

Publications List of the Molecular Epidemiology Group

Published

2018

van Iterson M, Cats D, Hop P; BIOS Consortium, Heijmans BT, Stegle O. OmicsPrint: DETECTION OF DATA LINKAGE ERRORS IN MULTIPLE OMICS STUDIES. *Bioinformatics*. 2018 Feb 6. doi: 10.1093/bioinformatics/bty062.

Jiang X, O'Reilly PF, Aschard H, Hsu YH, Richards JB, Dupuis J, Ingelsson E, Karasik D, Pilz S, Berry D, Kestenbaum B, Zheng J, Luan J, Sofianopoulou E, Streeten EA, Albanes D, Lutsey PL, Yao L, Tang W, Econs MJ, Wallaschofski H, Völzke H, Zhou A, Power C, McCarthy MI, Michos ED, Boerwinkle E, Weinstein SJ, Freedman ND, Huang WY, Van Schoor NM, van der Velde N, Groot LCPGM, Enneman A, Cupples LA, Booth SL, Vasas RS, Liu CT, Zhou Y, Ripatti S, Ohlsson C, Vandenput L, Lorentzon M, Eriksson JG, Shea MK, Houston DK, Kritchevsky SB, Liu Y, Lohman KK, Ferrucci L, Peacock M, Gieger C, Beekman M, Slagboom E, Deelen J, Heemst DV, Kleber ME, März W, de Boer IH, Wood AC, Rotter JI, Rich SS, Robinson-Cohen C, den Heijer M, Jarvelin MR, Cavadino A, Joshi PK, Wilson JF, Hayward C, Lind L, Michaëlsson K, Trompet S, Zillikens MC, Uitterlinden AG, Rivadeneira F, Broer L, Zgaga L, Campbell H, Theodoratou E, Farrington SM, Timofeeva M, Dunlop MG, Valdes AM, Tikkanen E, Lehtimäki T, Lyytikäinen LP, Kähönen M, Raitakari OT, Mikki Iä V, Ikram MA, Sattar N, Jukema JW, Wareham NJ, Langenberg C, Forouhi NG, Gundersen TE, Khaw KT, Butterworth AS, Danesh J, Spector T, Wang TJ, Hyppönen E, Kraft P, Kiel DP. Genome-wide association study in 79,366 European-ancestry individuals informs the genetic architecture of 25-hydroxyvitamin D levels. *Nat Commun*. 2018 Jan 17;9(1):260. doi: 10.1038/s41467-017-02662-2.

van der Lee SJ, Teunissen CE, Pool R, Shipley MJ, Teumer A, Chouraki V, Melo van Lent D, Tynkkynen J, Fischer K, Hernesniemi J, Haller T, Singh-Manoux A, Verhoeven A, Willemsen G, de Leeuw FA, Wagner H, van Dongen J, Hertel J, Budde K, Willems van Dijk K, Weinhold L, Ikram MA, Pietzner M, Perola M, Wagner M, Friedrich N, Slagboom PE, Scheltens P, Yang Q, Gertzen RE, Egert S, Li S, Hankemeier T, van Beijsterveldt CEM, Vasas RS, Maier W, Peeters CFW, Jürgen Grabe H, Ramirez A, Seshadri S, Metspalu A, Kivimäki M, Salomaa V, Demirkan A, Boomsma DI, van der Flier WM, Amin N, van Duijn CM. Circulating metabolites and general cognitive ability and dementia: Evidence from 11 cohort studies. *Alzheimers Dement*. 2018 Jan 6. pii: S1552-5260(17)33855-4. doi: 10.1016/j.jalz.2017.11.012

Tobi EW, Slieker RC, Luijk R, Dekkers KF, Stein AD, Xu KM; Biobank-based Integrative Omics Studies Consortium, Slagboom PE, van Zwet EW, Lumey LH, Heijmans BT. DNA methylation as a mediator of the association between prenatal adversity and risk factors for metabolic disease in adulthood. *Sci Adv*. 2018 Jan 31;4(1):eaao4364. doi: 10.1126/sciadv.aao4364

Yousefi S, Abbassi-Daloui T, Kraaijenbrink T, Vermaat M, Mei H, van 't Hof P, van Iterson M, Zhernakova DV, Claringbould A, Franke L, 't Hart LM, Slieker RC, van der Heijden A, de Knijff P; BIOS consortium, 't Hoen PAC. A SNP panel for identification of DNA and RNA specimens. *BMC Genomics*. 2018 Jan 25;19(1):90. doi: 10.1186/s12864-018-4482-7

2017

Bacalini MG, Deelen J, Pirazzini C, De Cecco M, Giuliani C, Lanzarini C, Ravaioli F, Marasco E, van Heemst D, Suchiman HED, Slieker R, Giampieri E, Recchioni R, Mercheselli F, Salvioli S, Vitale G, Olivieri F, Spijkerman AMW, Dollé MET, Sedivy JM, Castellani G, Franceschi C, Slagboom PE, Garagnani P. Systemic Age-Associated DNA Hypermethylation of ELOVL2 Gene: In Vivo and In Vitro Evidences of a Cell Replication Process. *J Gerontol A Biol Sci Med Sci*. 2017 Aug 1;72(8):1015-1023. doi: 10.1093/gerona/glw185

Ben-Avraham D, Karasik D, Verghese J, Lunetta KL, Smith JA, Eicher JD, Vered R, Deelen J, Arnold AM, Buchman AS, Tanaka T, Faul JD, Nethander M, Fornage M, Adams HH, Matteini AM, Callisaya ML, Smith AV, Yu L, De Jager PL, Evans DA, Gudnason V, Hofman A, Pattie A, Corley J, Launer LJ, Knopman DS, Parimi N, Turner ST, Bandinelli S, Beekman M, Gutman D, Sharvit L, Mooijaart SP, Liewald DC, Houwing-Duistermaat JJ, Ohlsson C, Moed M, Verlinden VJ, Mellström D, van der Geest JN, Karlsson M, Hernandez D, McWhirter R, Liu Y, Thomson R, Tranah GJ, Uitterlinden AG, Weir DR, Zhao W, Starr JM, Johnson AD, Ikram MA, Bennett DA, Cummings SR, Deary IJ, Harris TB, Kardina SL, Mosley TH, Srikanth VK, Windham BG, Newman AB, Walston JD, Davies G, Evans DS, Slagboom EP, Ferrucci L, Kiel DP, Murabito JM, Atzmon G. The complex genetics of gait speed: genome-wide meta-analysis approach. *Aging (Albany NY)*. 2017 Jan 10;9(1):209-246. doi: 10.18632/aging.101151. correction *Aging (Albany NY)*. 2017 Jul 7. doi: 10.18632/aging.101260

van den Berg N, Beekman M, Smith KR, Janssens A, Slagboom PE. Historical demography and longevity genetics: Back to the future. *Ageing Res Rev.* 2017 Sep;38:28-39. doi: 10.1016/j.arr.2017.06.005

van den Berg R, Noordam R, Kooijman S, Jansen SWM, Akintola AA, Slagboom PE, Pijl H, Rensen PCN, Biermasz NR, van Heemst D. Familial longevity is characterized by high circadian rhythmicity of serum cholesterol in healthy elderly individuals. *Aging Cell.* 2017 Apr;16(2):237-243. doi: 10.1111/accel.12547.

Bonder MJ, Luijk R, Zhernakova DV, Moed M, Deelen P, Vermaat M, van Iterson M, van Dijk F, van Galen M, Bot J, Sliker RC, Jhamai PM, Verbiest M, Suchiman HE, Verkerk M, van der Breggen R, van Rooij J, Lakenberg N, Arindrarto W, Kielbasa SM, Jonkers I, van 't Hof P, Nooren I, Beekman M, Deelen J, van Heemst D, Zhernakova A, Tigchelaar EF, Swertz MA, Hofman A, Uitterlinden AG, Pool R, van Dongen J, Hottenga JJ, Stehouwer CD, van der Kallen CJ, Schalkwijk CG, van den Berg LH, van Zwet EW, Mei H, Li Y, Lemire M, Hudson TJ; BIOS Consortium., Slagboom PE, Wijmenga C, Veldink JH, van Greevenbroek MM, van Duijn CM, Boomsma DI, Isaacs A, Jansen R, van Meurs JB, 't Hoen PA, Franke L, Heijmans BT. Disease variants alter transcription factor levels and methylation of their binding sites. *Nat Genet.* 2017 Jan;49(1):131-138. doi: 10.1038/ng.3721.

Duncan L, Yilmaz Z, Gaspar H, Walters R, Goldstein J, Anttila V, Bulik-Sullivan B, Ripke S; Eating Disorders Working Group of the Psychiatric Genomics Consortium (Duncan L, Yilmaz Z, Gaspar H, Walters R, Goldstein J, Anttila V, Bulik-Sullivan B, Ripke S, Adan R, Alfredsson L, Ando T, Andreassen O, Aschauer H, Baker J, Barrett J, Bencko V, Bergen A, Berrettini W, Birgegård A, Boni C, Perica VB, Brandt H, Burghardt R, Carlberg L, Cassina M, Cesta C, Cichon S, Clementi M, Cohen-Woods S, Coleman J, Cone R, Courtet P, Crawford S, Crow S, Crowley J, Danner U, Davis O, de Zwaan M, Dedoussis G, Degortes D, DeSocio J, Dick D, Dikeos D, Dina C, Ding B, Dmitrzak-Weglarz M, Docampo E, Egberts K, Ehrlich S, Escaramís G, Esko T, Espeseth T, Estivill X, Favaro A, Fernández-Aranda F, Fichter M, Finan C, Fischer K, Floyd J, Föcker M, Foretova L, Forzan M, Fox C, Franklin C, Gaborieau V, Gallinger S, Gambaro G, Giegling I, Gonidakis F, Gorwood P, Gratacos M, Guillaume S, Guo Y, Hakonarson H, Halmi K, Harrison R, Hatzikotoulas K, Hauser J, Hebebrand J, Helder S, Hendriks J, Herms S, Herpertz-Dahlmann B, Herzog W, Hilliard C, Huckins L, Hudson J, Huemer J, Imgart H, Inoko H, Jall S, Jamain S, Janout V, Jiménez-Murcia S, Johnson C, Jordan J, Julià A, Juréus A, Kalsi G, Kaplan A, Kaprio J, Karhunen L, Karwautz A, Kas M, Kaye W, Kennedy M, Kennedy J, Keski-Rahkonen A, Kiezebrink K, Kim YR, Klareskog L, Klump K, Knudsen GP, Koelman B, Koubek D, La Via M, Landén M, Le Hellard S, Leboyer M, Levitan R, Li D, Lichtenstein P, Lilienfeld L, Lissowska J, Lundervold A, Magistretti P, Maj M, Mannik K, Marsal S, Kaminska D, Martin N, Mattingsdal M, McDevitt S, McGuffin P, Merl E, Metspalu A, Meulenbelt I, Micali N, Mitchell J, Mitchell K, Monteleone P, Monteleone AM, Montgomery G, Mortensen P, Munn-Chernoff M, Müller T, Nacmias B, Navratilova M, Nilsson I, Norring C, Ntalla I, Ophoff R, O'Toole J, Palotie A, Pantel J, Papezova H, Parker R, Pinto D, Rabionet R, Raevuori A, Rajewski A, Ramoz N, Rayner NW, Reichborn-Kjennerud T, Ricca V, Ripatti S, Ritschel F, Roberts M, Rotondo A, Rujescu D, Rybakowski F, Santonastaso P, Scherag A, Scherer S, Schmidt U, Schork N, Schosser A, Scott L, Seitz J, Slachtova L, Sladek R, Slagboom PE, 't Landt MS, Slopian A, Smith T, Soranzo N, Sorbi S, Southam L, Steen V, Strengman E, Strober M, Szatkiewicz J, Szeszenia-Dabrowska N, Tachmazidou I, Tenconi E, Tortorella A, Tozzi F, Treasure J, Tschöp M, Tsitsika A, Tziouvas K, van Elburg A, van Furth E, Wade T, Wagner G, Walton E, Watson H, Wichmann HE, Widen E, Woodside DB, Yanovski J, Yao S, Zerwas S, Zipfel S, Thornton L, Hinney A, Daly M, Sullivan PF, Zeggini E, Breen G, Thornton L, Hinney A, Daly M, Sullivan PF, Zeggini E, Breen G, Bulik CM. Significant Locus and Metabolic Genetic Correlations Revealed in Genome-Wide Association Study of Anorexia Nervosa. *Am J Psychiatry.* 2017 Sep 1;174(9):850-858. doi: 10.1176/appi.ajp.2017.16121402.

Ek WE, Tobi EW, Ahsan M, Lampa E, Ponzi E, Kyrtopoulos SA, Georgiadis P, Lumey LH, Heijmans BT, Botsivali M, Bergdahl IA, Karlsson T, Rask-Andersen M, Palli D, Ingelsson E, Hedman ÅK, Nilsson LM, Vineis P, Lind L, Flanagan JM, Johansson Å; Epigenome-Wide Association Study Consortium. Tea and coffee consumption in relation to DNA methylation in four European cohorts. *Hum Mol Genet.* 2017 Aug 15;26(16):3221-3231. doi: 10.1093/hmg/ddx194

Francioli LC, Cretu-Stancu M, Garimella KV, Fromer M, Kloosterman WP; Genome of the Netherlands consortium., Samocha KE, Neale BM, Daly MJ, Banks E, DePristo MA, de Bakker PI. A framework for the detection of de novo mutations in family-based sequencing data. *Eur J Hum Genet.* 2017 Feb;25(2):227-233. doi: 10.1038/ejhg.2016.147.

Hägg S, Zhan Y, Karlsson R, Gerritsen L, Ploner A, van der Lee SJ, Broer L, Deelen J, Marioni RE, Wong A, Lundquist A, Zhu G, Hansell NK, Sillanpää E, Fedko IO, Amin NA, Beekman M, de Craen AJM, Degerman S, Harris SE, Kan KJ, Martin-Ruiz CM, Montgomery GW; NeuroCHARGE Cognitive Working Group., Adolfsson AN, Reynolds CA, Samani NJ, Suchiman HED, Viljanen A, von Zglinicki T, Wright MJ, Hottenga JJ, Boomsma DI, Rantanen T, Kaprio JA, Nyholt DR, Martin NG, Nyberg L, Adolfsson R, Kuh D, Starr JM, Deary IJ, Slagboom PE, van Duijn CM, Codd V, Pedersen NL. Short telomere length is associated with impaired cognitive performance in European ancestry cohorts. *Transl Psychiatry.* 2017 Apr 18;7(4):e1100. doi: 10.1038/tp.2017.73.

Hillger JM, le Roy B, Wang Z, Mulder-Krieger T, Boomsma DI, Slagboom PE, Danen EHJ, IJzerman AP, Heitman LH. Phenotypic screening of cannabinoid receptor 2 ligands shows different sensitivity to genotype. *Biochem Pharmacol.* 2017 Apr 15;130:60-70. doi: 10.1016/j.bcp.2017.01.014.

Hinney A, Kesselmeier M, Jall S, Volckmar AL, Föcker M, Antel J; GCAN; WTCCC3, Heid IM, Winkler TW; GIANT, Grant SF; EGG, Guo Y, Bergen AW, Kaye W, Berrettini W, Hakonarson H; Price Foundation Collaborative Group; Children's Hospital of Philadelphia/Price Foundation, Herpertz-Dahlmann B, de Zwaan M, Herzog W, Ehrlich S, Zipfel S, Egberts KM, Adan R, Brandys M, van Elburg A, Boraska Perica V, Franklin CS, Tschöp MH, Zeggini E, Bulik CM, Collier D, Scherag A, Müller TD, Hebebrand J. Evidence for three genetic loci involved in both anorexia nervosa risk and variation of body mass index. *Mol Psychiatry.* 2017 Feb;22(2):192-201. doi: 10.1038/mp.2016.71. doi: 10.1038/mp.2016.71.

van Iterson M, van Zwet EW; BIOS Consortium., Heijmans BT. Controlling bias and inflation in epigenome- and transcriptome-wide association studies using the empirical null distribution. *Genome Biol.* 2017 Jan 27;18(1):19. doi: 10.1186/s13059-016-1131-9.

