

DTR Publications 2019

Visconti A, Le Roy CI, Rosa F, Rossi N, Martin TC, Mohny RP, Li W, de Rinaldis E, Bell JT, Venter JC, Nelson KE, Spector TD, Falchi M. **Interplay between the human gut microbiome and host metabolism.** Nat Commun. 2019 Oct 3;10(1):4505. PMID: 31582752

Wells HRR, Freidin MB, Zainul Abidin FN, Payton A, Dawes P, Munro KJ, Morton CC, Moore DR, Dawson SJ, Williams FMK. **GWAS Identifies 44 Independent Associated Genomic Loci for Self-Reported Adult Hearing Difficulty in UK Biobank.** Am J Hum Genet. 2019 Oct 3;105(4):788-802. PMID: 31564434

July-September

Freidin M, Kraatari M, Skarp S, Määttä J, Kettunen J, Niinimäki J, Karppinen J, Williams F, Männikkö M. **Genome-wide meta-analysis identifies genetic locus on chromosome 9 associated with Modic changes.** J Med Genet. 2019 Jul;56(7):420-426. PMID: 30808802

Evangelou E, Gao H, Chu C, Ntritsos G, Blakeley P, Butts AR, Pazoki R, Suzuki H, Koskeridis F, Yiorkas AM, Karaman I, Elliott J, Luo Q, Aeschbacher S, Bartz TM, Baumeister SE, Braund PS, Brown MR, Brody JA, Clarke TK, Dimou N, Faul JD, Homuth G, Jackson AU, Kentistou KA, Joshi PK, Lemaitre RN, Lind PA, Lyytikäinen LP, Mangino M, Milaneschi Y, Nelson CP, Nolte IM, Perälä MM, Polasek O, Porteous D, Ratliff SM, Smith JA, Stančáková A, Teumer A, Tuominen S, Thériault S, Vangipurapu J, Whitfield JB, Wood A, Yao J, Yu B, Zhao W, Arking DE, Auvinen J, Liu C, Männikkö M, Risch L, Rotter JI, Snieder H, Veijola J, Blakemore AI, Boehnke M, Campbell H, Conen D, Eriksson JG, Grabe HJ, Guo X, van der Harst P, Hartman CA, Hayward C, Heath AC, Jarvelin MR, Kähönen M, Kardia SLR, Kühne M, Kuusisto J, Laakso M, Lahti J, Lehtimäki T, McIntosh AM, Mohlke KL, Morrison AC, Martin NG, Oldehinkel AJ, Penninx BWJH, Psaty BM, Raitakari OT, Rudan I, Samani NJ, Scott LJ, Spector TD, Verweij N, Weir DR, Wilson JF, Levy D, Tzoulaki I, Bell JD, Matthews PM, Rothenfluh A, Desrivières S, Schumann G, Elliott P. **New alcohol-related genes suggest shared genetic mechanisms with neuropsychiatric disorders.** Nat Hum Behav. 2019 Jul 29. PMID: 31358974

Wong YL, Hysi P, Cheung G, Tedja M, Hoang QV, Tompson SWJ, Whisenhunt KN, Verhoeven V, Zhao W, Hess M, Wong CW, Kifley A, Hosoda Y, Haarman AEG, Hopf S, Laspas P, Sensaki S, Sim X, Miyake M, Tsujikawa A, Lamoureux E, Ohno-Matsui K, Nickels S, Mitchell P, Wong TY, Wang JJ, Hammond CJ, Barathi VA, Cheng CY, Yamashiro K, Young TL, Klaver CCW, Saw SM; Consortium of Refractive Error, Myopia (CREAM). **Genetic variants linked to myopic macular degeneration in persons with high myopia: CREAM Consortium.** PLoS One. 2019 Aug 15;14(8):e0220143 PMID: 31415580

Suri P, Boyko EJ, Smith NL, Jarvik JG, Jarvik GP, Williams FMK, Williams R, Haselkorn J, Goldberg J. **Post-traumatic Stress Disorder Symptoms are Associated With Incident Chronic Back Pain: A Longitudinal Twin Study of Older Male Veterans.** Spine (Phila Pa 1976). 2019 Sep 1;44(17):1220-1227. PMID: 30985567

Dunbar LA, Patni P, Aguilar C, Mburu P, Corns L, Wells HR, Delmaghani S, Parker A, Johnson S, Williams D, Esapa CT, Simon MM, Chessum L, Newton S, Dorning J, Jeyarajan P, Morse S, Lelli A, Codner GF, Peineau T, Gopal SR, Alagramam KN, Hertzano R, Dulon D, Wells S, Williams FM, Petit C, Dawson SJ, Brown SD, Marcotti W, El-Amraoui A, Bowl MR. **Clarin-2 is essential for hearing by maintaining stereocilia integrity and function.** EMBO Mol Med. 2019 Aug 26:e10288 PMID: 31448880

