Vries PS. Type 2 Diabetes Modifies the Association of CAD Genomic Risk Variants With Subclinical Atherosclerosis. *Circ Genom Precis Med.* 2023 Dec;16(6):e004176. doi: 10.1161/CIRCGEN.123.004176. Epub 2023 Nov 28. PMID: 38014529; PMCID: PMC10843644.

211. Diego VP, Manusov EG, Mao X, Almeida M, Peralta JM, Curran JE, **Mahaney MC**, Göring H, Blangero J, Williams-Blangero S. Metabolic syndrome traits exhibit genotype-by-environment interaction in relation to socioeconomic status in the Mexican American family heart study. *Front Genet.* 2024 Mar 1;15:1240462. doi: 10.3389/fgene.2024.1240462. PMID: 38495670; PMCID: PMC10940335.
212. de Vries PS, Conomos MP, Singh K, Nicholson CJ, Jain D, Hasbani NR, Jiang W, Lee S, Lino Cardenas CL, Lutz SM, Wong D, Guo X, Yao J, Young EP, Tcheandjieu C, Hilliard AT, Bis JC, Bielak LF, Brown MR, Musharoff S, Clarke SL, Terry JG, Palmer ND, Yanek LR, Xu H, Heard-Costa N, Wessel J, Selvaraj MS, Li RH, Sun X, Turner AW, Stilp AM, Khan A, Newman AB, Rasheed A, Freedman BI, Kral BG, McHugh CP, Hodonsky C, Saleheen D, Herrington DM, Jacobs DR Jr, Nickerson DA, Boerwinkle E, Wang FF, Heiss G, Jun G, Kinney GL, Sigurslid HH, Doddapaneni H, Hall IM, Bensenor IM, Broome J, Crapo JD, Wilson JG, Smith JA, Blangero J, Vargas JD, Mosquera JV, Smith JD, Viaud-Martinez KA, Ryan KA, Young KA, Taylor KD, Lange LA, Emery LS, Bittencourt MS, Budoff MJ, Montasser ME, Yu M, **Mahaney MC**, Mahamdeh MS, Fornage M, Franceschini N, Lotufo PA, Natarajan P, Wong Q, Mathias RA, Gibbs RA, Do R, Mehran R, Tracy RP, Kim RW, Nelson SC, Damrauer SM, Kardia SLR, Rich SS, Fuster V, Napolioni V, Zhao W, Tian W, Yin X, Min YI, Manning AK, Peloso G, Kelly TN, O'Donnell CJ, Morrison AC, Curran JE, Zapol WM, Bowden DW, Becker LC, Correa A, Mitchell BD, Psaty BM, Carr JJ, Pereira AC, Assimes TL, Stitzel NO, Hokanson JE, Laurie CA, Rotter JI, Vasan RS, Post WS, Peyser PA, Miller CL, Malhotra R. Whole-genome sequencing uncovers two loci for coronary artery calcification and identifies ARSE as a regulator of vascular calcification. *Nat Cardiovasc Res.* 2023 Dec;2(12):1159-1172. doi: 10.1038/s44161-023-00375-y. Epub 2023 Dec 4. PMID: 38817323; PMCID: PMC11138106.

Book Chapters

1. Hlusko LJ, **Mahaney MC** (2007) Of mice and monkeys: Quantitative genetic analyses of size variation along the dental arcade, In: *Dental Perspectives on Human Evolution*, S.E. Bailey, J-J Hublin, Eds., Springer: Dordrecht, Netherlands. Pp. 237-246.
2. Hlusko LJ, **MC Mahaney** (2008) The baboon model for dental development, In: *The Baboon in Biomedical Research*, JL VandeBerg, S Tardif, S Williams-Blangero, Eds. Kluwer.
3. Rizk OT, Amugongo S, **Mahaney MC**, and Hlusko LJ. (2008). The quantitative genetic analysis of primate dental variation: History of the approach and prospects for the future. Chapter in: *Technique and Application in Dental Anthropology*, J.D. Irish and G.C. Nelson, eds. Cambridge University Press.

4. Rogers J, **Mahaney MC**, Cox LA (2009) The development and status of the baboon genetic linkage map, Chapter in: The Baboon in Biomedical Research, JL VandeBerg, S Tardif, S Williams-Blangero, Eds. Kluwer; Pp. 1-19.

Book Reviews

1. Pfeiffer S and **Mahaney MC** (1989) Review: Assessing the Skeletal Maturity of the Hand-Wrist: Fels Method, by A.F. Roche, W.C. Chumlea and D. Thissen (1988) Charles C Thomas, Publisher: Springfield. For: Am J Phys Anthropol 80: 260-261.
2. **Mahaney MC** (1994) Review of Morphometric Tools for Landmark Data: Geometry and Biology, by F.L. Bookstein (1991) Cambridge University Press: Cambridge, U.K.. For: Hum Biol 66(1): 157-160.