Justice AE, Winkler TW, Feitosa MF, Graff M, Fisher VA, Young K, Barata L, Deng X, Czajkowski J, Hadley D, Ngwa JS, Ahluwalia TS, Chu AY, Heard-Costa NL, Lim E, Perez J, Eicher JD, Kutalik Z, Xue L, Mahajan A, Renström F, Wu J, Qi Q, Ahmad S, Alfred T, Amin N, Bielak LF, Bonnefond A, Bragg J, Cadby G, Chittani M, Coggeshall S, Corre T, Direk N, Eriksson J, Fischer K, Gorski M, Neergaard Harder M, Horikoshi M, Huang T, Huffman JE, Jackson AU, Justesen JM, Kanoni S, Kinnunen L, Kleber ME, Komulainen P, Kumari M, Lim U, Luan J, Lyytikäinen LP, Mangino M, Manichaikul A, Marten J, Middelberg RPS, Müller-Nurasyid M, Navarro P, Pérusse L, Pervjakova N, Sarti C, Smith AV, Smith JA, Stančáková A, Strawbridge RJ, Stringham HM, Sung YJ, Tanaka T, Teumer A, Trompet S, van der Laan SW, van der Most PJ, Van Vliet-Ostaptchouk JV, Vedantam SL, Verweij N, Vink JM, Vitart V, Wu Y, Yengo L, Zhang W, Hua Zhao J, Zimmermann ME, Zubair N, Abecasis GR, Adair LS, Afaq S, Afzal U, Bakker SJL, Bartz TM, Beilby J, Bergman RN, Bergmann S, Biffar R, Blangero J, Boerwinkle E, Bonnycastle LL, Bottinger E, Braga D, Buckley BM, Buyske S, Campbell H, Chambers JC, Collins FS, Curran JE, de Borst GJ, de Craen AJM, de Geus EJC, Dedoussis G, Delgado GE, den Ruijter HM, Eiriksdottir G, Eriksson AL, Esko T, Faul JD, Ford I, Forrester T, Gertow K, Gigante B, Glorioso N, Gong J, Grallert H, Grammer TB, Grarup N, Haitjema S, Hallmans G, Hamsten A, Hansen T, Harris TB, Hartman CA, Hassinen M, Hastie ND, Heath AC, Hernandez D, Hindorf L, Hocking LJ, Hollensted M, Holmen OL, Homuth G, Jan Hottenga J, Huang J, Hung J, Hutri-Kähönen N, Ingelsson E, James AL, Jansson JO, Jarvelin MR, Jhun MA, Jørgensen ME, Juonala M, Kähönen M, Karlsson M, Koistinen HA, Kolcic I, Kolovou G, Kooperberg C, Krämer BK, Kuusisto J, Kvaløy K, Lakka TA, Langenberg C, Launer LJ, Leander K, Lee NR, Lind L, Lindgren CM, Linneberg A, Lobbens S, Loh M, Lorentzon M, Luben R, Lubke G, Ludolph-Donislawski A, Lupoli S, Madden PAF, Männikkö R, Marques-Vidal P, Martin NG, McKenzie CA, McKnight B, Mellström D, Menni C, Montgomery GW, Musk AB, Narisu N, Nauck M, Nolte IM, Oldehinkel AJ, Olden M, Ong KK, Padmanabhan S, Peyser PA, Pisinger C, Porteous DJ, Raitakari OT, Rankinen T, Rao DC, Rasmussen-Torvik LJ, Rawal R, Rice T, Ridker PM, Rose LM, Bien SA, Rudan I, Sanna S, Sarzynski MA, Sattar N, Savonen K, Schlessinger D, Scholtens S, Schurmann C, Scott RA, Sennblad B, Siemelink MA, Silbernagel G, Slagboom PE, Snieder H, Staessen JA, Stott DJ, Swertz MA, Swift AJ, Taylor KD, Tayo BO, Thorand B, Thuillier D, Tuomilehto J, Uitterlinden AG, Vandenput L, Vohl MC, Völzke H, Vonk JM, Waeber G, Waldenberger M, Westendorp RGJ, Wild S, Willemsen G, Wolfenbuttel BHR, Wong A, Wright AF, Zhao W, Zillikens MC, Baldassarre D, Balkau B, Bandinelli S, Böger CA, Boomsma DI, Bouchard C, Bruinenberg M, Chasman DI, Chen YD, Chines PS, Cooper RS, Cucca F, Cusi D, Faire U, Ferrucci L, Franks PW, Froguel P, Gordon-Larsen P, Grabe HJ, Gudnason V, Haiman CA, Hayward C, Hveem K, Johnson AD, Wouter Jukema J, Kardia SLR, Kivimäki M, Kooner JS, Kuh D, Laakso M, Lehtimäki T, Marchand LL, März W, McCarthy MI, Metspalu A, Morris AP, Ohlsson C, Palmer LJ, Pasterkamp G, Pedersen O, Peters A, Peters U, Polasek O, Psaty BM, Qi L, Rauramaa R, Smith BH, Sørensen TIA, Strauch K, Tiemeier H, Tremoli E, van der Harst P, Vestergaard H, Vollenweider P, Wareham NJ, Weir DR, Whitfield JB, Wilson JF, Tyrrell J, Frayling TM, Barroso I, Boehnke M, Deloukas P, Fox CS, Hirschhorn JN, Hunter DJ, Spector TD, Strachan DP, van Duijn CM, Heid IM, Mohlke KL, Marchini J, Loos RJF, Kilpeläinen TO, Liu CT, Borecki IB, North KE, Cupples LA. Genome-wide meta-analysis of 241,258 adults accounting for smoking behaviour identifies novel loci for obesity traits. *Nat Commun.* 2017 Apr 26;8:14977. doi: 10.1038/ncomms14977.

Li D, Chang X, Connolly JJ, Tian L, Liu Y, Bhoj EJ, Robinson N, Abrams D, Li YR, Bradfield JP, Kim CE, Li J, Wang F, Snyder J, Lemma M, Hou C, Wei Z, Guo Y, Qiu H, Mentch FD, Thomas KA, Chiavacci RM, Cone R, Li B, Sleiman PA; Eating Disorders Working Group of the Psychiatric Genomics Consortium (Boraska Perica V, Franklin CS, Floyd JAB, Thornton LM, Huckins LM, Southam L, Rayner NW, Tachmazidou I, Klump KL, Treasure J, Schmidt U, Tozzi F, Kiezebrink K, Hebebrand J, Gorwood P, Adan RAH, Kas MJH, Favaro A, Santonastaso P, Fernández-Aranda F, Gratacos M, Rybakowski F, Dmitrzak-Weglarz M, Kaprio J, Keski-Rahkonen A, Raevuori-Helkamaa A, Van Furth EF, Slof-Op't Landt MCT, Hudson JI, Reichborn-Kjennerud T, Knudsen GPS, Monteleone P, Kaplan AS, Karwautz A, Berrettini WH, Schork NJ, Ando T, Inoko H, Esko T, Fischer K, Männik K, Metspalu A, Baker JH, DeSocio JE, Hilliard CE, O'Toole JK, Pantel J, Szatkiewicz JP, Zerwas S, Davis OSP, Helder S, Bühren K, Burghardt R, de Zwaan M, Egberts K, Ehrlich S, Herpertz-Dahlmann B, Herzog W, Irgart H, Scherag A, Zipfel S, Boni C, Ramoz N, Versini A,

Danner UN, Hendriks J, Koeleman BPC, Ophoff RA, Strengman E, van Elburg AA, Bruson A, Clementi M, Degortes D, Forzan M, Tenconi E, Docampo E, Escaramís G, Jiménez-Murcia S, Lissowska J, Rajewski A, Szeszenia-Dabrowska N, Slopian A, Hauser J, Karhunen L, Meulenbelt I, Slagboom PE, Tortorella A, Maj M, Dedoussis G, Dikeos D, Gonidakis F, Tziouvas K, Tsitsika A, Papezova H, Slachtova L, Martaskova D, Kennedy JL, Levitan RD, Yilmaz Z, Huemer J, Koubek D, Merl E, Wagner G, Lichtenstein P, Breen G, Cohen-Woods S, Farmer A, McGuffin P, Cichon S, Giegling I, Herms S, Dan Rujescu, Schreiber S, Wichmann HE, Dina C, Sladek R, Gambaro G, Soranzo N, Julia A, Marsal S, Rabionet R, Gaborieau V, Dick DM, Palotie A, Ripatti S, Widén E, Andreassen OA, Espeseth T, Lundervold A, Reinvang I, Steen VM, Le Hellard S, Mattingsdal M, Ntalla I, Bencko V, Foretova L, Janout V, Navratilova M, Gallinger S, Pinto D, Scherer SW, Aschauer H, Carlberg L, Schosser A, Alfredsson L, Ding B, Klareskog L, Padyukov L, Finan C, Kalsi G, Roberts M, Barrett JC, Estivill X, Hinney A, Sullivan PF, Zeggini E, Bulik CM); Price Foundation Collaborative Group (Brandt H, Crawford S, Crow S, Fichter MM, Halmi KA, Johnson C, Kaplan AS, La Via MC, Mitchell J, Strober M, Rotondo A, Treasure J, Woodside DB, Bulik CM, Keel PK, Klump KL, Lilienfeld L, Thornton LM, Bergen AW, Berrettini W, Kaye W, Magistretti P), Hakonarson H. A genome-wide association study of anorexia nervosa suggests a risk locus implicated in dysregulated leptin signaling. *Sci Rep*. 2017 Jun 19;7(1):3847. doi: 10.1038/s41598-017-01674-8

Mason AG, Slieker RC, Balog J, Lemmers RJLF, Wong CJ, Yao Z, Lim JW, Filippova GN, Ne E, Tawil R, Heijmans BT, Tapscott SJ, van der Maarel SM. SMCHD1 regulates a limited set of gene clusters on autosomal chromosomes. *Skelet Muscle*. 2017 Jun 6;7(1):12. doi: 10.1186/s13395-017-0129-7

Noordam R, Sitlani CM, Avery CL, Stewart JD, Gogarten SM, Wiggins KL, Trompet S, Warren HR, Sun F, Evans DS, Li X, Li J, Smith AV, Bis JC, Brody JA, Busch EL, Caulfield MJ, Chen YI, Cummings SR, Cupples LA, Duan Q, Franco OH, Méndez-Giráldez R, Harris TB, Heckbert SR, van Heemst D, Hofman A, Floyd JS, Kors JA, Launer LJ, Li Y, Li-Gao R, Lange LA, Lin HJ, de Mutsert R, Napier MD, Newton-Cheh C, Poulter N, Reiner AP, Rice KM, Roach J, Rodriguez CJ, Rosendaal FR, Sattar N, Sever P, Seyerle AA, Slagboom PE, Soliman EZ, Sotoodehnia N, Stott DJ, Stürmer T, Taylor KD, Thornton TA, Uitterlinden AG, Wilhelmsen KC, Wilson JG, Gudnason V, Jukema JW, Laurie CC, Liu Y, Mook-Kanamori DO, Munroe PB, Rotter JI, Vasani RS, Psaty BM, Stricker BH, Whitsel EA. A genome-wide interaction analysis of tricyclic/tetracyclic antidepressants and RR and QT intervals: a pharmacogenomics study from the Cohorts for Heart and Aging Research in Genomic Epidemiology (CHARGE) consortium. *J Med Genet*. 2017 May;54(5):313-323. doi: 10.1136/jmedgenet-2016-104112.

Panoutsopoulou K, Thiagarajah S, Zengini E, Day-Williams AG, Ramos YF, Meessen JM, Huetink K, Nelissen RG, Southam L, Rayner NW; arcOGEN Consortium, Doherty M, Meulenbelt I, Zeggini E, Wilkinson JM. Radiographic endophenotyping in hip osteoarthritis improves the precision of genetic association analysis. *Ann Rheum Dis*. 2017 Jul;76(7):1199-1206. doi: 10.1136/annrheumdis-2016-210373.

Ramos YF, Meulenbelt I. The role of epigenetics in osteoarthritis: current perspective. *Curr Opin Rheumatol*. 2017 Jan;29(1):119-129. Review.

Raz Y, Guerrero-Ros I, Maier A, Slagboom PE, Atzmon G, Barzilay N, Macian F. Activation-Induced Autophagy Is Preserved in CD4+ T-Cells in Familial Longevity. *J Gerontol A Biol Sci Med Sci*. 2017 Sep 1;72(9):1201-1206. doi: 10.1093/gerona/glx020

Reiding KR, Ruhaak LR, Uh HW, El Bouhaddani S, van den Akker EB, Plomp R, McDonnell LA, Houwing-Duistermaat JJ, Slagboom PE, Beekman M, Wuhler M. Human plasma N-glycosylation as analyzed by MALDI-FTICR-MS associates with markers of inflammation and metabolic health. *Mol Cell Proteomics*. 2017 Feb;16(2):228-242. doi: 10.1074/mcp.M116.065250.

van Rooij FJ, Qayyum R, Smith AV, Zhou Y, Trompet S, Tanaka T, Keller MF, Chang LC, Schmidt H, Yang ML, Chen MH, Hayes J, Johnson AD, Yanek LR, Mueller C, Lange L, Floyd JS, Ghanbari M, Zonderman AB, Jukema JW, Hofman A, van Duijn CM, Desch KC, Saba Y, Ozel AB, Snively BM, Wu JY, Schmidt R, Fornage M, Klein RJ, Fox CS, Matsuda K, Kamatani N, Wild PS, Stott DJ, Ford I, Slagboom PE, Yang J, Chu AY, Lambert AJ, Uitterlinden AG, Franco OH, Hofer E, Ginsburg D, Hu B, Keating B, Schick UM, Brody JA, Li JZ, Chen Z, Zeller T, Guralnik JM, Chasman DI, Peters LL, Kubo M, Becker DM, Li J, Eiriksdottir G, Rotter JI, Levy D, Grossmann V, Patel KV, Chen CH; BioBank Japan Project., Ridker PM, Tang H, Launer LJ, Rice KM, Li-Gao R, Ferrucci L, Evans MK, Choudhuri A, Trompouki E, Abraham BJ, Yang S, Takahashi A, Kamatani Y, Kooperberg C, Harris TB, Jee SH, Coresh J, Tsai FJ, Longo DL, Chen YT, Felix JF, Yang Q, Psaty BM, Boerwinkle E, Becker LC, Mook-Kanamori DO, Wilson JG, Gudnason V, O'Donnell CJ, Dehghan A, Cupples LA, Nalls MA, Morris AP, Okada Y, Reiner AP, Zou L, Ganesh SK. Genome-wide Trans-ethnic Meta-analysis Identifies Seven Genetic Loci Influencing Erythrocyte Traits and a Role for RBPMS in Erythropoiesis. *Am J Hum Genet*. 2017 Jan 5;100(1):51-63. doi: 10.1016/j.ajhg.2016.11.016.

Roost MS, Sliker RC, Bialecka M, van Iperen L, Gomes Fernandes MM, He N, Suchiman HED, Szuhai K, Carlotti F, de Koning EJP, Mummery CL, Heijmans BT, Chuva de Sousa Lopes SM. DNA methylation and transcriptional trajectories during human development and reprogramming of isogenic pluripotent stem cells. *Nat Commun.* 2017 Oct 13;8(1):908. doi: 10.1038/s41467-017-01077-3

Slagboom EP, van den Berg N, Deelen J. Phenome and genome based studies into human ageing and longevity: An overview. *Biochim Biophys Acta.* 2017 Sep 22. pii: S0925-4439(17)30332-0. doi: 10.1016/j.bbadis.2017.09.017.

Steinberg J, Ritchie GRS, Roumeliotis TI, Jayasuriya RL, Clark MJ, Brooks RA, Binch ALA, Shah KM, Coyle R, Pardo M, Le Maitre CL, Ramos YFM, Nelissen RGHH, Meulenbelt I, McCaskie AW, Choudhary JS, Wilkinson JM, Zeggini E. Integrative epigenomics, transcriptomics and proteomics of patient chondrocytes reveal genes and pathways involved in osteoarthritis. *Sci Rep.* 2017 Aug 21;7(1):8935. doi: 10.1038/s41598-017-09335-6.

Tan Q, Heijmans BT, Hjelmborg JVB, Soerensen M, Christensen K, Christiansen L. Handling blood cell composition in epigenetic studies on ageing. *Int J Epidemiol.* 2017 Oct 1;46(5):1717-1718. doi: 10.1093/ije/dyx083.

Tissier R, Tsonaka R, Mooijaart SP, Slagboom E, Houwing-Duistermaat JJ. Secondary phenotype analysis in ascertained family designs: application to the Leiden longevity study. *Stat Med.* 2017 Jun 30;36(14):2288-2301. doi: 10.1002/sim.7281.

Verhoeven A, Slagboom E, Wuhler M, Giera M, Mayboroda OA. Automated quantification of metabolites in blood-derived samples by NMR. *Anal Chim Acta.* 2017 Jul 11;976:52-62. doi: 10.1016/j.aca.2017.04.013.

de Vries PS, Sabater-Lleal M, Chasman DI, Trompet S, Ahluwalia TS, Teumer A, Kleber ME, Chen MH, Wang JJ, Attia JR, Marioni RE, Steri M, Weng LC, Pool R, Grossmann V, Brody JA, Venturini C, Tanaka T, Rose LM, Oldmeadow C, Mazur J, Basu S, Frånberg M, Yang Q, Ligthart S, Hottenga JJ, Rumley A, Mulas A, de Craen AJ, Grotevendt A, Taylor KD, Delgado GE, Kifley A, Lopez LM, Berentzen TL, Mangino M, Bandinelli S, Morrison AC, Hamsten A, Tofler G, de Maat MP, Draisma HH, Lowe GD, Zoledziewska M, Sattar N, Lackner KJ, Völker U, McKnight B, Huang J, Holliday EG, McEvoy MA, Starr JM, Hysi PG, Hernandez DG, Guan W, Rivadeneira F, McArdle WL, Slagboom PE, Zeller T, Psaty BM, Uitterlinden AG, de Geus EJ, Stott DJ, Binder H, Hofman A, Franco OH, Rotter JI, Ferrucci L, Spector TD, Deary IJ, März W, Greinacher A, Wild PS, Cucca F, Boomsma DI, Watkins H, Tang W, Ridker PM, Jukema JW, Scott RJ, Mitchell P, Hansen T, O'Donnell CJ, Smith NL, Strachan DP, Dehghan A. Comparison of HapMap and 1000 Genomes Reference Panels in a Large-Scale Genome-Wide Association Study. *PLoS One.* 2017 Jan 20;12(1):e0167742. doi: 10.1371/journal.pone.0167742. eCollection 2017.