Lu AT, Seeboth A, Tsai PC, Sun D, Quach A, Reiner AP, Kooperberg C, Ferrucci L, Hou L, Baccarelli AA, Li Y, Harris SE, Corley J, Taylor A, Deary IJ, Stewart JD, Whitsel EA, Assimes TL, Chen W, Li S, Mangino

M, Bell JT, Wilson JG, Aviv A, Marioni RE, Raj K, Horvath S. **DNA methylation-based estimator of telomere length.** *Aging (Albany NY)*. 2019 Aug 18;11(16):5895-5923 PMID: 31422385

Deelen J, Kettunen J, Fischer K, van der Spek A, Trompet S, Kastenmüller G, Boyd A, Zierer J, van den Akker EB, Ala-Korpela M, Amin N, Demirkan A, Ghanbari M, van Heemst D, Ikram MA, van Klinken JB, Mooijaart SP, Peters A, Salomaa V, Sattar N, Spector TD, Tiemeier H, Verhoeven A, Waldenberger M, Würtz P, Davey Smith G, Metspalu A, Perola M, Menni C, Geleijnse JM, Drenos F, Beekman M, Jukema JW, van Duijn CM, Slagboom PE. **A metabolic profile of all-cause mortality risk identified in an observational study of 44,168 individuals.** *Nat Commun*. 2019 Aug 20;10(1):3346. PMID: 31431621

van der Spek A, Broer L, Draisma HHM, Pool R, Albrecht E, Beekman M, Mangino M, Raag M, Nyholt DR, Dharuri HK, Codd V, Amin N, de Geus EJC, Deelen J, Demirkan A, Yet I, Fischer K, Haller T, Henders AK, Isaacs A, Medland SE, Montgomery GW, Mooijaart SP, Strauch K, Suchiman HED, Vaarhorst AAM, van Heemst D, Wang-Sattler R, Whitfield JB, Willemsen G, Wright MJ, Martin NG, Samani NJ, Metspalu A, Eline Slagboom P, Spector TD, Boomsma DI, van Duijn CM, Gieger C. **Metabolomics reveals a link between homocysteine and lipid metabolism and leukocyte telomere length: the ENGAGE consortium.** *Sci Rep*. 2019 Aug 12;9(1):11623. PMID: 31406173

Visconti A, Ribero S, Sanna M, Spector TD, Bataille V, Falchi M. **Body site-specific genetic effects influence naevus count distribution in women.** *Pigment Cell Melanoma Res*. 2019 Aug 12. PMID: 31403758

Le Roy CI, Wells PM, Si J, Raes J, Bell JT, Spector TD. **Red Wine Consumption Associated With Increased Gut Microbiota α -diversity in 3 Independent Cohorts.** *Gastroenterology*. 2019 Aug 23. pii: S0016-5085(19)41244-4 PMID: 31472153

Spracklen CN, Karaderi T, Yaghootkar H, Schurmann C, Fine RS, Kutalik Z, Preuss MH, Lu Y, Wittemans LBL, Adair LS, Allison M, Amin N, Auer PL, Bartz TM, Blüher M, Boehnke M, Borja JB, Bork-Jensen J, Broer L, Chasman DI, Chen YI, Chirstofidou P, Demirkan A, van Duijn CM, Feitosa MF, Garcia ME, Graff M, Grallert H, Grarup N, Guo X, Haessler J, Hansen T, Harris TB, Highland HM, Hong J, Ikram MA, Ingelsson E, Jackson R, Jousilahti P, Kähönen M, Kizer JR, Kovacs P, Kriebel J, Laakso M, Lange LA, Lehtimäki T, Li J, Li-Gao R, Lind L, Luan J, Lyytikäinen LP, MacGregor S, Mackey DA, Mahajan A, Mangino M, Männistö S, McCarthy MI, McKnight B, Medina-Gomez C, Meigs JB, Molnos S, Mook-Kanamori D, Morris AP, de Mutsert R, Nalls MA, Nedeljkovic I, North KE, Pennell CE, Pradhan AD, Province MA, Raitakari OT, Raulerson CK, Reiner AP, Ridker PM, Ripatti S, Roberston N, Rotter JI, Salomaa V, Sandoval-Zarate AA, Sitlani CM, Spector TD, Strauch K, Stumvoll M, Taylor KD, Thuesen B, Tönjes A, Uitterlinden AG, Venturini C, Walker M, Wang CA, Wang S, Wareham NJ, Willems SM, Willems van Dijk K, Wilson JG, Wu Y, Yao J, Young KL, Langenberg C, Frayling TM, Kilpeläinen TO, Lindgren CM, Loos RJF, Mohlke KL. **Exome-Derived Adiponectin-Associated Variants Implicate Obesity and Lipid Biology.** *Am J Hum Genet*. 2019 Jul 3;105(1):15-28. PMID: 31178129