Waaijer ME, Westendorp RG, Goldeck D, Gunn DA, Pawelec G, Stijntjes M, Slagboom PE, Maier AB. Assessment of health status by molecular measures in adults ranging from middle-aged to old: Ready for clinical use? *Exp Gerontol. Exp Gerontol.* 2017 Jan;87(Pt B):175-181. doi: 10.1016/j.exger.2016.03.020.

Wahl S, Drong A, Lehne B, Loh M, Scott WR, Kunze S, Tsai PC, Ried JS, Zhang W, Yang Y, Tan S, Fiorito G, Franke L, Guarrera S, Kasela S, Kriebel J, Richmond RC, Adamo M, Afzal U, Ala-Korpela M, Albeti B, Ammerpohl O, Apperley JF, Beekman M, Bertazzi PA, Black SL, Blancher C, Bonder MJ, Brosch M, Carstensen-Kirberg M, de Craen AJ, de Lusignan S, Dehghan A, Elkalaawy M, Fischer K, Franco OH, Gaunt TR, Hampe J, Hashemi M, Isaacs A, Jenkinson A, Jha S, Kato N, Krogh V, Laffan M, Meisinger C, Meitinger T, Mok ZY, Motta V, Ng HK, Nikolakopoulou Z, Nteliopoulos G, Panico S, Pervjakova N, Prokisch H, Rathmann W, Roden M, Rota F, Rozario MA, Sandling JK, Schafmayer C, Schramm K, Siebert R, Slagboom PE, Soininen P, Stolk L, Strauch K, Tai ES, Tarantini L, Thorand B, Tigchelaar EF, Tumino R, Uitterlinden AG, van Duijn C, van Meurs JB, Vineis P, Wickremasinghe AR, Wijmenga C, Yang TP, Yuan W, Zernakova A, Batterham RL, Smith GD, Deloukas P, Heijmans BT, Herder C, Hofman A, Lindgren CM, Milani L, van der Harst P, Peters A, Illig T, Relton CL, Waldenberger M, Jarvelin MR, Bollati V, Soong R, Spector TD, Scott J, McCarthy MI, Elliott P, Bell JT, Matullo G, Gieger C, Koener JS, Gallert H, Chambers JC. Epigenome-wide association study of body mass index, and the adverse outcomes of adiposity. *Nature.* 2017 Jan 5;541(7635):81-86. doi: 10.1038/nature20784.

Zernakova DV, Deelen P, Vermaat M, van Iterson M, van Galen M, Arindrarto W, van 't Hof P, Mei H, van Dijk F, Westra HJ, Bonder MJ, van Rooij J, Verkerk M, Jhamai PM, Moed M, Kielbasa SM, Bot J, Nooren I, Pool R, van Dongen J, Hottenga JJ, Stehouwer CD, van der Kallen CJ, Schalkwijk CG, Zernakova A, Li Y, Tigchelaar EF, de Klein N, Beekman M, Deelen J, van Heemst D, van den Berg LH, Hofman A, Uitterlinden AG, van Greevenbroek MM, Veldink JH, Boomsma DI, van Duijn CM, Wijmenga C, Slagboom PE, Swertz MA, Isaacs A, van Meurs JB, Jansen R, Heijmans BT, 't Hoen PA, Franke L. Identification of context-dependent expression quantitative trait loci in whole blood. *Nat Genet.* 2017 Jan;49(1):139-145. doi: 10.1038/ng.3737.

Zwamborn RA, Sliker RC, Mulder PC, Zoetemelk I, Verschuren L, Suchiman HE, Toet KH, Droog S, Slagboom PE, Kooistra T, Kleemann R, Heijmans BT. Prolonged high-fat diet induces gradual and fat depot-specific DNA methylation changes in adult mice. *Sci Rep.* 2017 Mar 3;7:43261. doi: 10.1038/srep43261.

2016

van den Akker EB, Pitts SJ, Deelen J, Moed MH, Potluri S, van Rooij J, Suchiman HE, Lakenberg N, de Dijcker WJ, Uitterlinden AG, Kraaij R, Hofman A, de Craen AJ, Houwing-Duistermaat JJ, van Ommen GB, Cox DR, van Meurs JB, Beekman M, Reinders MJ, Slagboom PE. Uncompromised ten-year survival of oldest old carrying somatic mutations in DNMT3A and TET2. *Blood.* 2016 Mar 17;127(11):1512-5. doi: 10.1182/blood-2015-12-685925.

Beekman M, Uh HW, van Heemst D, Wuhrer M, Ruhaak LR, Gonzalez-Covarrubias V, Hankemeier T, Houwing-Duistermaat JJ, Slagboom PE. Classification for Longevity Potential: The Use of Novel Biomarkers. *Front Public Health.* 2016 Oct 28;4:233.

Bomer N, Cornelis FM, Ramos YF, den Hollander W, Storms L, van der Breggen R, Lakenberg N, Slagboom PE, Meulenbelt I, Lories RJ. The effect of forced exercise on knee joints in Dio2^{-/-} mice: type II iodothyronine deiodinase-deficient mice are less prone to develop OA-like cartilage damage upon excessive mechanical stress. *Ann Rheum Dis.* 2016 Mar;75(3):571-7. doi: 10.1136/annrheumdis-2014-206608.

Bomer N, Cornelis FM, Ramos YF, den Hollander W, Lakenberg N, van der Breggen R, Storms L, Slagboom PE, Lories RJ, Meulenbelt I. Aberrant Calreticulin Expression in Articular Cartilage of Dio2 Deficient Mice. *PLoS One.* 2016 May 10;11(5):e0154999. doi: 10.1371/journal.pone.0154999.

Bomer N, den Hollander W, Suchiman H, Houtman E, Sliker RC, Heijmans BT, Slagboom PE, Nelissen RG, Ramos YF, Meulenbelt I. Neo-cartilage engineered from primary chondrocytes is epigenetically similar to autologous cartilage, in contrast to using mesenchymal stem cells. *Osteoarthritis Cartilage.* 2016 Aug;24(8):1423-30. doi: 10.1016/j.joca.2016.03.009

Broekhuizen K, de Gelder J, Wijsman CA, Wijsman LW, Westendorp RG, Verhagen E, Slagboom PE, de Craen AJ, van Mechelen W, van Heemst D, van der Ouderaa F, Mooijaart SP. An Internet-Based Physical Activity Intervention to Improve Quality of Life of Inactive Older Adults: A Randomized Controlled Trial. *J Med Internet Res.* 2016 Apr 27;18(4):e74. doi: 10.2196/jmir.4335

Castaño-Betancourt MC, Evans DS, Ramos YF, Boer CG, Metrustry S, Liu Y, den Hollander W, van Rooij J, Kraus VB, Yau MS, Mitchell BD, Muir K, Hofman A, Doherty M, Doherty S, Zhang W, Kraaij R, Rivadeneira F, Barrett-Connor E, Maciewicz RA, Arden N, Nelissen RG, Kloppenburg M, Jordan JM, Nevitt MC, Slagboom EP, Hart DJ, Lafeber F, Stykarsdottir U, Zeggini E, Evangelou E, Spector TD, Uitterlinden AG, Lane NE, Meulenbelt I, Valdes AM, van Meurs JB. Novel Genetic Variants for Cartilage Thickness and Hip Osteoarthritis. *PLoS Genet.* 2016 Oct 4;12(10):e1006260. doi: 10.1371/journal.pgen.1006260

Ciccarone F, Malavolta M, Calabrese R, Guastafierro T, Bacalini MG, Reale A, Franceschi C, Capri M, Hervonen A, Hurme M, Grubeck-Loebenstein B, Koller B, Bernhardt J, Schön C, Slagboom PE, Toussaint O, Sikora E, Gonos ES, Breusing N, Grune T, Jansen E, Dollé M, Moreno-Villanueva M, Sindlinger T, Bürkle A, Zampieri M, Caiafa P. Age-dependent expression of DNMT1 and DNMT3B in PBMCs from a large European population enrolled in the MARK-AGE study. *Aging Cell.* 2016 Aug;15(4):755-65. doi: 10.1111/acer.12485.

Djuardi Y, Supali T, Wibowo H, Heijmans BT, Deelen J, Slagboom EP, Houwing-Duistermaat JJ, Sartono E, Yazdanbakhsh M. Maternal and child cytokine relationship in early life is not altered by cytokine gene polymorphisms. *Genes Immun.* 2016 Dec;17(7):380-385. doi: 10.1038/gene.2016.35.

Dekkers KF, Slagboom PE, Jukema JW, Heijmans BT. The multifaceted interplay between lipids and epigenetics. *Curr Opin Lipidol.* 2016 Jun;27(3):288-94. doi: 10.1097/MOL.0000000000000301.

Dekkers KF, van Iterson M, Sliker RC, Moed MH, Bonder MJ, van Galen M, Mei H, Zhernakova DV, van den Berg LH, Deelen J, van Dongen J, van Heemst D, Hofman A, Hottenga JJ, van der Kallen CJ, Schalkwijk CG, Stehouwer CD, Tigchelaar EF, Uitterlinden AG, Willemsen G, Zhernakova A, Franke L, 't Hoen PA, Jansen R, van Meurs J, Boomsma DI, van Duijn CM, van Greevenbroek MM, Veldink JH, Wijmenga C; BIOS Consortium, van Zwet EW, Slagboom PE, Jukema JW, Heijmans BT. Blood lipids influence DNA methylation in circulating cells. *Genome Biol.* 2016 Jun 27;17(1):138. doi: 10.1186/s13059-016-1000-6

van Dongen J, Nivard MG, Willemsen G, Hottenga JJ, Helmer Q, Dolan CV, Ehli EA, Davies GE, van Iterson M, Breeze CE, Beck S; BIOS Consortium, Suchiman HE, Jansen R, van Meurs JB, Heijmans BT, Slagboom PE, Boomsma DI. Genetic and environmental influences interact with age and sex in shaping the human methylome. *Nat Commun.* 2016 Apr 7;7:11115. doi: 10.1038/ncomms11115

van Doorn R, Slieker RC, Boonk SE, Zoutman WH, Goeman JJ, Bagot M, Michel L, Tensen CP, Willemze R, Heijmans BT, Vermeer MH. Epigenomic analysis of Sézary syndrome defines patterns of aberrant DNA methylation and identifies diagnostic markers. *J Invest Dermatol.* 2016 Sep;136(9):1876-84. doi: 10.1016/j.jid.2016.03.042.

Hehir-Kwa JY, Marschall T, Kloosterman WP, Francioli LC, Baaijens JA, Dijkstra LJ, Abdellaoui A, Koval V, Thung DT, Wardenaar R, Renkens I, Coe BP, Deelen P, de Ligt J, Lameijer EW, van Dijk F, Hormozdiari F; Genome of the Netherlands Consortium., Uitterlinden AG, van Duijn CM, Eichler EE, de Bakker PI, Swertz MA, Wijmenga C, van Ommen GB, Slagboom PE, Boomsma DI, Schönhuth A, Ye K, Guryev V. A high-quality human reference panel reveals the complexity and distribution of genomic structural variants. *Nat Commun.* 2016 Oct 6;7:12989. doi: 10.1038/ncomms12989.

Hillger JM, Diehl C, van Spronsen E, Boomsma DI, Slagboom PE, Heitman LH, IJzerman AP. Getting personal: Endogenous adenosine receptor signaling in lymphoblastoid cell lines. *Biochem Pharmacol.* 2016 Sep 1;115:114-22. doi: 10.1016/j.bcp.2016.06.006.

Huétink K, van der Voort P, Bloem JL, Nelissen RG, Meulenbelt I. Genetic Contribution to the Development of Radiographic Knee Osteoarthritis in a Population Presenting with Nonacute Knee Symptoms a Decade Earlier. *Clin Med Insights Arthritis Musculoskelet Disord.* 2016 Apr 28;9:57-63. doi: 10.4137/CMAMD.S30657.

Ibrahim-Verbaas CA, Bressler J, Dobbins M, Schuur M, Smith AV, Bis JC, Davies G, Trompet S, Smith JA, Wolf C, Chibnik LB, Liu Y, Vitart V, Kirin M, Petrovic K, Polasek O, Zgaga L, Fawns-Ritchie C, Hoffmann P, Karjalainen J, Lahti J, Llewellyn DJ, Schmidt CO, Mather KA, Chouraki V, Sun Q, Resnick SM, Rose LM, Oldmeadow C, Stewart M, Smith BH, Gudnason V, Yang Q, Mirza SS, Jukema JW, deJager PL, Harris TB, Liewald DC, Amin N, Coker LH, Stegle O, Lopez OL, Schmidt R, Teumer A, Ford I, Karbalai N, Becker JT, Jonsdottir MK, Au R, Fehrmann RS, Herms S, Nalls M, Zhao W, Turner ST, Yaffe K, Lohman K, van Swieten JC, Kardinaal SL, Knopman DS, Meeks WM, Heiss G, Holliday EG, Schofield PW, Tanaka T, Stott DJ, Wang J, Ridker P, Gow AJ, Pattie A, Starr JM, Hocking LJ, Armstrong NJ, McLachlan S, Shulman JM, Pilling LC, Eiriksdottir G, Scott RJ, Kochan NA, Palotie A, Hsieh YC, Eriksson JG, Penman A, Gottesman RF, Oostra BA, Yu L, DeStefano AL, Beiser A, Garcia M, Rotter JI, Nöthen MM, Hofman A, Slagboom PE, Westendorp RG, Buckley BM, Wolf PA, Uitterlinden AG, Psaty BM, Grabe HJ, Bandinelli S, Chasman DI, Grodstein F, Räikkönen K, Lambert JC, Porteous DJ; Generation Scotland, Price JF, Sachdev PS, Ferrucci L, Attia JR, Rudan I, Hayward C, Wright AF, Wilson JF, Cichon S, Franke L, Schmidt H, Ding J, de Craen AJ, Fornage M, Bennett DA, Deary IJ, Ikram MA, Launer LJ, Fitzpatrick AL, Seshadri S, van Duijn CM, Mosley TH. GWAS for executive function and processing speed suggests involvement of the *CADM2* gene. *Mol Psychiatry.* 2016 Feb;21(2):189-97. doi: 10.1038/mp.2015.37.

Kettunen J, Demirkan A, Würtz P, Draisma HH, Haller T, Rawal R, Vaarhorst A, Kangas AJ, Lyytikäinen LP, Pirinen M, Pool R, Sarin AP, Soininen P, Tukiainen T, Wang Q, Tiainen M, Tynkkynen T, Amin N, Zeller T, Beekman M, Deelen J, van Dijk KW, Esko T, Hottenga JJ, van Leeuwen EM, Lehtimäki T, Mihailov E, Rose RJ, de Craen AJ, Gieger C, Kähönen M, Perola M, Blankenberg S, Savolainen MJ, Verhoeven A, Viikari J, Willemsen G, Boomsma DI, van Duijn CM, Eriksson J, Jula A, Järvelin MR, Kaprio J, Metspalu A, Raitakari O, Salomaa V, Slagboom PE, Waldenberger M, Ripatti S, Ala-Korpela M. Genome-wide study for circulating metabolites identifies 62 loci and reveals novel systemic effects of LPA. *Nat Commun.* 2016 Mar 23;7:11122. doi: 10.1038/ncomms11122

Kilpeläinen TO, Carli JF, Skowronski AA, Sun Q, Kriebel J, Feitosa MF, Hedman ÅK, Drong AW, Hayes JE, Zhao J, Pers TH, Schick U, Grarup N, Kutalik Z, Trompet S, Mangino M, Kristiansson K, Beekman M, Lyytikäinen LP, Eriksson J, Henneman P, Lahti J, Tanaka T, Luan J, Greco M FD, Pasko D, Renström F, Willems SM, Mahajan A, Rose LM, Guo X, Liu Y, Kleber ME, Pérusse L, Gaunt T, Ahluwalia TS, Ju Sung Y, Ramos YF, Amin N, Amuzu A, Barroso I, Bellis C, Blangero J, Buckley BM, Böhringer S, I Chen YD, de Craen AJ, Crosslin DR, Dale CE, Dastani Z, Day FR, Deelen J, Delgado GE, Demirkan A, Finucane FM, Ford I, Garcia ME, Gieger C, Gustafsson S, Hallmans G, Hankinson SE, Havulinna AS, Herder C, Hernandez D, Hicks AA, Hunter DJ, Illig T, Ingelsson E, Ioan-Facsinay A, Jansson JO, Jenny NS, Jørgensen ME, Jørgensen T, Karlsson M, Koenig W, Kraft P, Kwekkeboom J, Laatikainen T, Ladwig KH, LeDuc CA, Lowe G, Lu Y, Marques-Vidal P, Meisinger C, Menni C, Morris AP, Myers RH, Männistö S, Nalls MA, Paternoster L, Peters A, Pradhan AD, Rankinen T, Rasmussen-Torvik LJ, Rathmann W, Rice TK, Brent Richards J, Ridker PM, Sattar N, Savage DB, Söderberg S, Timpson NJ, Vandenput L, van Heemst D, Uh HW, Vohl MC, Walker M, Wichmann HE, Widén E, Wood AR, Yao J, Zeller T, Zhang Y, Meulenbelt I, Kloppenburg M, Astrup A, Sørensen TI, Sarzynski MA, Rao DC, Jousilahti P, Vartiainen E, Hofman A, Rivadeneira F, Uitterlinden AG, Kajantie E, Osmond C, Palotie A, Eriksson JG, Heliövaara M, Knekt PB, Koskinen S, Jula A, Perola M, Huupponen

RK, Viikari JS, Kähönen M, Lehtimäki T, Raitakari OT, Mellström D, Lorentzon M, Casas JP, Bandinelli S, März W, Isaacs A, van Dijk KW, van Duijn CM, Harris TB, Bouchard C, Allison MA, Chasman DI, Ohlsson C, Lind L, Scott RA, Langenberg C, Wareham NJ, Ferrucci L, Frayling TM, Pramstaller PP, Borecki IB, Waterworth DM, Bergmann S, Waeber G, Vollenweider P, Vestergaard H, Hansen T, Pedersen O, Hu FB, Eline Slagboom P, Grallert H, Spector TD, Jukema JW, Klein RJ, Schadt EE, Franks PW, Lindgren CM, Leibel RL, Loos RJ. Genome-wide meta-analysis uncovers novel loci influencing circulating leptin levels. *Nat Commun.* 2016 Feb 1;7:10494. doi: 10.1038/ncomms10494

Koopman JJ, Pijpe J, Böhringer S, van Bodegom D, Eriksson UK, Sanchez-Faddeev H, Ziem JB, Zwaan B, Slagboom PE, de Knijff P, Westendorp RG. Genetic variants determining survival and fertility in an adverse African environment: a population-based large-scale candidate gene association study. *Aging (Albany NY).* 2016 Jul;8(7):1364-83. doi: 10.18632/aging.100986.

van der Kroef S, Noordam R, Deelen J, Akintola AA, Jansen SW, Postmus I, Wijsman CA, Beekman M, Mooijaart SP, Slagboom PE, van Heemst D. Association between the rs7903146 Polymorphism in the TCF7L2 Gene and Parameters Derived with Continuous Glucose Monitoring in Individuals without Diabetes. *PLoS One.* 2016 Feb 25;11(2):e0149992. doi: 10.1371/journal.pone.0149992. eCollection 2016.

Kroon M, Lameijer EW, Lakenberg N, Hehir-Kwa JY, Thung DT, Slagboom PE, Kok JN, Ye K. Detecting Dispersed Duplications in High-Throughput Sequencing Data using a Database-Free Approach. *Bioinformatics.* 2016 Feb 15;32(4):505-10. doi: 10.1093/bioinformatics/btv621.

de Lange-Brokaar BJ, Bijsterbosch J, Kornaat PR, Yusuf E, Ioan-Facsinay A, Zuurmond AM, Kroon HM, Meulenbelt I, Bloem JL, Kloppenburg M. Radiographic progression of knee osteoarthritis is associated with MRI abnormalities in both the patellofemoral and tibiofemoral joint. *Osteoarthritis Cartilage.* 2016 Mar;24(3):473-9. doi: 10.1016/j.joca.2015.09.021

van Leeuwen EM, Sabo A, Bis JC, Huffman JE, Manichaikul A, Smith AV, Feitosa MF, Demissie S, Joshi PK, Duan Q, Marten J, van Klinken JB, Surakka I, Nolte IM, Zhang W, Mbarek H, Li-Gao R, Trompet S, Verweij N, Evangelou E, Lytikäinen LP, Tayo BO, Deelen J, van der Most PJ, van der Laan SW, Arking DE, Morrison A, Dehghan A, Franco OH, Hofman A, Rivadeneira F, Sijbrands EJ, Uitterlinden AG, Mychaleckyj JC, Campbell A, Hocking LJ, Padmanabhan S, Brody JA, Rice KM, White CC, Harris T, Isaacs A, Campbell H, Lange LA, Rudan I, Kolcic I, Navarro P, Zemunik T, Salomaa V; LifeLines Cohort Study, Kooner AS, Kooner JS, Lehne B, Scott WR, Tan ST, de Geus EJ, Milaneschi Y, Penninx BW, Willemsen G, de Mutsert R, Ford I, Gansevoort RT, Segura-Lepe MP, Raitakari OT, Viikari JS, Nikus K, Forrester T, McKenzie CA, de Craen AJ, de Ruijter HM, Pasterkamp G, Snieder H, Oldehinkel AJ, Slagboom PE, Cooper RS, Kähönen M, Lehtimäki T, Elliott P, van der Harst P, Jukema JW, Mook-Kanamori DO, Boomsma DI, Chambers JC, Swertz M, Ripatti S, Willems van Dijk K, Vitart V, Polasek O, Hayward C, Wilson JG, Wilson JF, Gudnason V, Rich SS, Psaty BM, Borecki IB, Boerwinkle E, Rotter JI, Cupples LA, van Duijn CM. Meta-analysis of 49 549 individuals imputed with the 1000 Genomes Project reveals an exonic damaging variant in ANGPTL4 determining fasting TG levels. *J Med Genet.* 2016 Jul;53(7):441-9. doi: 10.1136/jmedgenet-2015-103439.

Li M, Rothwell R, Vermaat M, Wachsmuth M, Schröder R, Laros JF, van Oven M, de Bakker PI, Bovenberg JA, van Duijn CM, van Ommen GB, Slagboom PE, Swertz MA, Wijmenga C; Genome of the Netherlands Consortium, Kayser M, Boomsma DI, Zöllner S, de Knijff P, Stoneking M. Transmission of human mtDNA heteroplasmy in the Genome of the Netherlands families: support for a variable-size bottleneck. *Genome Res.* 2016 Apr;26(4):417-26. doi: 10.1101/gr.203216.115.

Liu F, Hamer MA, Deelen J, Lall JS, Jacobs L, van Heemst D, Murray PG, Wollstein A, de Craen AJ, Uh HW, Zeng C, Hofman A, Uitterlinden AG, Houwing-Duistermaat JJ, Pardo LM, Beekman M, Slagboom PE, Nijsten T, Kayser M, Gunn DA. The MC1R Gene and Youthful Looks. *Curr Biol.* 2016 May 9;26(9):1213-20. doi: 10.1016/j.cub.2016.03.008.

McCarthy S, Das S, Kretschmar W, Delaneau O, Wood AR, Teumer A, Kang HM, Fuchsberger C, Danecek P, Sharp K, Luo Y, Sidore C, Kwong A, Timpson N, Koskinen S, Vrieze S, Scott LJ, Zhang H, Mahajan A, Veldink J, Peters U, Pato C, van Duijn CM, Gillies CE, Gandin I, Mezzavilla M, Gilly A, Cocca M, Traglia M, Angius A, Barrett JC, Boomsma D, Branham K, Breen G, Brummett CM, Busonero F, Campbell H, Chan A, Chen S, Chew E, Collins FS, Corbin LJ, Smith GD, Dedoussis G, Dorr M, Farmaki AE, Ferrucci L, Forer L, Fraser RM, Gabriel S, Levy S, Groop L, Harrison T, Hattersley A, Holmen OL, Hveem K, Kretzler M, Lee JC, McGue M, Meitinger T, Melzer D, Min JL, Mohlke KL, Vincent JB, Nauck M, Nickerson D, Palotie A, Pato M, Pirastu N, McInnis M, Richards JB, Sala C, Salomaa V, Schlessinger D, Schoenherr S, Slagboom PE, Small K, Spector T, Stambolian D, Tuke M, Tuomilehto J, Van den Berg LH, Van Rheenen W, Volker U, Wijmenga C, Toniolo D, Zeggini E, Gasparini P, Sampson MG, Wilson

JF, Frayling T, de Bakker PI, Swertz MA, McCarroll S, Kooperberg C, Dekker A, Altshuler D, Willer C, Iacono W, Ripatti S, Soranzo N, Walter K, Swaroop A, Cucca F, Anderson CA, Myers RM, Boehnke M, McCarthy MI, Durbin R; Haplotype Reference Consortium. A reference panel of 64,976 haplotypes for genotype imputation. *Nat Genet.* 2016 Oct;48(10):1279-83. doi: 10.1038/ng.3643.

Meulenbelt I, Bhutani N, den Hollander W, Gay S, Oppermann U, Reynard LN, Skelton AJ, Young DA, Beier F, Loughlin J. The first international workshop on the epigenetics of osteoarthritis. *Connect Tissue Res.* 2016 Mar 30:1-12

Noordam R, Gunn DA, van Drielen K, Westgate G, Slagboom PE, de Craen AJ, van Heemst D. Low circulating insulin-like growth factor-1 and high density lipoprotein are associated with hair loss in middle-aged women. *Aging (Albany NY).* 2016 Aug;8(8):1790-801. doi: 10.18632/aging.101017

Nygaard M, Debrabant B, Tan Q, Deelen J, Andersen-Ranberg K, de Craen AJ, Beekman M, Jeune B, Slagboom PE, Christensen K, Christiansen L. Copy number variation associates with mortality in long-lived individuals: a genome-wide assessment. *Aging Cell.* 2016 Feb;15(1):49-55. doi: 10.1111/acel.12407.

Palamara PF, Francioli LC, Wilton PR, Genovese G, Gusev A, Finucane HK, Sankararaman S; Genome of the Netherlands Consortium, Sunyaev SR, de Bakker PI, Wakeley J, Pe'er I, Price AL. Leveraging Distant Relatedness to Quantify Human Mutation and Gene-Conversion Rates. *Am J Hum Genet.* 2015 Dec 3;97(6):775-89. doi: 10.1016/j.ajhg.2015.10.006.

Peters MJ, Ramos YF, den Hollander W, Schiphof D, Hofman A, Uitterlinden AG, Oei EH, Slagboom PE, Kloppenburg M, Bloem JL, Bierma-Zeinstra SM, Meulenbelt I, van Meurs JB. Associations between joint effusion in the knee and gene expression levels in the circulation: a meta-analysis. *F1000Res.* 2016 Jan 27;5:109. doi: 10.12688/f1000research.7763.1.

Postmus I, Warren HR, Trompet S, Arsenault BJ, Avery CL, Bis JC, Chasman DI, de Keyser CE, Deshmukh HA, Evans DS, Feng Q, Li X, Smit RA, Smith AV, Sun F, Taylor KD, Arnold AM, Barnes MR, Barratt BJ, Betteridge J, Boehnke SM, Boerwinkle E, Buckley BM, Chen YI, de Craen AJ, Cummings SR, Denny JC, Dubé MP, Durrington PN, Eiriksdottir G, Ford I, Guo X, Harris TB, Heckbert SR, Hofman A, Hovingh GK, Kastelein JJ, Launer LJ, Liu CT, Liu Y, Lumley T, McKeigue PM, Munroe PB, Neil A, Nickerson DA, Nyberg F, O'Brien E, O'Donnell CJ, Post W, Poulter N, Vasan RS, Rice K, Rich SS, Rivadeneira F, Sattar N, Sever P, Shaw-Hawkins S, Shields DC, Slagboom PE, Smith NL, Smith JD, Sotoodehnia N, Stanton A, Stott DJ, Stricker BH, Stürmer T, Uitterlinden AG, Wei WQ, Westendorp RG, Whitsel EA, Wiggins KL, Wilke RA, Ballantyne CM, Colhoun HM, Cupples LA, Franco OH, Gudnason V, Hitman G, Palmer CN, Psaty BM, Ridker PM, Stafford JM, Stein CM, Tardif JC, Caulfield MJ, Jukema JW, Rotter JJ, Krauss RM. Meta-analysis of genome-wide association studies of HDL cholesterol response to statins. *J Med Genet.* 2016 Dec;53(12):835-845. doi: 10.1136/jmedgenet-2016-103966.

Ricaño-Ponce I, Zhernakova DV, Deelen P, Luo O, Li X, Isaacs A, Karjalainen J, Di Tommaso J, Borek ZA, Zorro MM, Gutierrez-Achury J, Uitterlinden AG, Hofman A, van Meurs J; BIOS consortium; Lifelines Cohort Study, Netea MG, Jonkers IH, Withoff S, van Duijn CM, Li Y, Ruan Y, Franke L, Wijmenga C, Kumar V. Refined mapping of autoimmune disease associated genetic variants with gene expression suggests an important role for non-coding RNAs. *J Autoimmun.* 2016 Apr;68:62-74. doi: 10.1016/j.jaut.2016.01.002.

van de Rest O, Schutte BA, Deelen J, Stassen SA, van den Akker EB, van Heemst D, Dibbets-Schneider P, van Dipten-van der Veen RA, Kelderman M, Hankemeier T, Mooijaart SP, van der Grond J, Houwing-Duistermaat JJ, Beekman M, Feskens EJ, Slagboom PE. Metabolic effects of a 13-weeks lifestyle intervention in older adults: The Growing Old Together Study. *Aging (Albany NY).* 2016 Jan;8(1):111-26.

van Rooden S, Buijs M, van Vliet ME, Versluis MJ, Webb AG, Oleksik AM, van de Wiel L, Middelkoop HA, Blauw GJ, Weverling-Rynsburger AW, Goos JD, van der Flier WM, Koene T, Scheltens P, Barkhof F, van de Rest O, Slagboom PE, van Buchem MA, van der Grond J. Cortical phase changes measured using 7-T MRI in subjects with subjective cognitive impairment, and their association with cognitive function. *NMR Biomed.* 2014 Dec 19. doi: 10.1002/nbm.3248

Rusli F, Deelen J, Andriyani E, Boekschoten MV, Lute C, van den Akker EB, Müller M, Beekman M, Steegenga WT. Fibroblast growth factor 21 reflects liver fat accumulation and dysregulation of signalling pathways in the liver of C57BL/6J mice. *Sci Rep.* 2016 Jul 29;6:30484. doi: 10.1038/srep30484

Sala M, van der Grond J, de Mutsert R, van Heemst D, Slagboom PE, Kroft LJ, de Roos A. Liver Fat Assessed With CT Relates to MRI Markers of Incipient Brain Injury in Middle-Aged to Elderly Overweight Persons. *AJR Am J Roentgenol.* 2016 May;206(5):1087-92. doi: 10.2214/AJR.15.15251.

Schoeman MA, Pijls BG, Oostlander AE, Keurentjes JC, Valstar ER, Nelissen RG, Meulenbelt I. Innate immune response and implant loosening: Interferon gamma is inversely associated with early migration of total knee prostheses. *J Orthop Res.* 2016 Jan;34(1):121-6. doi: 10.1002/jor.22988.

Schutte BA, van den Akker EB, Deelen J, van de Rest O, van Heemst D, Feskens EJ, Beekman M, Slagboom PE. The effect of standardized food intake on the association between BMI and 1H-NMR metabolites. *Sci Rep.* 2016 Dec 14;6:38980. doi: 10.1038/srep38980

Slieker RC, van Iterson M, Luijk R, Beekman M, Zhernakova DV, Moed MH, Mei H, van Galen M, Deelen P, Bonder MJ, Zhernakova A, Uitterlinden AG, Tigchelaar EF, Stehouwer CD, Schalkwijk CG, van der Kallen CJ, Hofman A, van Heemst D, de Geus EJ, van Dongen J, Deelen J, van den Berg LH, van Meurs J, Jansen R, 't Hoen PA, Franke L, Wijmenga C, Veldink JH, Swertz MA, van Greevenbroek MM, van Duijn CM, Boomsma DI; BIOS consortium., Slagboom PE, Heijmans BT. Age-related accrual of methylomic variability is linked to fundamental ageing mechanisms. *Genome Biol.* 2016 Sep 22;17(1):191.

van der Spoel E, Roelfsema F, Jansen SW, Akintola AA, Ballieux BE, Cobbaert CM, Blauw GJ, Slagboom PE, Westendorp RG, Pijl H, van Heemst D. Familial Longevity Is Not Associated with Major Differences in the Hypothalamic-Pituitary-Gonadal Axis in Healthy Middle-Aged Men. *Front Endocrinol (Lausanne).* 2016 Nov 9;7:143

Stijntjes M, Meskers CG, de Craen AJ, van Lummel RC, Rispens SM, Slagboom PE, Maier AB. Effect of calendar age on physical performance: A comparison of standard clinical measures with instrumented measures in middle-aged to older adults. *Gait Posture.* 2016 Mar;45:12-8. doi: 10.1016/j.gaitpost.2015.12.018.

Stijntjes M, de Craen AJ, van der Grond J, Meskers CG, Slagboom PE, Maier AB. Cerebral Microbleeds and Lacunar Infarcts Are Associated with Walking Speed Independent of Cognitive Performance in Middle-Aged to Older Adults. *Gerontology.* 2016;62(5):500-7. doi: 10.1159/000444583.

Sutton EF, Gilmore LA, Dunger DB, Heijmans BT, Hivert MF, Ling C, Martinez JA, Ozanne SE, Simmons RA, Szyf M, Waterland RA, Redman LM, Ravussin E. Developmental programming: State-of-the-science and future directions: Summary from a Pennington Biomedical symposium. *Obesity (Silver Spring).* 2016 May;24(5):1018-26. doi: 10.1002/oby.21487.

Tan Q, Heijmans BT, Hjelmborg JV, Soerensen M, Christensen K, Christiansen L. Epigenetic drift in the aging genome: a ten-year follow-up in an elderly twin cohort. *Int J Epidemiol.* 2016 Aug;45(4):1146-1158.