Le Roy CI, Bowyer RCE, Castillo-Fernandez JE, Pallister T, Menni C, Steves CJ, Berry SE, Spector TD, Bell JT. **Dissecting the role of the gut microbiota and diet on visceral fat mass accumulation.** *Sci Rep*. 2019 Jul 5;9(1):9758. PMID: 31278309

Verdi S, Abbasian G, Bowyer RCE, Lachance G, Yarand D, Christofidou P, Mangino M, Menni C, Bell JT, Falchi M, Small KS, Williams FMK, Hammond CJ, Hart DJ, Spector TD, Steves CJ. **TwinsUK: The UK Adult Twin Registry Update.** *Twin Res Hum Genet*. 2019 Sep 17:1-7 PMID: 31526404

Bailey JF, Sparrey CJ, Williams FMK, Curran PF, Lotz JC, Kramer PA. **The effect of parity on age-related degenerative changes in sagittal balance.** Spine (Phila Pa 1976). 2019 Sep 6. PMID: 31513113

Ho A, Sinick J, Esko T, Fischer K, Menni C, Zierer J, Matey-Hernandez M, Fortney K, Morgen EK. **Circulating glucuronic acid predicts healthspan and longevity in humans and mice.** Aging (Albany NY). 2019 Sep 26;11(18):7694-7706 PMID: 31557729

Khawaja AP, Chua S, Hysi PG, Georgoulas S, Carrant H, Fitzgerald TW, Birney E, Ko F, Yang Q, Reisman C, Garway-Heath DF, Hammond CJ, Khaw PT, Foster PJ, Patel PJ, Strouthidis N; UK Biobank Eye and Vision Consortium. **Comparison of Associations with Different Macular Inner Retinal Thickness Parameters in a Large Cohort: The UK Biobank.** Ophthalmology. 2019 Aug 21. pii: S0161-6420(19)31937-2 PMID: 31585827

Tamraz B, Huang Y, French AL, Kassaye S, Anastos K, Nowicki MJ, Gange S, Gustafson DR, Bacchetti P, Greenblatt RM, Hysi PG, Aouizerat BE; Women's Interagency HIV Study. **Association of Pharmacogenetic Markers With Atazanavir Exposure in HIV-Infected Women.** Clin Pharmacol Ther. 2019 Sep 28. PMID: 31562781

Baird PN, Hysi P. **Twin Registries Moving Forward and Meeting the Future: A Review.** Twin Res Hum Genet. 2019 Aug;22(4):201-209 PMID: 31498057

April-June

Khawaja AP, Rojas Lopez KE, Hardcastle AJ, Hammond CJ, Liskova P, Davidson AE, Gore DM, Hafford Tear NJ, Pontikos N, Hayat S, Wareham N, Khaw KT, Tuft SJ, Foster PJ, Hysi PG. **Genetic Variants Associated With Corneal Biomechanical Properties and Potentially Conferring Susceptibility to Keratoconus in a Genome-Wide Association Study.** JAMA Ophthalmol. 2019 Jun 27 PMID: 31246245

Noordam R, Young WJ, Salman R, Kanters JK, van den Berg ME, van Heemst D, Lin HJ, Barreto SM, Biggs ML, Biino G, Catamo E, Concas MP, Ding J, Evans DS, Foco L, Grarup N, Lyytikäinen LP, Mangino M, Mei H, van der Most PJ, Müller-Nurasyid M, Nelson CP, Qian Y, Repetto L, Said MA, Shah N, Schramm K, Vidigal PG, Weiss S, Yao J, Zilhao NR, Brody JA, Braund PS, Brumat M, Campana E, Christofidou P, Caulfield MJ, De Grandi A, Dominiczak AF, Doney ASF, Eiriksdottir G, Ellervik C, Giatti L, Gögele M, Graff C, Guo X, van der Harst P, Joshi PK, Kähönen M, Kestenbaum B, Lima-Costa MF, Linneberg A, Maan AC, Meitinger T, Padmanabhan S, Pattaro C, Peters A, Petersmann A, Sever P, Sinner MF, Shen X, Stanton A, Strauch K, Soliman EZ, Tarasov KV, Taylor KD, Thio CHL, Uitterlinden AG, Vaccargiu S, Waldenberger M, Robino A, Correa A, Cucca F, Cummings SR, Dörr M, Girotto G, Gudnason V, Hansen T, Heckbert SR, Juhl CR, Kääb S, Lehtimäki T, Liu Y, Lotufo PA, Palmer CNA, Pirastu M, Pramstaller PP, Ribeiro ALP, Rotter JI, Samani NJ, Snieder H, Spector TD, Stricker BH, Verweij N, Wilson JF, Wilson JG, Jukema JW, Tinker A, Newton-Cheh CH, Sotoodehnia N, Mook-Kanamori DO, Munroe PB, Warren HR. **Effects of Calcium, Magnesium, and Potassium Concentrations on Ventricular Repolarization in Unselected Individuals.** J Am Coll Cardiol. 2019 Jun 25;73(24):3118-3131 PMID: 31221261