Teumer A, Qi Q, Nethander M, Aschard H, Bandinelli S, Beekman M, Berndt SI, Bidlingmaier M, Broer L; CHARGE Longevity Working Group, Cappola A, Ceda GP, Chanock S, Chen MH, Chen TC, Chen YI, Chung J, Del Greco Miglianico F, Eriksson J, Ferrucci L, Friedrich N, Gnewuch C, Goodarzi MO, Grarup N, Guo T, Hammer E, Hayes RB, Hicks AA, Hofman A, Houwing-Duistermaat JJ, Hu F, Hunter DJ, Husemoen LL, Isaacs A, Jacobs KB, Janssen JA, Jansson JO, Jehmlich N, Johnson S, Juul A, Karlsson M, Kilpelainen TO, Kovacs P, Kraft P, Li C, Linneberg A, Liu Y, Loos RJ; Body Composition Genetics Consortium, Lorentzon M, Lu Y, Maggio M, Magi R, Meigs J, Mellström D, Nauck M, Newman AB, Pollak MN, Pramstaller PP, Prokopenko I, Psaty BM, Reincke M, Rimm EB, Rotter JI, Saint Pierre A, Schurmann C, Seshadri S, Sjögren K, Slagboom PE, Strickler HD, Stumvoll M, Suh Y, Sun Q, Zhang C, Svensson J, Tanaka T, Tare A, Tönjes A, Uh HW, van Duijn CM, van Heemst D, Vandenput L, Vasan RS, Völker U, Willems SM, Ohlsson C, Wallaschofski H, Kaplan RC. Genomewide meta-analysis identifies loci associated with IGF-I and IGFBP-3 levels with impact on age-related traits. *Aging Cell.* 2016 Oct;15(5):811-24. doi: 10.1111/acel.12490.

Trompet S, Postmus I, Slagboom PE, Heijmans BT, Smit RA, Maier AB, Buckley BM, Sattar N, Stott DJ, Ford I, Westendorp RG, de Craen AJ, Jukema JW. Non-response to (statin) therapy: the importance of distinguishing non-responders from non-adherers in pharmacogenetic studies. *Eur J Clin Pharmacol.* 2016 Apr;72(4):431-7. doi: 10.1007/s00228-015-1994-9.

Valentini E, Zampieri M, Malavolta M, Bacalini MG, Calabrese R, Guastafierro T, Reale A, Franceschi C, Hervonen A, Köller B, Bernhardt J, Slagboom PE, Toussaint O, Sikora E, Gonos ES, Breusing N, Grune T, Jansen E, Dollé ME, Moreno-Villanueva M, Sindlinger T, Bürkle A, Ciccarone F, Caiafa P. Analysis of the machinery and intermediates

of the 5hmC-mediated DNA demethylation pathway in aging on samples from the MARK-AGE Study. *Aging (Albany NY)*. 2016 Aug 29;8(9):1896-1922. doi: 10.18632/aging.101022.

de Vries PS, Chasman DI, Sabater-Lleal M, Chen MH, Huffman JE, Steri M, Tang W, Teumer A, Marioni RE, Grossmann V, Hottenga JJ, Trompet S, Müller-Nurasyid M, Zhao JH, Brody JA, Kleber ME, Guo X, Wang JJ, Auer PL, Attia JR, Yanek LR, Ahluwalia TS, Lahti J, Venturini C, Tanaka T, Bielak LF, Joshi PK, Rocanin-Arjo A, Kolcic I, Navarro P, Rose LM, Oldmeadow C, Riess H, Mazur J, Basu S, Goel A, Yang Q, Ghanbari M, Willemsen G, Rumley A, Fiorillo E, de Craen AJ, Grotevendt A, Scott R, Taylor KD, Delgado GE, Yao J, Kifley A, Kooperberg C, Qayyum R, Lopez LM, Berentzen TL, Rääkkönen K, Mangino M, Bandinelli S, Peyser PA, Wild S, Trégouët DA, Wright AF, Marten J, Zemunik T, Morrison AC, Sennblad B, Tofler G, de Maat MP, de Geus EJ, Lowe GD, Zoledziewska M, Sattar N, Binder H, Völker U, Waldenberger M, Khaw KT, McKnight B, Huang J, Jenny NS, Holliday EG, Qi L, McEvoy MG, Becker DM, Starr JM, Sarin AP, Hysi PG, Hernandez DG, Jhun MA, Campbell H, Hamsten A, Rivadeneira F, McArdle WL, Slagboom PE, Zeller T, Koenig W, Psaty BM, Haritunians T, Liu J, Palotie A, Uitterlinden AG, Stott DJ, Hofman A, Franco OH, Polasek O, Rudan I, Morange PE, Wilson JF, Kardia SL, Ferrucci L, Spector TD, Eriksson JG, Hansen T, Deary IJ, Becker LC, Scott RJ, Mitchell P, März W, Wareham NJ, Peters A, Greinacher A, Wild PS, Jukema JW, Boomsma DI, Hayward C, Cucca F, Tracy R, Watkins H, Reiner AP, Folsom AR, Ridker PM, O'Donnell CJ, Smith NL, Strachan DP, Dehghan A. A meta-analysis of 120,246 individuals identifies 18 new loci for fibrinogen concentration. *Hum Mol Genet*. Jan 15;25(2):358-70. doi: 10.1093/hmg/ddv454.

Ye K, Wang J, Jayasinghe R, Lameijer EW, McMichael JF, Ning J, McLellan MD, Xie M, Cao S, Yellapantula V, Huang KL, Scott A, Foltz S, Niu B, Johnson KJ, Moed M, Slagboom PE, Chen F, Wendl MC, Ding L. Systematic discovery of complex insertions and deletions in human cancers. *Nat Med*. Jan;22(1):97-104. doi: 10.1038/nm.4002.

Waaijer ME, Croco E, Westendorp RG, Slagboom PE, Sedivy JM, Lorenzini A, Maier AB. DNA damage markers in dermal fibroblasts in vitro reflect chronological donor age. *Aging (Albany NY)*. 2016 Jan;8(1):147-57.

Waaijer ME, Gunn DA, Adams PD, Pawlikowski JS, Griffiths CE, van Heemst D, Slagboom PE, Westendorp RG, Maier AB. P16INK4a Positive Cells in Human Skin Are Indicative of Local Elastic Fiber Morphology, Facial Wrinkling, and Perceived Age. *J Gerontol A Biol Sci Med Sci*. 2016 Aug;71(8):1022-8. doi: 10.1093/gerona/glv114.

Zeng Y, Nie C, Min J, Liu X, Li M, Chen H, Xu H, Wang M, Ni T, Li Y, Yan H, Zhang JP, Song C, Chi LQ, Wang HM, Dong J, Zheng GY, Lin L, Qian F, Qi Y, Liu X, Cao H, Wang Y, Zhang L, Li Z, Zhou Y, Wang Y, Lu J, Li J, Qi M, Bolund L, Yashin A, Land KC, Gregory S, Yang Z, Gottschalk W, Tao W, Wang J, Wang J, Xu X, Bae H, Nygaard M, Christiansen L, Christensen K, Franceschi C, Lutz MW, Gu J, Tan Q, Perls T, Sebastiani P, Deelen J, Slagboom E, Hauser E, Xu H, Tian XL, Yang H, Vaupel JW. Novel loci and pathways significantly associated with longevity. *Sci Rep*. 2016 Feb 25;6:21243. doi: 10.1038/srep21243.

2015

van den Akker EB, Deelen J, Slagboom PE, Beekman M. Exome and whole genome sequencing in aging and longevity. *Adv Exp Med Biol*. 847:127-39. doi: 10.1007/978-1-4939-2404-2_6.

Akintola AA, van den Berg A, van Buchem MA, Jansen SW, Slagboom EP, Westendorp RG, van der Grond J, van Heemst D. Associations between insulin action and integrity of brain microstructure differ with familial longevity and with age. *Front Aging Neurosci*. May 28;7:92. doi: 10.3389/fnagi.2015.00092. eCollection 2015.

Akintola AA, van den Berg A, Altmann-Schneider I, Jansen SW, van Buchem MA, Slagboom PE, Westendorp RG, van Heemst D, van der Grond J. Parameters of glucose metabolism and the aging brain: a magnetization transfer imaging study of brain macro- and micro-structure in older adults without diabetes. *Age (Dordr)*. Aug;37(4):9802. doi: 10.1007/s11357-015-9802-0.

Altmann-Schneider I, de Craen AJ, van den Berg-Huysmans AA, Slagboom P, Westendorp RG, van Buchem MA, van der Grond J. An in vivo study on brain microstructure in biological and chronological ageing. *PLoS One*. Mar 25;10(3):e0120778. doi: 10.1371/journal.pone.0120778.

Bis JC, Sitlani C, Irvin R, Avery CL, Smith AV, Sun F, Evans DS, Musani SK, Li X, Trompet S, Krijthe BP, Harris TB, Quibrera PM, Brody JA, Demissie S, Davis BR, Wiggins KL, Tranah GJ, Lange LA, Sotoodehnia N, Stott DJ, Franco OH, Launer LJ, Stürmer T, Taylor KD, Cupples LA, Eckfeldt JH, Smith NL, Liu Y, Wilson JG, Heckbert SR, Buckley BM, Ikram MA, Boerwinkle E, Chen YI, de Craen AJ, Uitterlinden AG, Rotter JI, Ford I, Hofman A, Sattar N, Slagboom PE, Westendorp RG, Gudnason V, Vasani RS, Lumley T, Cummings SR, Taylor HA Jr, Post W, Jukema JW, Stricker BH, Whitsel EA, Psaty BM, Arnett D. Drug-Gene Interactions of Antihypertensive Medications and Risk of Incident

Cardiovascular Disease: A Pharmacogenomics Study from the CHARGE Consortium. *PLoS One*. Oct 30;10(10):e0140496. doi: 10.1371/journal.pone.0140496. eCollection 2015

Bomer N, den Hollander W, Ramos YF, Meulenbelt I. Translating genomics into mechanisms of disease: Osteoarthritis. *Best Pract Res Clin Rheumatol*. 2015 Dec;29(6):683-91. doi: 10.1016/j.berh.2016.01.001.

Bomer N, den Hollander W, Ramos YF, Bos SD, van der Breggen R, Lakenberg N, Pepers BA, van Eeden AE, Darvishan A, Tobi EW, Duijnisveld BJ, van den Akker EB, Heijmans BT, van Roon-Mom WM, Verbeek FJ, van Osch GJ, Nelissen RG, Slagboom PE, Meulenbelt I. Underlying molecular mechanisms of DIO2 susceptibility in symptomatic osteoarthritis. *Ann Rheum Dis*. 2015 Aug;74(8):1571-9. doi: 10.1136/annrheumdis-2013-204739.

Bousquet J, Anto JM, Berkouk K, Gergen P, Antunes JP, Augé P, Camuzat T, Bringer J, Mercier J, Best N, Bourret R, Akdis M, Arshad SH, Bedbrook A, Berr C, Bush A, Cavalli G, Charles MA, Clavel-Chapelon F, Gillman M, Gold DR, Goldberg M, Holloway JW, Iozzo P, Jacquemin S, Jeandel C, Kauffmann F, Keil T, Koppelman GH, Krauss-Etschmann S, Kuh D, Lehmann S, Carlsen KC, Maier D, Méchali M, Melén E, Moatti JP, Momas I, Nérin P, Postma DS, Ritchie K, Robine JM, Samolinski B, Siroux V, Slagboom PE, Smit HA, Sunyer J, Valenta R, Van de Perre P, Verdier JM, Vrijheid M, Wickman M, Yiallourous P, Zins M. Developmental determinants in non-communicable chronic diseases and ageing. *Thorax*. Jun;70(6):595-7. doi: 10.1136/thoraxjnl-2014-206304.

Bouwland-Both MI, van Mil NH, Tolhoek CP, Stolk L, Eilers PH, Verbiest MM, Heijmans BT, Uitterlinden AG, Hofman A, van Ijzendoorn MH, Duijts L, de Jongste JC, Tiemeier H, Steegers EA, Jaddoe VW, Steegers-Theunissen RP. Prenatal parental tobacco smoking, gene specific DNA methylation, and newborns size: the Generation R study. *Clin Epigenetics*. 2015 Aug 11;7(1):83. doi: 10.1186/s13148-015-0115-z

Broer L, Buchman AS, Deelen J, Evans DS, Faul JD, Lunetta KL, Sebastiani P, Smith JA, Smith AV, Tanaka T, Yu L, Arnold AM, Aspelund T, Benjamin EJ, De Jager PL, Eiriksdottir G, Evans DA, Garcia ME, Hofman A, Kaplan RC, Kardina SL, Kiel DP, Oostra BA, Orwoll ES, Parimi N, Psaty BM, Rivadeneira F, Rotter JI, Seshadri S, Singleton A, Tiemeier H, Uitterlinden AG, Zhao W, Bandinelli S, Bennett DA, Ferrucci L, Gudnason V, Harris TB, Karasik D, Launer LJ, Perls TT, Slagboom PE, Tranah GJ, Weir DR, Newman AB, van Duijn CM, Murabito JM. GWAS of Longevity in CHARGE Consortium Confirms APOE and FOXO3 Candidacy. *J Gerontol A Biol Sci Med Sci*. Jan;70(1):110-8. doi: 10.1093/gerona/flu166

de Bruin PW, Koken P, Versluis MJ, Aussenhofer SA, Meulenbelt I, Börner P, Webb AG. Time-efficient interleaved human (23) Na and (1) H data acquisition at 7 T. *NMR Biomed*. 2015 Oct;28(10):1228-35. doi: 10.1002/nbm.3368.

Bürkle A, Moreno-Villanueva M, Bernhard J, Blasco M, Zondag G, Hoeijmakers JH, Toussaint O, Grubeck-Loebenstien B, Mocchegiani E, Collino S, Gonos ES, Sikora E, Gradinaru D, Dollé M, Salmon M, Kristensen P, Griffiths HR, Libert C, Grune T, Breusing N, Simm A, Franceschi C, Capri M, Talbot D, Caiafa P, Friguet B, Slagboom PE, Hervonen A, Hurme M, Aspinall R. MARK-AGE biomarkers of ageing. *Mech Ageing Dev*. 2015 Nov;151:2-12. doi: 10.1016/j.mad.2015.03.006.

Draisma HH, Pool R, Kobl M, Jansen R, Petersen AK, Vaarhorst AA, Yet I, Haller T, Demirkan A, Esko T, Zhu G, Böhringer S, Beekman M, van Klinken JB, Römisch-Margl W, Prehn C, Adamski J, de Craen AJ, van Leeuwen EM, Amin N, Dharuri H, Westra HJ, Franke L, de Geus EJ, Hottenga JJ, Willemsen G, Henders AK, Montgomery GW, Nyholt DR, Whitfield JB, Penninx BW, Spector TD, Metspalu A, Eline Slagboom P, van Dijk KW, 't Hoen PA, Strauch K, Martin NG, van Ommen GJ, Illig T, Bell JT, Mangino M, Suhre K, McCarthy MI, Gieger C, Isaacs A, van Duijn CM, Boomsma DI. Genome-wide association study identifies novel genetic variants contributing to variation in blood metabolite levels. *Nat Commun*. Jun 12;6:7208. doi: 10.1038/ncomms8208.

van Drielen K, Gunn DA, Griffiths CE, Griffiths TW, Ogdén S, Noordam R, Slagboom PE, van Heemst D, de Craen AJ. Markers of health and disease and pigmented spots in a middle-aged population. *Br J Dermatol*. Dec;173(6):1550-2. doi: 10.1111/bjd.14051.

van Dongen J, Willemsen G, Heijmans BT, Neuteboom J, Kluff C, Jansen R, Penninx BW, Slagboom PE, de Geus EJ, Boomsma DI. Longitudinal weight differences, gene expression and blood biomarkers in BMI-discordant identical twins. *Int J Obes (Lond)*. Jun;39(6):899-909. doi: 10.1038/ijo.2015.24.

van Dongen J, Nivard MG, Baselmans BM, Zilhão NR, Ligthart L; BIOS Consortium, Heijmans BT, Bartels M, Boomsma DI. Epigenome-Wide Association Study of Aggressive Behavior. *Twin Res Hum Genet*. Dec;18(6):686-98. doi: 10.1017/thg.2015.74.

Duggal G, Warriar S, Ghimire S, Broekaert D, Van der Jeught M, Lierman S, Deroo T, Peelman L, Van Soom A, Cornelissen R, Menten B, Mestdagh P, Vandesoepel J, Roost M, Sliker RC, Heijmans BT, Deforce D, De Sutter P, De Sousa Lopes SC, Heindryckx B. Alternative Routes to Induce Naïve Pluripotency in Human Embryonic Stem Cells. *Stem Cells*. Sep;33(9):2686-98. doi: 10.1002/stem.2071

Francioli LC, Polak PP, Koren A, Menelaou A, Chun S, Renkens I; Genome of the Netherlands Consortium, van Duijn CM, Swertz M, Wijmenga C, van Ommen G, Slagboom PE, Boomsma DI, Ye K, Guryev V, Arndt PF, Kloosterman WP, de Bakker PI, Sunyaev SR. Genome-wide patterns and properties of de novo mutations in humans. *Nat Genet*. Jul;47(7):822-6. doi: 10.1038/ng.3292.

Germain M, Chasman DI, de Haan H, Tang W, Lindström S, Weng LC, de Andrade M, de Visser MC, Wiggins KL, Suchon P, Saut N, Smadja DM, Le Gal G, van Hylckama Vlieg A, Di Narzo A, Hao K, Nelson CP, Rocanin-Arjo A, Folkersen L, Monajemi R, Rose LM, Brody JA, Slagboom E, Aïssi D, Gagnon F, Deleuze JF, Deloukas P, Tzourio C, Dartigues JF, Berr C, Taylor KD, Civelek M, Eriksson P; Cardiogenics Consortium, Psaty BM, Houwing-Duistermaat J, Goodall AH, Cambien F, Kraft P, Amouyel P, Samani NJ, Basu S, Ridker PM, Rosendaal FR, Kabrhel C, Folsom AR, Heit J, Reitsma PH, Trégouët DA, Smith NL, Morange PE. Meta-analysis of 65,734 individuals identifies TSPAN15 and SLC44A2 as two susceptibility loci for venous thromboembolism. *Am J Hum Genet*. Apr 2;96(4):532-42. doi: 10.1016/j.ajhg.2015.01.019.

Gunn DA, Dick JL, van Heemst D, Griffiths CE, Tomlin CC, Murray PG, Griffiths TW, Ogden S, Mayes AE, Westendorp RG, Slagboom PE, de Craen AJ. Lifestyle and youthful looks. *Br J Dermatol*. May;172(5):1338-45. doi: 10.1111/bjd.13646.

Hillger JM, Schoop J, Boomsma DI, Eline Slagboom P, IJzerman AP, Heitman LH. Whole-cell biosensor for label-free detection of GPCR-mediated drug responses in personal cell lines. *Biosens Bioelectron*. Dec 15;74:233-42. doi: 10.1016/j.bios.2015.06.031.

den Hollander W, Ramos YF, Bomer N, Elzinga S, van der Breggen R, Lakenberg N, de Dijcker WJ, Suchiman HE, Duijnisveld BJ, Houwing-Duistermaat JJ, Slagboom EP, Bos SD, Nelissen RG, Meulenbelt I. Transcriptional associations of osteoarthritis mediated loss of epigenetic control in articular cartilage. *Arthritis Rheumatol*. 2015 May;67(8):2108-16. doi: 10.1002/art.39162

den Hollander W, Meulenbelt I. DNA Methylation in Osteoarthritis. *Curr Genomics*. 2015 Dec;16(6):419-26. doi: 10.2174/1389202916666150817212711.

Hofer E, Cavalieri M, Bis JC, DeCarli C, Fornage M, Sigurdsson S, Srikanth V, Trompet S, Verhaaren BF, Wolf C, Yang Q, Adams HH, Amouyel P, Beiser A, Buckley BM, Callisaya M, Chauhan G, de Craen AJ, Dufouil C, van Duijn CM, Ford I, Freudenberger P, Gottesman RF, Gudnason V, Heiss G, Hofman A, Lumley T, Martinez O, Mazoyer B, Moran C, Niessen WJ, Phan T, Psaty BM, Satizabal CL, Sattar N, Schilling S, Shibata DK, Slagboom PE, Smith A, Stott DJ, Taylor KD, Thomson R, Töglhofer AM, Tzourio C, van Buchem M, Wang J, Westendorp RG, Windham BG, Vernooij MW, Zijdenbos A, Beare R, Dobbie S, Ikram MA, Jukema JW, Launer LJ, Longstreth WT Jr, Mosley TH, Seshadri S, Schmidt H, Schmidt R. White Matter Lesion Progression: Genome-Wide Search for Genetic Influences. *Stroke*. 2015 Nov;46(11):3048-57. doi: 10.1161/STROKEAHA.115.009252

Horikoshi M, Mägi R, van de Bunt M, Surakka I, Sarin AP, Mahajan A, Marullo L, Thorleifsson G, Hägg S, Hottenga JJ, Ladenvall C, Ried JS, Winkler TW, Willems SM, Perjakova N, Esko T, Beekman M, Nelson CP, Willenborg C, Wiltshire S, Ferreira T, Fernandez J, Gaulton KJ, Steinthorsdottir V, Hamsten A, Magnusson PK, Willemsen G, Milaneschi Y, Robertson NR, Groves CJ, Bennett AJ, Lehtimäki T, Viikari JS, Rung J, Lyssenko V, Perola M, Heid IM, Herder C, Grallert H, Müller-Nurasyid M, Roden M, Hyppönen E, Isaacs A, van Leeuwen EM, Karssen LC, Mihailov E, Houwing-Duistermaat JJ, de Craen AJ, Deelen J, Havulinna AS, Blades M, Hengstenberg C, Erdmann J, Schunkert H, Kaprio J, Tobin MD, Samani NJ, Lind L, Salomaa V, Lindgren CM, Slagboom PE, Metspalu A, van Duijn CM, Eriksson JG, Peters A, Gieger C, Jula A, Groop L, Raitakari OT, Power C, Penninx BW, de Geus E, Smit JH, Boomsma DI, Pedersen NL, Ingelsson E, Thorsteinsdottir U, Stefansson K, Ripatti S, Prokopenko I, McCarthy MI, Morris AP; ENGAGE Consortium. Discovery and Fine-Mapping of Glycaemic and Obesity-Related Trait Loci Using High-Density Imputation. *PLoS Genet*. Jul 1;11(7):e1005230. doi: 10.1371/journal.pgen.1005230. eCollection 2015 Jul.

Jacobs LC, Hamer MA, Gunn DA, Deelen J, Lall JS, van Heemst D, Uh HW, Hofman A, Uitterlinden AG, Griffiths CE, Beekman M, Eline Slagboom P, Kayser M, Liu F, Nijsten T. A Genome-Wide Association Study Identifies the Skin Color Genes IRF4, MC1R, ASIP, and BNC2 Influencing Facial Pigmented Spots. *J Invest Dermatol*. Jul;135(7):1735-42. doi: 10.1038/jid.2015.62.

Jansen SW, Akintola AA, Roelfsema F, van der Spoel E, Cobbaert CM, Ballieux BE, Egri P, Kvarta-Papp Z, Gereben B, Fekete C, Slagboom PE, van der Grond J, Demeneix BA, Pijl H, Westendorp RG, van Heemst D. Human longevity is characterised by high thyroid stimulating hormone secretion without altered energy metabolism. *Sci Rep.* Jun 19;5:11525. doi: 10.1038/srep11525.

Jansen S, Roelfsema F, van der Spoel E, Akintola A, Postmus I, Ballieux B, Slagboom PE, Cobbaert C, van der Grond J, Westendorp R, Pijl H, van Heemst D. Familial Longevity is Associated with Higher TSH secretion and Strong TSH-ft3 Relationship. *J Clin Endocrinol Metab.* Oct;100(10):3806-13. doi: 10.1210/jc.2015-2624.

Kato N, Loh M, Takeuchi F, Verweij N, Wang X, Zhang W, Kelly TN, Saleheen D, Lehne B, Leach IM, Drong AW, Abbott J, Wahl S, Tan ST, Scott WR, Campanella G, Chadeau-Hyam M, Afzal U, Ahluwalia TS, Bonder MJ, Chen P, Dehghan A, Edwards TL, Esko T, Go MJ, Harris SE, Hartiala J, Kasela S, Kasturiratne A, Khor CC, Kleber ME, Li H, Mok ZY, Nakatochi M, Sapari NS, Saxena R, Stewart AF, Stolk L, Tabara Y, Teh AL, Wu Y, Wu JY, Zhang Y, Aits I, Da Silva Couto Alves A, Das S, Dorajoo R, Hopewell JC, Kim YK, Koivula RW, Luan J, Lyttikäinen LP, Nguyen QN, Pereira MA, Postmus I, Raitakari OT, Bryan MS, Scott RA, Sorice R, Tragante V, Traglia M, White J, Yamamoto K, Zhang Y, Adair LS, Ahmed A, Akiyama K, Asif R, Aung T, Barroso I, Bjorndal A, Braun TR, Cai H, Chang LC, Chen CH, Cheng CY, Chong YS, Collins R, Courtney R, Davies G, Delgado G, Do LD, Doevendans PA, Gansevoort RT, Gao YT, Grammer TB, Grarup N, Grewal J, Gu D, Wander GS, Hartikainen AL, Hazen SL, He J, Heng CK, Hixson JE, Hofman A, Hsu C, Huang W, Husemoen LL, Hwang JY, Ichihara S, Igase M, Isona M, Justesen JM, Katsuya T, Kibriya MG, Kim YJ, Kishimoto M, Koh WP, Kohara K, Kumari M, Kwek K, Lee NR, Lee J, Liao J, Lieb W, Liewald DC, Matsubara T, Matsushita Y, Meitinger T, Mihailov E, Milani L, Mills R, Mononen N, Müller-Nurasyid M, Nabika T, Nakashima E, Ng HK, Nikus K, Nutile T, Ohkubo T, Ohnaka K, Parish S, Paternoster L, Peng H, Peters A, Pham ST, Pinidiyapathirage MJ, Rahman M, Rakugi H, Rolandsson O, Rozario MA, Ruggiero D, Sala CF, Sarju R, Shimokawa K, Snieder H, Sparsø T, Spiering W, Starr JM, Stott DJ, Stram DO, Sugiyama T, Szymczak S, Tang WH, Tong L, Trompet S, Turjanmaa V, Ueshima H, Uitterlinden AG, Umemura S, Vaarasmaki M, van Dam RM, van Gilst WH, van Veldhuisen DJ, Viikari JS, Waldenberger M, Wang Y, Wang A, Wilson R, Wong TY, Xiang YB, Yamaguchi S, Ye X, Young RD, Young TL, Yuan JM, Zhou X, Asselbergs FW, Ciullo M, Clarke R, Deloukas P, Franke A, Franks PW, Franks S, Friedlander Y, Gross MD, Guo Z, Hansen T, Jarvelin MR, Jørgensen T, Jukema JW, Kähönen M, Kajio H, Kivimaki M, Lee JY, Lehtimäki T, Linneberg A, Miki T, Pedersen O, Samani NJ, Sørensen TI, Takayanagi R, Toniolo D; BIOS-consortium; CARDio GRAMplusCD; LifeLines Cohort Study; InterAct Consortium, Ahsan H, Allayee H, Chen YT, Danesh J, Deary IJ, Franco OH, Franke L, Heijmans BT, Holbrook JD, Isaacs A, Kim BJ, Lin X, Liu J, März W, Metspalu A, Mohlke KL, Sanghera DK, Shu XO, van Meurs JB, Vithana E, Wickremasinghe AR, Wijmenga C, Wolfenbutter BH, Yokota M, Zheng W, Zhu D, Vineis P, Kyrtopoulos SA, Kleinjans JC, McCarthy MI, Soong R, Gieger C, Scott J, Teo YY, He J, Elliott P, Tai ES, van der Harst P, Kooner JS, Chambers JC. Trans-ancestry genome-wide association study identifies 12 genetic loci influencing blood pressure and implicates a role for DNA methylation. *Nat Genet.* Nov;47(11):1282-93. doi: 10.1038/ng.3405

Kloosterman WP, Francioli LC, Hormozdiari F, Marschall T, Hehir-Kwa JY, Abdellaoui A, Lameijer EW, Moed MH, Koval V, Renkens I, van Roosmalen MJ, Arp P, Karssen LC, Coe BP, Handsaker RE, Suchiman ED, Cuppen E, Thung DT, McVey M, Wendl MC; Genome of the Netherlands Consortium, Uitterlinden A, van Duijn CM, Swertz MA, Wijmenga C, van Ommen GB, Slagboom PE, Boomsma DI, Schönhuth A, Eichler EE, de Bakker PI, Ye K, Guryev V. Characteristics of de novo structural changes in the human genome. *Genome Res.* Jun;25(6):792-801. doi: 10.1101/gr.185041.114.

van Leeuwen EM, Karssen LC, Deelen J, Isaacs A, Medina-Gomez C, Mbarek H, Kanterakis A, Trompet S, Postmus I, Verweij N, van Enkevort DJ, Huffman JE, White CC, Feitosa MF, Bartz TM, Manichaikul A, Joshi PK, Peloso GM, Deelen P, van Dijk F, Willemsen G, de Geus EJ, Milanesechi Y, Penninx BW, Francioli LC, Menelaou A, Pulit SL, Rivadeneira F, Hofman A, Oostra BA, Franco OH, Mateo Leach I, Beekman M, de Craen AJ, Uh HW, Trochet H, Hocking LJ, Porteous DJ, Sattar N, Packard CJ, Buckley BM, Brody JA, Bis JC, Rotter JJ, Mychaleckyj JC, Campbell H, Duan Q, Lange LA, Wilson JF, Hayward C, Polasek O, Vitart V, Rudan I, Wright AF, Rich SS, Psaty BM, Borecki IB, Kearney PM, Stott DJ, Adrienne Cupples L; Genome of The Netherlands Consortium, Jukema JW, van der Harst P, Sijbrands EJ, Hottenga JJ, Uitterlinden AG, Swertz MA, van Ommen GJ, de Bakker PI, Eline Slagboom P, Boomsma DI, Wijmenga C, van Duijn CM. Genome of The Netherlands population-specific imputations identify an ABCA6 variant associated with cholesterol levels. *Nat Commun.* Mar 9;6:6065. doi: 10.1038/ncomms7065.

van Leeuwen EM, Kanterakis A, Deelen P, Kattenberg MV; Genome of the Netherlands Consortium, Slagboom PE, de Bakker PI, Wijmenga C, Swertz MA, Boomsma DI, van Duijn CM, Karssen LC, Hottenga JJ. Population-specific genotype imputations using minimac or IMPUTE2. *Nat Protoc.* 2015 Sep;10(9):1285-96. doi: 10.1038/nprot.2015.077.

Liu R, Kwok W, Vliet Vlieland T, Kroon H, Meulenbelt I, Houwing-Duistermaat J, Rosendaal F, Huizinga T, Kloppenburg M. Mortality in osteoarthritis patients. *Scand J Rheumatol.* ;44(1):70-3. doi: 10.3109/03009742.2014.922213.