Mercader JM, Fuchsberger C, Udler MS, Mahajan A, Wessel J, Teslovich TM, Caulkins L, Koesterer R, Barajas-Olmos F, Blackwell TW, Boerwinkle E, Brody JA, Centeno-Cruz F, Chen L, Chen S, Contreras-Cubas C, Córdova E, Correa A, Cortes M, DeFronzo RA, Dolan L, Drews KL, Elliott A, Floyd JS, Gabriel S, Garay-Sevilla ME, García-Ortiz H, Gross M, Han S, Heard-Costa NL, Jackson AU, Jørgensen ME, Kang HM, Kelsey M, Kim BJ, Koistinen HA, Kuusisto J, Leader JB, Linneberg A, Liu CT, Liu J, Lyssenko

V, Manning AK, Marcketta A, Malacara-Hernandez JM, Martínez-Hernández A, Matsuo K, Mayer-Davis E, Mendoza-Caamal E, Mohlke KL, Morrison AC, Ndungu A, Ng MCY, O'Dushlaine C, Payne AJ, Pihoker C; Broad Genomics Platform, Post WS, Preuss M, Psaty BM, Vasani RS, Rayner NW, Reiner AP, Revilla-Monsalve C, Robertson NR, Santoro N, Schurmann C, So WY, Soberón X, Stringham HM, Strom TM, Tam CHT, Thameem F, Tomlinson B, Torres JM, Tracy RP, van Dam RM, Vujkovic M, Wang S, Welch RP, Witte DR, Wong TY, Atzmon G, Barzilai N, Blangero J, Bonnycastle LL, Bowden DW, Chambers JC, Chan E, Cheng CY, Cho YS, Collins FS, de Vries PS, Duggirala R, Glaser B, Gonzalez C, Gonzalez ME, Groop L, Kooner JS, Kwak SH, Laakso M, Lehman DM, Nilsson P, Spector TD, Tai ES, Tuomi T, Tuomilehto J, Wilson JG, Aguilar-Salinas CA, Bottinger E, Burke B, Carey DJ, Chan JCN, Dupuis J, Frossard P, Heckbert SR, Hwang MY, Kim YJ, Kirchner HL, Lee JY, Lee J, Loos RJF, Ma RCW, Morris AD, O'Donnell CJ, Palmer CNA, Pankow J, Park KS, Rasheed A, Saleheen D, Sim X, Small KS, Teo YY, Haiman C, Hanis CL, Henderson BE, Orozco L, Tusié-Luna T, Dewey FE, Baras A, Gieger C, Meitinger T, Strauch K, Lange L, Grarup N, Hansen T, Pedersen O, Zeitler P, Dabelea D, Abecasis G, Bell GI, Cox NJ, Seielstad M, Sladek R, Meigs JB, Rich SS, Rotter JI; DiscovEHR Collaboration; CHARGE; LuCamp; ProDiGY; GoT2D; ESP; SIGMA-T2D; T2D-GENES; AMP-T2D-GENES, Altshuler D, Burt NP, Scott LJ, Morris AP, Florez JC, McCarthy MI, Boehnke M. **Exome sequencing of 20,791 cases of type 2 diabetes and 24,440 controls.** *Nature*. 2019 Jun;570(7759):71-76. PMID: 31118516

Glastonbury CA, Couto Alves A, El-Sayed Moustafa JS, Small KS **Cell-Type Heterogeneity in Adipose Tissue Is Associated with Complex Traits and Reveals Disease-Relevant Cell-Specific eQTLs.** *Am J Hum Genet*. 2019 Jun 6;104(6):1013-1024 PMID: 31130283