Locke AE, Kahali B, Berndt SI, Justice AE, Pers TH, Day FR, Powell C, Vedantam S, Buchkovich ML, Yang J, Croteau-Chonka DC, Esko T, Fall T, Ferreira T, Gustafsson S, Kutalik Z, Luan J, Mägi R, Randall JC, Winkler TW, Wood AR, Workalemahu T, Faul JD, Smith JA, Hua Zhao J, Zhao W, Chen J, Fehrmann R, Hedman ÅK, Karjalainen J, Schmidt EM, Absher D, Amin N, Anderson D, Beekman M, Bolton JL, Bragg-Gresham JL, Buyske S, Demirkan A, Deng G, Ehret GB, Feenstra B, Feitosa MF, Fischer K, Goel A, Gong J, Jackson AU, Kanoni S, Kleber ME, Kristiansson K, Lim U, Lotay V, Mangino M, Mateo Leach I, Medina-Gomez C, Medland SE, Nalls MA, Palmer CD, Pasko D, Pechlivanis S, Peters MJ, Prokopenko I, Shungin D, Stančáková A, Strawbridge RJ, Ju Sung Y, Tanaka T, Teumer A, Trompet S, van der Laan SW, van Setten J, Van Vliet-Ostaptchouk JV, Wang Z, Yengo L, Zhang W, Isaacs A, Albrecht E, Ärnlöv J, Arscott GM, Attwood AP, Bandinelli S, Barrett A, Bas IN, Bellis C, Bennett AJ, Berne C, Blagieva R, Blüher M, Böhringer S, Bonnycastle LL, Böttcher Y, Boyd HA, Bruinenberg M, Caspersen IH, Ida Chen YD, Clarke R, Daw EW, de Craen AJ, Delgado G, Dimitriou M, Doney AS, Eklund N, Estrada K, Eury E, Folkersen L, Fraser RM, Garcia ME, Geller F, Giedraitis V, Gigante B, Go AS, Golay A, Goodall AH, Gordon SD, Gorski M, Grabe HJ, Grallert H, Grammer TB, Gräßler J, Grönberg H, Groves CJ, Gusto G, Haessler J, Hall P, Haller T, Hallmans G, Hartman CA, Hassinen M, Hayward C, Heard-Costa NL, Helmer Q, Hengstenberg C, Holmen O, Hottenga JJ, James AL, Jeff JM, Johansson Å, Jolley J, Juliusdottir T, Kinnunen L, Koenig W, Koskenvuo M, Kratzer W, Laitinen J, Lamina C, Leander K, Lee NR, Lichtner P, Lind L, Lindström J, Sin Lo K, Lobbens S, Lorbeer R, Lu Y, Mach F, Magnusson PK, Mahajan A, McArdle WL, McLachlan S, Menni C, Merger S, Mihailov E, Milani L, Moayyeri A, Monda KL, Morken MA, Mulas A, Müller G, Müller-Nurasyid M, Musk AW, Nagaraja R, Nöthen MM, Nolte IM, Pilz S, Rayner NW, Renstrom F, Rettig R, Ried JS, Ripke S, Robertson NR, Rose LM, Sanna S, Scharnagl H, Scholtens S, Schumacher FR, Scott WR, Seufferlein T, Shi J, Vernon Smith A, Smolonska J, Stanton AV, Steinthorsdottir V, Stirrups K, Stringham HM, Sundström J, Swertz MA, Swift AJ, Syvänen AC, Tan ST, Tayo BO, Thorand B, Thorleifsson G, Tyrer JP, Uh HW, Vandenput L, Verhulst FC, Vermeulen SH, Verweij N, Vonk JM, Waite LL, Warren HR, Waterworth D, Weedon MN, Wilkens LR, Willenborg C, Wilsgaard T, Wojczynski MK, Wong A, Wright AF, Zhang Q; LifeLines Cohort Study, Brennan EP, Choi M, Dastani Z, Drong AW, Eriksson P, Franco-Cereceda A, Gådin JR, Gharavi AG, Goddard ME, Handsaker RE, Huang J, Karpe F, Kathiresan S, Keildson S, Kiryluk K, Kubo M, Lee JY, Liang L, Lifton RP, Ma B, McCarroll SA, McKnight AJ, Min JL, Moffatt MF, Montgomery GW, Murabito JM, Nicholson G, Nyholt DR, Okada Y, Perry JR, Dorajoo R, Reinmaa E, Salem RM, Sandholm N, Scott RA, Stolk L, Takahashi A, Tanaka T, Van't Hooft FM, Vinkhuyzen AA, Westra HJ, Zheng W, Zondervan KT; ADIPOGen Consortium; AGEN-BMI Working Group; CARDIOGRAMplusC4D Consortium; CKDGen Consortium; GLGC; ICBP; MAGIC Investigators; MuTHER Consortium; MIGen Consortium; PAGE Consortium; ReproGen Consortium; GENIE Consortium; International Endogene Consortium, Heath AC, Arveiler D, Bakker SJ, Beilby J, Bergman RN, Blangero J, Bovet P, Campbell H, Caulfield MJ, Cesana G, Chakravarti A, Chasman DI, Chines PS, Collins FS, Crawford DC, Cupples LA, Cusi D, Danesh J, de Faire U, den Ruijter HM, Dominiczak AF, Erbel R, Erdmann J, Eriksson JG, Farrall M, Felix SB, Ferrannini E, Ferrières J, Ford I, Forouhi NG, Forrester T, Franco OH, Gansevoort RT, Gejman PV, Gieger C, Gottesman O, Gudnason V, Gyllenstein U, Hall AS, Harris TB, Hattersley AT, Hicks AA, Hindorf LA, Hingorani AD, Hofman A, Homuth G, Hovingh GK, Humphries SE, Hunt SC, Hyppönen E, Illig T, Jacobs KB, Jarvelin MR, Jöckel KH, Johansen B, Jousilahti P, Jukema JW, Jula AM, Kaprio J, Kastelein JJ, Keinänen-Kiukkaanniemi SM, Kiemeny LA, Knekt P, Kooperberg C, Kovacs P, Kraja AT, Kumari M, Kuusisto J, Lakka TA, Langenberg C, Le Marchand L, Lehtimäki T, Lyssenko V, Männistö S, Marette A, Matise TC, McKnight CA, McKnight B, Moll FL, Morris AD, Morris AP, Murray JC, Nelis M, Ohlsson C, Oldehinkel AJ, Ong KK, Madden PA, Pasterkamp G, Peden JF, Peters A, Postma DS, Pramstaller PP, Price JF, Qi L, Raitakari OT, Rankinen T, Rao DC, Rice TK, Ridker PM, Rioux JD, Ritchie MD, Rudan I, Salomaa V, Samani NJ, Saramies J, Sarzynski MA, Schunkert H, Schwarz PE, Sever P, Shuldiner AR, Sinisalo J, Stolk RP, Strauch K, Tönjes A, Trégouët DA, Tremblay A, Tremoli E, Virtamo J, Vohl MC, Völker U, Waeber G, Willemsen G, Witteman JC, Zillikens MC, Adair LS, Amouyel P, Asselbergs FW, Assimes TL, Bochud M, Boehm BO, Boerwinkle E, Bornstein SR, Bottinger EP, Bouchard C, Cauchi S, Chambers JC, Chanock SJ, Cooper RS, de Bakker PI, Dedoussis G, Ferrucci L, Franks PW, Froguel P, Groop LC, Haiman CA, Hamsten A, Hui J, Hunter DJ, Hveem K, Kaplan RC, Kivimäki M, Kuh D, Laakso M, Liu Y, Martin NG, März W, Melbye M, Metspalu A, Moebus S, Munroe PB, Njølstad I, Oostra BA, Palmer CN, Pedersen NL, Perola M, Pérusse L, Peters U, Power C, Quertermous T, Rauramaa R, Rivadeneira F, Saaristo TE, Saleheen D, Sattar N, Schadt EE, Schlessinger D, Slagboom PE, Snieder H, Spector TD, Thorsteinsdottir U, Stumvoll M, Tuomilehto J, Uitterlinden AG, Uusitupa M, van der Harst P, Walker M, Wallaschowski H, Wareham NJ, Watkins H, Weir DR, Wichmann HE, Wilson JF, Zanen P, Borecki IB, Deloukas P, Fox CS, Heid IM, O'Connell JR, Strachan DP, Stefansson K, van Duijn CM, Abecasis GR, Franke L, Frayling TM, McCarthy MI, Visscher PM, Scherag A, Willer CJ, Boehnke M, Mohlke KL, Lindgren CM, Beckmann JS, Barroso I, North KE, Ingelsson E, Hirschhorn JN, Loos RJ, Speliotes EK. Genetic studies of body mass index yield new insights for obesity biology. *Nature.* Feb 12;518(7538):197-206. doi: 10.1038/nature14177.

Luijk R, Goeman JJ, Slagboom EP, Heijmans BT, van Zwet EW. An alternative approach to multiple testing for methylation QTL mapping reduces the proportion of falsely identified CpGs. *Bioinformatics.* Feb 1;31(3):340-5. doi: 10.1093/bioinformatics/btu654.

Oh G, Wang SC, Pal M, Chen ZF, Khare T, Tochigi M, Ng C, Yang YA, Kwan A, Kaminsky ZA, Mill J, Gunasinghe C, Tackett JL, Gottesman II, Willemsen G, de Geus EJ, Vink JM, Slagboom PE, Wray NR, Heath AC, Montgomery GW, Turecki G, Martin NG, Boomsma DI, McGuffin P, Kustra R, Petronis A. DNA Modification Study of Major Depressive Disorder: Beyond Locus-by-Locus Comparisons. *Biol Psychiatry*. Feb 1;77(3):246-55. doi: 10.1016/j.biopsych.2014.06.016.

Passtoors WM, van den Akker EB, Deelen J, Maier AB, van der Breggen R, Jansen R, Trompet S, van Heemst D, Derhovanessian E, Pawelec G, van Ommen GJ, Slagboom PE, Beekman M. IL7R gene expression network associates with human healthy ageing. *Immun Ageing*. 2015 Nov 11;12:21. doi: 10.1186/s12979-015-0048-6. eCollection 2015

Pedersen JK, Skytthe A, McGue M, Honig LS, Franceschi C, Kirkwood TB, Passarino G, Slagboom PE, Vaupel JW, Christensen K. Low tobacco-related cancer incidence in offspring of long-lived siblings: a comparison with Danish national cancer registry data. *Ann Epidemiol*. Mar 18. pii: S1047-2797(15)00093-9. doi: 10.1016/j.annepidem.2015.03.004.

Pers TH, Karjalainen JM, Chan Y, Westra HJ, Wood AR, Yang J, Lui JC, Vedantam S, Gustafsson S, Esko T, Frayling T, Speliotes EK; Genetic Investigation of ANthropometric Traits (GIANT) Consortium, Boehnke M, Raychaudhuri S, Fehrmann RS, Hirschhorn JN, Franke L. Biological interpretation of genome-wide association studies using predicted gene functions. *Nat Commun*. Jan 19;6:5890. doi: 10.1038/ncomms6890.

Peters MJ, Joehanes R, Pilling LC, Schurmann C, Conneely KN, Powell J, Reinmaa E, Sutphin GL, Zhernakova A, Schramm K, Wilson YA, Kobes S, Tukiainen T; NABEC/UKBEC Consortium, Ramos YF, Göring HH, Fornage M, Liu Y, Gharib SA, Stranger BE, De Jager PL, Aviv A, Levy D, Murabito JM, Munson PJ, Huan T, Hofman A, Uitterlinden AG, Rivadeneira F, van Rooij J, Stolck L, Broer L, Verbiest MM, Jhamai M, Arp P, Metspalu A, Tserel L, Milani L, Samani NJ, Peterson P, Kasela S, Codd V, Peters A, Ward-Caviness CK, Herder C, Waldenberger M, Roden M, Singmann P, Zeilinger S, Illig T, Homuth G, Grabe HJ, Völzke H, Steil L, Kocher T, Murray A, Melzer D, Yaghoobkar H, Bandinelli S, Moses EK, Kent JW, Curran JE, Johnson MP, Williams-Blangero S, Westra HJ, McRae AF, Smith JA, Kardia SL, Hovatta I, Perola M, Ripatti S, Salomaa V, Henders AK, Martin NG, Smith AK, Mehta D, Binder EB, Nylocks KM, Kennedy EM, Klengel T, Ding J, Suchy-Dacey AM, Enquobahrie DA, Brody J, Rotter JI, Chen YD, Houwing-Duistermaat J, Kloppenburg M, Slagboom PE, Helmer Q, den Hollander W, Bean S, Raj T, Bakhshi N, Wang QP, Oyston LJ, Psaty BM, Tracy RP, Montgomery GW, Turner ST, Blangero J, Meulenbelt I, Ressler KJ, Yang J, Franke L, Kettunen J, Visscher PM, Neely GG, Korstanje R, Hanson RL, Prokisch H, Ferrucci L, Esko T, Teumer A, van Meurs JB, Johnson AD. The transcriptional landscape of age in human peripheral blood. *Nat Commun*. Oct 22;6:8570. doi: 10.1038/ncomms9570

Postmus I, Deelen J, Sedaghat S, Trompet S, de Craen AJ, Heijmans BT, Franco OH, Hofman A, Dehghan A, Slagboom PE, Westendorp RG, Jukema JW. LDL cholesterol still a problem in old age? A Mendelian randomization study. *Int J Epidemiol*. Apr;44(2):604-12. doi: 10.1093/ije/dyv031.

Ramos YF, Meulenbelt I. Implementation of Functional Genomics for Bench-to-Bedside Transition in Osteoarthritis. *Curr Rheumatol Rep*. Aug;17(8):528. doi: 10.1007/s11926-015-0528-x.

Ramos YF, Bos SD, van der Breggen R, Kloppenburg M, Ye K, Lameijer EW, Nelissen RG, Slagboom PE, Meulenbelt I. A gain of function mutation in TNFRSF11B encoding osteoprotegerin causes osteoarthritis with chondrocalcinosis. *Ann Rheum Dis*. Sep;74(9):1756-62. doi: 10.1136/annrheumdis-2013-205149.

Reinards TH, Albers HM, Brinkman DM, Kamphuis SS, van Rossum MA, Girschick HJ, Wouters C, Hoppenreijns EP, Saurenmann RK, Hinks A, Ellis JA, Bakker E, Verduijn W, Slagboom P, Huizinga TW, Toes RE, Houwing-Duistermaat JJ, Ten Cate R, Schilham MW. CD226 (DNAM-1) is associated with susceptibility to juvenile idiopathic arthritis. *Ann Rheum Dis*. Dec;74(12):2193-8. doi: 10.1136/annrheumdis-2013-205138.

Relton CL, Gaunt T, McArdle W, Ho K, Duggirala A, Shihab H, Woodward G, Lyttleton O, Evans DM, Reik W, Paul YL, Ficiz G, Ozanne SE, Wipat A, Flanagan K, Lister A, Heijmans BT, Ring SM, Davey Smith G. Data Resource Profile: Accessible Resource for Integrated Epigenomic Studies (ARIES). *Int J Epidemiol*. Aug;44(4):1181-90. doi: 10.1093/ije/dyv072.

Sala ML, Röell B, van der Bijl N, van der Grond J, de Craen AJ, Slagboom EP, van der Geest R, de Roos A, Kroft LJ. Genetically determined prospect to become long-lived is associated with less abdominal fat and in particular less abdominal visceral fat in men. *Age Ageing*. Jul;44(4):713-7. doi: 10.1093/ageing/afv063.

Shah S, Bonder MJ, Marioni RE, Zhu Z, McRae AF, Zernakova A, Harris SE, Liewald D, Henders AK, Mendelson MM, Liu C, Joehanes R, Liang L; BIOS Consortium, Levy D, Martin NG, Starr JM, Wijmenga C, Wray NR, Yang J, Montgomery GW, Franke L, Deary IJ, Visscher PM. Improving Phenotypic Prediction by Combining Genetic and Epigenetic Associations. *Am J Hum Genet.* Jul 2;97(1):75-85. doi: 10.1016/j.ajhg.2015.05.014.

Shungin D, Winkler TW, Croteau-Chonka DC, Ferreira T, Locke AE, Mägi R, Strawbridge RJ, Pers TH, Fischer K, Justice AE, Workalemahu T, Wu JM, Buchkovich ML, Heard-Costa NL, Roman TS, Drong AW, Song C, Gustafsson S, Day FR, Esko T, Fall T, Kutalik Z, Luan J, Randall JC, Scherag A, Vedantam S, Wood AR, Chen J, Fehrmann R, Karjalainen J, Kahali B, Liu CT, Schmidt EM, Absher D, Amin N, Anderson D, Beekman M, Bragg-Gresham JL, Buyske S, Demirkan A, Ehret GB, Feitosa MF, Goel A, Jackson AU, Johnson T, Kleber ME, Kristiansson K, Mangino M, Mateo Leach I, Medina-Gomez C, Palmer CD, Pasko D, Pechlivanis S, Peters MJ, Prokopenko I, Stančáková A, Ju Sung Y, Tanaka T, Teumer A, Van Vliet-Ostaptchouk JV, Yengo L, Zhang W, Albrecht E, Ärnlöv J, Arscott GM, Bandinelli S, Barrett A, Bellis C, Bennett AJ, Berne C, Blüher M, Böhringer S, Bonnet F, Böttcher Y, Bruinenberg M, Carba DB, Caspersen IH, Clarke R, Daw EW, Deelen J, Deelman E, Delgado G, Doney AS, Eklund N, Erdos MR, Estrada K, Eury E, Friedrich N, Garcia ME, Giedraitis V, Gigante B, Go AS, Golay A, Grallert H, Grammer TB, Gräßler J, Grewal J, Groves CJ, Haller T, Hallmans G, Hartman CA, Hassinen M, Hayward C, Heikkilä K, Herzig KH, Helmer Q, Hillege HL, Holmen O, Hunt SC, Isaacs A, Ittermann T, James AL, Johansson I, Juliusdottir T, Kalafati IP, Kinnunen L, Koenig W, Kooner IK, Kratzer W, Lamina C, Leander K, Lee NR, Lichtner P, Lind L, Lindström J, Lobbens S, Lorentzon M, Mach F, Magnusson PK, Mahajan A, McArdle WL, Menni C, Merger S, Mihailov E, Milani L, Mills R, Moayyeri A, Monda KL, Mooijaart SP, Mühleisen TW, Mulas A, Müller G, Müller-Nurasyid M, Nagaraja R, Nalls MA, Narisu N, Glorioso N, Nolte IM, Olden M, Rayner NW, Renstrom F, Ried JS, Robertson NR, Rose LM, Sanna S, Scharnagl H, Scholtens S, Sennblad B, Seufferlein T, Sitlani CM, Vernon Smith A, Stirrups K, Stringham HM, Sundström J, Swertz MA, Swift AJ, Syvänen AC, Tayo BO, Thorand B, Thorleifsson G, Tomaschitz A, Troffa C, van Oort FV, Verweij N, Vonk JM, Waite LL, Wennauer R, Wilsgaard T, Wojczynski MK, Wong A, Zhang Q, Hua Zhao J, Brennan EP, Choi M, Eriksson P, Folkersen L, Franco-Cereceda A, Gharavi AG, Hedman ÅK, Hivert MF, Huang J, Kanoni S, Karpe F, Keildson S, Kiryluk K, Liang L, Lifton RP, Ma B, McKnight AJ, McPherson R, Metspalu A, Min JL, Moffatt MF, Montgomery GW, Murabito JM, Nicholson G, Nyholt DR, Olsson C, Perry JR, Reinmaa E, Salem RM, Sandholm N, Schadt EE, Scott RA, Stolk L, Vallejo EE, Westra HJ, Zondervan KT; ADIPOGen Consortium; CARDIOGRAMplusC4D Consortium; CKDGen Consortium; GEFOS Consortium; GENIE Consortium; GLGC; ICBP; International Endogene Consortium; Lifelines Cohort Study; MAGIC Investigators; MuTHER Consortium; PAGE Consortium; ReproGen Consortium, Amouyel P, Arveiler D, Bakker SJ, Beilby J, Bergman RN, Blangero J, Brown MJ, Burnier M, Campbell H, Chakravarti A, Chines PS, Claudi-Boehm S, Collins FS, Crawford DC, Danesh J, de Faire U, de Geus EJ, Dörr M, Erbel R, Eriksson JG, Farrall M, Ferrannini E, Ferrières J, Forouhi NG, Forrester T, Franco OH, Gansevoort RT, Gieger C, Gudnason V, Haiman CA, Harris TB, Hattersley AT, Heliövaara M, Hicks AA, Hingorani AD, Hoffmann W, Hofman A, Homuth G, Humphries SE, Hyppönen E, Illig T, Jarvelin MR, Johansen B, Jousilahti P, Jula AM, Kaprio J, Kee F, Keinanen-Kiukkaanniemi SM, Kooner JS, Kooperberg C, Kovacs P, Kraja AT, Kumari M, Kuulasmaa K, Kuusisto J, Lakka TA, Langenberg C, Le Marchand L, Lehtimäki T, Lyssenko V, Männistö S, Marette A, Matise TC, McKenzie CA, McKnight B, Musk AW, Möhlenkamp S, Morris AD, Nelis M, Ohlsson C, Oldenhinkel AJ, Ong KK, Palmer LJ, Penninx BW, Peters A, Pramstaller PP, Raitakari OT, Rankinen T, Rao DC, Rice TK, Ridker PM, Ritchie MD, Rudan I, Salomaa V, Samani NJ, Saramies J, Sarzynski MA, Schwarz PE, Shuldiner AR, Staessen JA, Steinthorsdottir V, Stolk RP, Strauch K, Tönjes A, Tremblay A, Tremoli E, Vohl MC, Völker U, Vollenweider P, Wilson JF, Witteman JC, Adair LS, Bochud M, Boehm BO, Bornstein SR, Bouchard C, Cauchi S, Caulfield MJ, Chambers JC, Chasman DI, Cooper RS, Dedoussis G, Ferrucci L, Froguel P, Grabe HJ, Hamsten A, Hui J, Hveem K, Jöckel KH, Kivimäki M, Kuh D, Laakso M, Liu Y, März W, Munroe PB, Njølstad I, Oostra BA, Palmer CN, Pedersen NL, Perola M, Pérusse L, Peters U, Power C, Quertermous T, Rauramaa R, Rivadeneira F, Saaristo TE, Saleheen D, Sinisalo J, Slagboom PE, Snieder H, Spector TD, Thorsteinsdottir U, Stumvoll M, Tuomilehto J, Uitterlinden AG, Uusitupa M, van der Harst P, Veronesi G, Walker M, Wareham NJ, Watkins H, Wichmann HE, Abecasis GR, Assimes TL, Berndt SI, Boehnke M, Borecki IB, Deloukas P, Franke L, Frayling TM, Groop LC, Hunter DJ, Kaplan RC, O'Connell JR, Qi L, Schlessinger D, Strachan DP, Stefansson K, van Duijn CM, Willer CJ, Visscher PM, Yang J, Hirschhorn JN, Zillikens MC, McCarthy MI, Speliotes EK, North KE, Fox CS, Barroso I, Franks PW, Ingelsson E, Heid IM, Loos RJ, Cupples LA, Morris AP, Lindgren CM, Mohlke KL. New genetic loci link adipose and insulin biology to body fat distribution. *Nature.* Feb 12;518(7538):187-96. doi: 10.1038/nature14132.