Liu J, Carnero-Montoro E, van Dongen J, Lent S, Nedeljkovic I, Ligthart S, Tsai PC, Martin TC, Mandaviya PR, Jansen R, Peters MJ, Duijts L, Jaddoe VWV, Tiemeier H, Felix JF, Willemsen G, de Geus EJC, Chu AY, Levy D, Hwang SJ, Bressler J, Gondalia R, Salfati EL, Herder C, Hidalgo BA, Tanaka T, Moore AZ, Lemaitre RN, Jhun MA, Smith JA, Sotoodehnia N, Bandinelli S, Ferrucci L, Arnett DK, Grallert H, Assimes TL, Hou L, Baccarelli A, Whitsel EA, van Dijk KW, Amin N, Uitterlinden AG, Sijbrands EJG, Franco OH, Dehghan A, Spector TD, Dupuis J, Hivert MF, Rotter JI, Meigs JB, Pankow JS, van Meurs JBJ, Isaacs A, Boomsma DI, Bell JT, Demirkan A, van Duijn CM. **An integrative cross-omics analysis of DNA methylation sites of glucose and insulin homeostasis.** *Nat Commun*. 2019 Jun 13;10(1):2581 PMID: 31197173

Freidin MB, Tsepilov YA, Palmer M, Karssen LC, Suri P, Aulchenko YS, Williams FMK; CHARGE Musculoskeletal Working Group. **Insight into the genetic architecture of back pain and its risk factors from a study of 509,000 individuals.** *Pain*. 2019 Jun;160(6):1361-1373 PMID: 30747904

Sharapov SZ, Tsepilov YA, Klaric L, Mangino M, Thareja G, Shadrina AS, Simurina M, Dagostino C, Dmitrieva J, Vilaj M, Vuckovic F, Pavic T, Stambuk J, Trbojevic-Akmacic I, Kristic J, Simunovic J, Momcilovic A, Campbell H, Doherty M, Dunlop MG, Farrington SM, Pucic-Bakovic M, Gieger C, Allegri M, Louis E, Georges M, Suhre K, Spector T, Williams FMK, Lauc G, Aulchenko YS. **Defining the genetic control of human blood plasma N-glycome using genome-wide association study.** 2019 Jun 15;28(12):2062-2077 PMID: 31163085

Pozarickij A, Williams C, Hysi PG, Guggenheim JA; UK Biobank Eye and Vision Consortium. **Quantile regression analysis reveals widespread evidence for gene-environment or gene-gene interactions in myopia development.** *Commun Biol*. 2019 May 6;2:167 PMID: 31069276

Suhre K, Trbojević-Akmačić I, Ugrina I, Mook-Kanamori DO, Spector T, Graumann J, Lauc G, Falchi M. **Fine-Mapping of the Human Blood Plasma N-Glycome onto Its Proteome.** *Metabolites*. 2019 Jun 26;9(7). pii: E122. PMID: 31247951

Noordam R, Young WJ, Salman R, Kanters JK, van den Berg ME, van Heemst D, Lin HJ, Barreto SM, Biggs ML, Biino G, Catamo E, Concas MP, Ding J, Evans DS, Foco L, Grarup N, Lyytikäinen LP, Mangino M, Mei H, van der Most PJ, Müller-Nurasyid M, Nelson CP, Qian Y, Repetto L, Said MA, Shah N, Schramm K, Vidigal PG, Weiss S, Yao J, Zilhao NR, Brody JA, Braund PS, Brumat M, Campana E, Christofidou P, Caulfield MJ, De Grandi A, Dominiczak AF, Doney ASF, Eiriksdottir G, Ellervik C, Giatti L, Gögele M, Graff C, Guo X, van der Harst P, Joshi PK, Kähönen M, Kestenbaum B, Lima-Costa MF, Linneberg A, Maan AC, Meitinger T, Padmanabhan S, Pattaro C, Peters A, Petersmann A, Sever P, Sinner MF, Shen X, Stanton A, Strauch K, Soliman EZ, Tarasov KV, Taylor KD, Thio CHL, Uitterlinden AG, Vaccargiu S, Waldenberger M, Robino A, Correa A, Cucca F, Cummings SR, Dörr M, Girotto G, Gudnason V, Hansen T, Heckbert SR, Juhl CR, Kääb S, Lehtimäki T, Liu Y, Lotufo PA, Palmer CNA, Pirastu M, Pramstaller PP, Ribeiro ALP, Rotter JI, Samani NJ, Snieder H, Spector TD, Stricker BH, Verweij N, Wilson JF, Wilson JG, Jukema JW, Tinker A, Newton-Cheh CH, Sotoodehnia N, Mook-Kanamori DO, Munroe PB, Warren HR. **Effects of Calcium, Magnesium, and Potassium Concentrations on Ventricular Repolarization in Unselected Individuals.** *J Am Coll Cardiol.* 2019 Jun 25;73(24):3118-3131. PMID: 31221261

Liu J, Carnero-Montoro E, van Dongen J, Lent S, Nedeljkovic I, Ligthart S, Tsai PC, Martin TC, Mandaviya PR, Jansen R, Peters MJ, Duijts L, Jaddoe VWW, Tiemeier H, Felix JF, Willemsen G, de Geus EJC, Chu AY, Levy D, Hwang SJ, Bressler J, Gondalia R, Salfati EL, Herder C, Hidalgo BA, Tanaka T, Moore AZ, Lemaitre RN, Jhun MA, Smith JA, Sotoodehnia N, Bandinelli S, Ferrucci L, Arnett DK, Grallert H, Assimes TL, Hou L, Baccarelli A, Whitsel EA, van Dijk KW, Amin N, Uitterlinden AG, Sijbrands EJG, Franco OH, Dehghan A, Spector TD, Dupuis J, Hivert MF, Rotter JI, Meigs JB, Pankow JS, van Meurs JBJ, Isaacs A, Boomsma DI, Bell JT, Demirkan A, van Duijn CM. **An integrative cross-omics analysis of DNA methylation sites of glucose and insulin homeostasis.** *Nat Commun.* 2019 Jun 13;10(1):2581. PMID: 31197173

Sharapov SZ, Tsepilov YA, Klaric L, Mangino M, Thareja G, Shadrina AS, Simurina M, Dagostino C, Dmitrieva J, Vilaj M, Vuckovic F, Pavic T, Stambuk J, Trbojevic-Akmacic I, Kristic J, Simunovic J, Momcilovic A, Campbell H, Doherty M, Dunlop MG, Farrington SM, Pucic-Bakovic M, Gieger C, Allegri M, Louis E, Georges M, Suhre K, Spector T, Williams FMK, Lauc G, Aulchenko YS. **Defining the genetic control of human blood plasma N-glycome using genome-wide association study.** *Hum Mol Genet.* 2019 Jun 15;28(12):2062-2077. PMID: 31163085

Garriga C, Sánchez-Santos MT, Judge A, Hart D, Spector T, Cooper C, Arden NK. **Predicting incident radiographic knee osteoarthritis in middle-aged women within 4 years: the importance of knee-level prognostic factors.** *Arthritis Care Res (Hoboken).* 2019 May 25. [Epub ahead of print] PMID: 31127870

Warrington NM, Beaumont RN, Horikoshi M, Day FR, Helgeland Ø, Laurin C, Bacelis J, Peng S, Hao K, Feenstra B, Wood AR, Mahajan A, Tyrrell J, Robertson NR, Rayner NW, Qiao Z, Moen GH, Vaudel M, Marsit CJ, Chen J, Nodzenski M, Schnurr TM, Zafarmand MH, Bradfield JP, Grarup N, Kooijman MN, Li-Gao R, Geller F, Ahluwalia TS, Paternoster L, Rueedi R, Huikari V, Hottenga JJ, Lyytikäinen LP, Cavadino A, Metrustry S, Cousminer DL, Wu Y, Thiering E, Wang CA, Have CT, Vilor-Tejedor N, Joshi PK, Painter JN, Ntalla I, Myhre R, Pitkänen N, van Leeuwen EM, Joro R, Lagou V, Richmond RC, Espinosa A, Barton SJ, Inskip HM, Holloway JW, Santa-Marina L, Estivill X, Ang W, Marsh JA, Reichetzeder C, Marullo L, Hoher B, Lunetta KL, Murabito JM, Relton CL, Kogevinas M, Chatzi L, Allard C, Bouchard L, Hivert MF, Zhang G, Muglia LJ, Heikkinen J; EGG Consortium, Morgen CS, van Kampen AHC, van Schaik BDC, Mentch FD, Langenberg C, Luan J, Scott RA, Zhao JH, Hemani G, Ring SM, Bennett AJ, Gaulton KJ, Fernandez-Tajes J, van Zuydam NR, Medina-Gomez C, de Haan HG, Rosendaal FR, Kutalik Z, Marques-Vidal P, Das S, Willemsen G, Mbarek H, Müller-Nurasyid M, Standl

M, Appel EVR, Fonvig CE, Trier C, van Beijsterveldt CEM, Murcia M, Bustamante M, Bonas-Guarch S, Hougaard DM, Mercader JM, Linneberg A, Schraut KE, Lind PA, Medland SE, Shields BM, Knight BA, Chai JF, Panoutsopoulou K, Bartels M, Sánchez F, Stokholm J, Torrents D, Vinding RK, Willems SM, Atalay M, Chawes BL, Kovacs P, Prokopenko I, Tuke MA, Yaghootkar H, Ruth KS, Jones SE, Loh PR, Murray A, Weedon MN, Tönjes A, Stumvoll M, Michaelsen KF, Eloranta AM, Lakka TA, van Duijn CM, Kiess W, Körner A, Niinikoski H, Pakkala K, Raitakari OT, Jacobsson B, Zeggini E, Dedoussis GV, Teo YY, Saw SM, Montgomery GW, Campbell H, Wilson JF, Vrijkotte TGM, Vrijheid M, de Geus EJC, Hayes MG, Kadarmideen HN, Holm JC, Beilin LJ, Pennell CE, Heinrich J, Adair LS, Borja JB, Mohlke KL, Eriksson JG, Widén EE, Hattersley AT, Spector TD, Kähönen M, Viikari JS, Lehtimäki T, Boomsma DI, Sebert S, Vollenweider P, Sørensen TIA, Bisgaard H, Bønnelykke K, Murray JC, Melbye M, Nohr EA, Mook-Kanamori DO, Rivadeneira F, Hofman A, Felix JF, Jaddoe VWV, Hansen T, Pisinger C, Vaag AA, Pedersen O, Uitterlinden AG, Jarvelin MR, Power C, Hyppönen E, Scholtens DM, Lowe WL Jr, Davey Smith G, Timpson NJ, Morris AP, Wareham NJ, Hakonarson H, Grant SFA, Frayling TM, Lawlor DA, Njølstad PR, Johansson S, Ong KK, McCarthy MI, Perry JRB, Evans DM, Freathy RM. **Maternal and fetal genetic effects on birth weight and their relevance to cardio-metabolic risk factors.** *Nat Genet.* 2019 May;51(5):804-814. Epub 2019 May 1. PMID: 31043758

Menni C, Hernandez MM, Vital M, Mohny RP, Spector TD, Valdes AM. **Circulating levels of the anti-oxidant indolepropionic acid are associated with higher gut microbiome diversity.** *Gut Microbes.* 2019 Apr 29:1-8. [Epub ahead of print] PMID: 31030641

Li Y, Jiang B, Keehn L, Gu H, Boguslavskyi A, Cecelja M, Vennin S, Spector T, Alastruey J, Chowienicz P. **Hemodynamic Mechanism of the Age-Related Increase in Pulse Pressure in Women.** *Hypertension.* 2019 May;73(5):1018-1024. PMID: 30929514

Mandaviya PR, Joehanes R, Brody J, Castillo-Fernandez JE, Dekkers KF, Do AN, Graff M, Hänninen IK, Tanaka T, de Jonge EAL, Kiefte-de Jong JC, Absher DM, Aslibekyan S, de Rijke YB, Fornage M, Hernandez DG, Hurme MA, Ikram MA, Jacques PF, Justice AE, Kiel DP, Lemaitre RN, Mendelson MM, Mikkilä V, Moore AZ, Pallister T, Raitakari OT, Schalkwijk CG, Sha J, Slagboom EPE, Smith CE, Stehouwer CDA, Tsai PC, Uitterlinden AG, van der Kallen CJH, van Heemst D; BIOS Consortium, CHARGE Consortium Epigenetics Working Group, CHARGE Consortium Nutrition Working Group, Arnett DK, Bandinelli S, Bell JT, Heijmans BT, Lehtimäki T, Levy D, North KE, Sotoodehnia N, van Greevenbroek MMJ, van Meurs JBJ, Heil SG. **Association of dietary folate and vitamin B-12 intake with genome-wide DNA methylation in blood: a large-scale epigenome-wide association analysis in 5841 individuals.** *Am J Clin Nutr.* 2019 Jun 5. pii: nqz031. [Epub ahead of print] PMID: 31165884

Glastonbury CA, Couto Alves A, El-Sayed Moustafa JS, Small KS. **Cell-Type Heterogeneity in Adipose Tissue Is Associated with Complex Traits and Reveals Disease-Relevant Cell-Specific eQTLs.** *Am J Hum Genet.* 2019 Jun 6;104(6):1013-1024. Epub 2019 May 23. PMID: 31130283

Odhams CA, Roberts AL, Vester SK, Duarte CST, Beales CT, Clarke AJ, Lindinger S, Daffern SJ, Zito A, Chen L, Jones LL, Boteva L, Morris DL, Small KS, Fernando MMA, Cunninghame Graham DS, Vyse TJ. **Interferon inducible X-linked gene CXorf21 may contribute to sexual dimorphism in Systemic Lupus Erythematosus.** *Nat Commun.* 2019 May 15;10(1):2164. PMID: 31092820

Yu B, Zanetti KA, Temprosa M, Albanes D, Appel N, Barrera CB, Ben-Shlomo Y, Boerwinkle E, Casas JP, Clish C, Dale C, Dehghan A, Derkach A, Eliassen AH, Elliott P, Fahy E, Gieger C, Gunter MJ, Harada S, Harris T, Herr DR, Herrington D, Hirschhorn JN, Hoover E, Hsing AW, Johansson M, Kelly RS, Khoo CM, Kivimäki M, Kristal BS, Langenberg C, Lasky-Su J, Lawlor DA, Lotta LA, Mangino M, Le Marchand L, Mathé E, Matthews CE, Menni C, Mucci LA, Murphy R, Oresic M, Orwoll E, Ose J, Pereira AC,

Playdon MC, Poston L, Price J, Qi Q, Rexrode K, Risch A, Sampson J, Seow WJ, Sesso HD, Shah SH, Shu XO, Smith GCS, Sovio U, Stevens VL, Stolzenberg-Solomon R, Takebayashi T, Tillin T, Travis R, Tzoulaki I, Ulrich CM, Vasan RS, Verma M, Wang Y, Wareham NJ, Wong A, Younes N, Zhao H, Zheng W, Moore SC. **The Consortium of Metabolomics Studies (COMETS): Metabolomics in 47 Prospective Cohort Studies.** *Am J Epidemiol.* 2019 Jun 1;188(6):991-1012. PMID: 31155658

Gorman KM, Meyer E, Grozeva D, Spinelli E, McTague A, Sanchis-Juan A, Carss KJ, Bryant E, Reich A, Schneider AL, Pressler RM, Simpson MA, Debelle GD, Wassmer E, Morton J, Sieciechowicz D, Jan-Kamsteeg E, Paciorkowski AR, King MD, Cross JH, Poduri A, Mefford HC, Scheffer IE, Haack TB, McCullagh G; Deciphering Developmental Disorders Study; UK10K Consortium; NIHR BioResource, Millichap JJ, Carvill GL, Clayton-Smith J, Maher ER, Raymond FL, Kurian MA. **Bi-allelic Loss-of-Function CACNA1B Mutations in Progressive Epilepsy-Dyskinesia.** *Am J Hum Genet.* 2019 May 2;104(5):948-956. Epub 2019 Apr 11. PMID: 30982612

Khawaja AP, Rojas Lopez KE, Hardcastle AJ, Hammond CJ, Liskova P, Davidson AE, Gore DM, Hafford Tear NJ, Pontikos N, Hayat S, Wareham N, Khaw KT, Tuft SJ, Foster PJ, Hysi PG. **Genetic Variants Associated With Corneal Biomechanical Properties and Potentially Conferring Susceptibility to Keratoconus in a Genome-Wide Association Study.** *JAMA Ophthalmol.* 2019 Jun 27. [Epub ahead of print] PMID: 31246245

Pozarickij A, Williams C, Hysi PG, Guggenheim JA; UK Biobank Eye and Vision Consortium. **Quantile regression analysis reveals widespread evidence for gene-environment or gene-gene interactions in myopia development.** *Commun Biol.* 2019 May 6;2:167. eCollection 2019. PMID: 31069276

Khawaja AP, Rojas Lopez KE, Hardcastle AJ, Hammond CJ, Liskova P, Davidson AE, Gore DM, Hafford Tear NJ, Pontikos N, Hayat S, Wareham N, Khaw KT, Tuft SJ, Foster PJ, Hysi PG. **Genetic Variants Associated With Corneal Biomechanical Properties and Potentially Conferring Susceptibility to Keratoconus in a Genome-Wide Association Study.** *JAMA Ophthalmol.* 2019 Jun 27. [Epub ahead of print] PMID: 31246245

January-March

Suri P, Boyko EJ, Smith NL, Jarvik JG, Jarvik GP, Williams FMK, Williams R, Haselkorn J, Goldberg J. **Post-Traumatic Stress Disorder Symptoms are Associated with Incident Chronic Back Pain: A Longitudinal Twin Study of Older Male Veterans.** *Spine (Phila Pa 1976).* 2019 Mar 26. [Epub ahead of print] PMID: 30985567

Wells PM, Williams FMK, Matey-Hernandez ML, Menni C, Steves CJ. **'RA and the microbiome: do host genetic factors provide the link?'** *J Autoimmun.* 2019 May;99:104-115 Epub 2019 Mar 5. Review. PMID: 30850234

Freidin M, Kraatari M, Skarp S, Määttä J, Kettunen J, Niinimäki J, Karppinen J, Williams F, Männikkö M. **Genome-wide meta-analysis identifies genetic locus on chromosome 9 associated with Modic changes.** *J Med Genet.* 2019 Jul;56(7):420-426. Epub 2019 Feb 26. PMID: 30808802