van der Spoel E, Rozing MP, Houwing-Duistermaat JJ, Slagboom PE, Beekman M, de Craen AJ, Westendorp RG, van Heemst D. Association analysis of insulin-like growth factor-1 axis parameters with survival and functional status in nonagenarians of the Leiden Longevity Study. *Aging (Albany NY).* 2015 Nov;7(11):956-63.

Suchiman HE, Sliker RC, Kremer D, Slagboom PE, Heijmans BT, Tobi EW. Design, measurement and processing of region-specific DNA methylation assays: the mass spectrometry-based method EpiTYPER. *Front Genet.* Sep 17;6:287. doi: 10.3389/fgene.2015.00287. eCollection 2015.

Surakka I, Horikoshi M, Mägi R, Sarin AP, Mahajan A, Lagou V, Marullo L, Ferreira T, Miraglio B, Timonen S, Kettunen J, Pirinen M, Karjalainen J, Thorleifsson G, Hägg S, Hottenga JJ, Isaacs A, Ladenvall C, Beekman M, Esko

T, Ried JS, Nelson CP, Willenborg C, Gustafsson S, Westra HJ, Blades M, de Craen AJ, de Geus EJ, Deelen J, Grallert H, Hamsten A, Havulinna AS, Hengstenberg C, Houwing-Duistermaat JJ, Hyppönen E, Karssen LC, Lehtimäki T, Lysenko V, Magnusson PK, Mihailov E, Müller-Nurasyid M, Mpindi JP, Pedersen NL, Penninx BW, Perola M, Pers TH, Peters A, Rung J, Smit JH, Steinthorsdottir V, Tobin MD, Tsernikova N, van Leeuwen EM, Viikari JS, Willems SM, Willemsen G, Schunkert H, Erdmann J, Samani NJ, Kaprio J, Lind L, Gieger C, Metspalu A, Slagboom PE, Groop L, van Duijn CM, Eriksson JG, Jula A, Salomaa V, Boomsma DI, Power C, Raitakari OT, Ingelsson E, Järvelin MR, Thorsteinsdottir U, Franke L, Ikonen E, Kallioniemi O, Pietiäinen V, Lindgren CM, Stefansson K, Palotie A, McCarthy MI, Morris AP, Prokopenko I, Ripatti S; ENGAGE Consortium. The impact of low-frequency and rare variants on lipid levels. *Nat Genet.* Jun;47(6):589-97. doi: 10.1038/ng.3300.

Tobi EW, Slieker RC, Stein AD, Suchiman HE, Slagboom PE, van Zwet EW, Heijmans BT, Lumey LH. Early gestation as the critical time-window for changes in the prenatal environment to affect the adult human blood methylome. *Int J Epidemiol.* Aug;44(4):1211-23. doi: 10.1093/ije/dyv043.

Uh HW, Beekman M, Meulenbelt I, Houwing-Duistermaat JJ. Genotype-Based Score Test for Association Testing in Families. *Stat Biosci.* 7(2):394-416.

Verhaaren BF, DeBette S, Bis JC, Smith JA, Ikram MK, Adams HH, Beecham AH, Rajan KB, Lopez LM, Barral S, van Buchem MA, van der Grond J, Smith AV, Hegenscheid K, Aggarwal NT, de Andrade M, Atkinson EJ, Beekman M, Beiser AS, Blanton SH, Boerwinkle E, Brickman AM, Bryan RN, Chauhan G, Chen CP, Chouraki V, de Craen AJ, Crivello F, Deary IJ, Deelen J, De Jager PL, Dufouil C, Elkind MS, Evans DA, Freudenberger P, Gottesman RW, Guðnason V, Habes M, Heckbert SR, Heiss G, Hilal S, Hofer E, Hofman A, Ibrahim-Verbaas CA, Knopman DS, Lewis CE, Liao J, Liewald DC, Luciano M, van der Lugt A, Martinez OO, Mayeux R, Mazoyer B, Nalls M, Nauck M, Niessen WJ, Oostra BA, Psaty BM, Rice KM, Rotter JJ, von Sarnowski B, Schmidt H, Schreiner PJ, Schuur M, Sidney SS, Sigurdsson S, Slagboom PE, Stott DJ, van Swieten JC, Teumer A, Töglhofer AM, Traylor M, Trompet S, Turner ST, Tzourio C, Uh HW, Uitterlinden AG, Vernooij MW, Wang JJ, Wong TY, Wardlaw JM, Windham BG, Wittfeld K, Wolf C, Wright CB, Yang Q, Zhao W, Zijdenbos A, Jukema JW, Sacco RL, Kardia SL, Amouyel P, Mosley TH, Longstreth WT Jr, DeCarli CC, van Duijn CM, Schmidt R, Launer LJ, Grabe HJ, Seshadri SS, Ikram MA, Fornage M. Multiethnic genome-wide association study of cerebral white matter hyperintensities on MRI. *Circ Cardiovasc Genet.* 2015 Apr;8(2):398-409. doi: 10.1161/CIRCGENETICS.114.000858.

Widya RL, Kroft LJ, Altmann-Schneider I, van den Berg-Huysmans AA, van der Bijl N, de Roos A, Lamb HJ, van Buchem MA, Slagboom PE, van Heemst D, van der Grond J; Leiden Longevity Study Group. Visceral adipose tissue is associated with microstructural brain tissue damage. *Obesity (Silver Spring).* May;23(5):1092-6. doi: 10.1002/oby.21048

Winkler TW, Justice AE, Graff M, Barata L, Feitosa MF, Chu S, Czajkowski J, Esko T, Fall T, Kilpeläinen TO, Lu Y, Mägi R, Mihailov E, Pers TH, Rieger S, Teumer A, Ehret GB, Ferreira T, Heard-Costa NL, Karjalainen J, Lagou V, Mahajan A, Neinast MD, Prokopenko I, Simino J, Teslovich TM, Jansen R, Westra HJ, White CC, Absher D, Ahluwalia TS, Ahmad S, Albrecht E, Alves AC, Bragg-Gresham JL, de Craen AJ, Bis JC, Bonnefond A, Boucher G, Cadby G, Cheng YC, Chiang CW, Delgado G, Demirkan A, Dueker N, Eklund N, Eiriksdottir G, Eriksson J, Feenstra B, Fischer K, Frau F, Galesloot TE, Geller F, Goel A, Gorski M, Grammer TB, Gustafsson S, Haitjema S, Hottenga JJ, Huffman JE, Jackson AU, Jacobs KB, Johansson Å, Kaakinen M, Kleber ME, Lahti J, Leach IM, Lehne B, Liu Y, Lo KS, Lorentzon M, Luan J, Madden PA, Mangino M, McKnight B, Medina-Gomez C, Monda KL, Montasser ME, Müller G, Müller-Nurasyid M, Nolte IM, Panoutsopoulou K, Pascoe L, Paternoster L, Rayner NW, Renström F, Rizzi F, Rose LM, Ryan KA, Salo P, Sanna S, Scharnagl H, Shi J, Smith AV, Southam L, Stančáková A, Steinthorsdottir V, Strawbridge RJ, Sung YJ, Tachmazidou I, Tanaka T, Thorleifsson G, Trompet S, Pervjakova N, Tyrer JP, Vandenput L, van der Laan SW, van der Velde N, van Setten J, van Vliet-Ostaptchouk JV, Verweij N, Vlachopoulou E, Waite LL, Wang SR, Wang Z, Wild SH, Willenborg C, Wilson JF, Wong A, Yang J, Yengo L, Yerges-Armstrong LM, Yu L, Zhang W, Zhao JH, Andersson EA, Bakker SJ, Baldassarre D, Banasik K, Barcella M, Barlassina C, Bellis C, Benaglio P, Blangero J, Blüher M, Bonnet F, Bonnycastle LL, Boyd HA, Bruinenberg M, Buchman AS, Campbell H, Chen YI, Chines PS, Claudi-Boehm S, Cole J, Collins FS, de Geus EJ, de Groot LC, Dimitriou M, Duan J, Enroth S, Eury E, Farmaki AE, Forouhi NG, Friedrich N, Gejman PV, Gigante B, Glorioso N, Go AS, Gottesman O, Gräßler J, Grallert H, Grarup N, Gu YM, Broer L, Ham AC, Hansen T, Harris TB, Hartman CA, Hassinen M, Hastie N, Hattersley AT, Heath AC, Henders AK, Hernandez D, Hillege H, Holmen O, Hovingh KG, Hui J, Husemoen LL, Hutri-Kähönen N, Hysi PG, Illig T, De Jager PL, Jalilzadeh S, Jørgensen T, Jukema JW, Juonala M, Kanoni S, Karaleftheri M, Khaw KT, Kinnunen L, Kittner SJ, Koenig W, Kolcic I, Kovacs P, Krarup NT, Kratzer W, Krüger J, Kuh D, Kumari M, Kyriakou T, Langenberg C, Lannfelt L, Lanzani C, Lotay V, Launer LJ, Leander K, Lindström J, Linneberg A, Liu YP, Lobbens S, Luben R, Lysenko V, Männistö S, Magnusson PK, McArdle WL, Menni C, Merger S, Milani L, Montgomery GW, Morris AP, Narisu N, Nelis M, Ong KK, Palotie A, Pérusse L, Pichler I, Pilia MG, Pouta A, Rheinberger M, Ribbel-Madsen R, Richards M, Rice KM, Rice TK, Rivolta C, Salomaa V, Sanders AR, Sarzynski MA, Scholtens S, Scott RA, Scott WR, Sebert S, Sengupta S, Sennblad B, Seufferlein T, Silveira A, Slagboom PE, Smit JH, Sparsø TH, Stirrups K, Stolk RP, Stringham HM, Swertz MA, Swift AJ, Syvänen AC, Tan ST, Thorand B, Tönjes A, Tremblay A, Tsafantakis

E, van der Most PJ, Völker U, Vohl MC, Vonk JM, Waldenberger M, Walker RW, Wennauer R, Widén E, Willemsen G, Wilsgaard T, Wright AF, Zillikens MC, van Dijk SC, van Schoor NM, Asselbergs FW, de Bakker PI, Beckmann JS, Beilby J, Bennett DA, Bergman RN, Bergmann S, Böger CA, Boehm BO, Boerwinkle E, Boomsma DI, Bornstein SR, Bottinger EP, Bouchard C, Chambers JC, Chanock SJ, Chasman DI, Cucca F, Cusi D, Dedoussis G, Erdmann J, Eriksson JG, Evans DA, de Faire U, Farrall M, Ferrucci L, Ford I, Franke L, Franks PW, Froguel P, Gansevoort RT, Gieger C, Grönberg H, Gudnason V, Gyllensten U, Hall P, Hamsten A, van der Harst P, Hayward C, Heliövaara M, Hengstenberg C, Hicks AA, Hingorani A, Hofman A, Hu F, Huikuri HV, Hveem K, James AL, Jordan JM, Jula A, Kähönen M, Kajantie E, Kathiresan S, Kiemeny LA, Kivimäki M, Knekt PB, Koistinen HA, Kooner JS, Koskinen S, Kuusisto J, Maerz W, Martin NG, Laakso M, Lakka TA, Lehtimäki T, Lettre G, Levinson DF, Lind L, Lokki ML, Mäntyselkä P, Melbye M, Metspalu A, Mitchell BD, Moll FL, Murray JC, Musk AW, Nieminen MS, Njølstad I, Ohlsson C, Oldehinkel AJ, Oostra BA, Palmer LJ, Pankow JS, Pasterkamp G, Pedersen NL, Pedersen O, Penninx BW, Perola M, Peters A, Polašek O, Pramstaller PP, Psaty BM, Qi L, Quertermous T, Raitakari OT, Rankinen T, Rauramaa R, Ridker PM, Rioux JD, Rivadeneira F, Rotter JI, Rudan I, den Ruijter HM, Saltevo J, Sattar N, Schunkert H, Schwarz PE, Shuldiner AR, Sinisalo J, Snieder H, Sørensen TI, Spector TD, Staessen JA, Stefania B, Thorsteinsdóttir U, Stumvoll M, Tardif JC, Tremoli E, Tuomilehto J, Uitterlinden AG, Uusitupa M, Verbeek AL, Vermeulen SH, Viikari JS, Vitart V, Völzke H, Vollenweider P, Waeber G, Walker M, Wallaschofski H, Wareham NJ, Watkins H, Zeggini E; CHARGE Consortium; DIAGRAM Consortium; GLGC Consortium; Global-BPGen Consortium; ICBP Consortium; MAGIC Consortium, Chakravarti A, Clegg DJ, Cupples LA, Gordon-Larsen P, Jaquish CE, Rao DC, Abecasis GR, Assimes TL, Barroso I, Berndt SI, Boehnke M, Deloukas P, Fox CS, Groop LC, Hunter DJ, Ingelsson E, Kaplan RC, McCarthy MI, Mohlke KL, O'Connell JR, Schlessinger D, Strachan DP, Stefansson K, van Duijn CM, Hirschhorn JN, Lindgren CM, Heid IM, North KE, Borecki IB, Kutalik Z, Loos RJ. The Influence of Age and Sex on Genetic Associations with Adult Body Size and Shape: A Large-Scale Genome-Wide Interaction Study. *PLoS Genet.* 2015 Oct 1;11(10):e1005378. doi: 10.1371/journal.pgen.1005378.

2014

van den Akker EB, Passtoors WM, Jansen R, van Zwet EW, Goeman JJ, Hulsman M, Emilsson V, Perola M, Willemsen G, Penninx BW, Heijmans BT, Maier AB, Boomsma DI, Kok JN, Slagboom PE, Reinders MJ, Beekman M. Meta-analysis on blood transcriptomic studies identifies consistently coexpressed protein-protein interaction modules as robust markers of human aging. *Aging Cell.* Apr;13(2):216-25. doi: 10.1111/accel.12160.

Albers HM, Reinards TH, Brinkman DM, Kamphuis SS, van Rossum MA, Hoppenreijns EP, Girschick HJ, Wouters C, Saurenmann RK, Bakker E, Verduijn W, Slagboom P, Huizinga TW, Toes RE, Houwing-Duistermaat JJ, Ten Cate R, Schilham MW. Genetic variation in VTCN1 (B7-H4) is associated with course of disease in juvenile idiopathic arthritis. *Ann Rheum Dis.* Jun;73(6):1198-201. doi: 10.1136/annrheumdis-2013-204466.

Almouzni G, Altucci L, Amati B, Ashley N, Baulcombe D, Beaujean N, Bock C, Bongcam-Rudloff E, Bousquet J, Braun S, de Paillerets BB, Bussemakers M, Clarke L, Conesa A, Estivill X, Fazeli A, Grgurevi NA, Gut I, Heijmans BT, Hermouet S, Houwing Duistermaat J, Iacobucci I, Ila J, Kandimalla R, Krauss-Etschmann S, Lasko P, Lehmann S, Lindroth A, Majdi G, Marcotte E, Martinelli G, Martinet N, Meyer E, Miceli C, Mills K, Moreno-Villanueva M, Morvan G, Nickel D, Niesler B, Nowacki M, Nowak J, Ossowski S, Pelizzola M, Pochet R, Poto Nik U, Radwanska M, Raes J, Rattray M, Robinson MD, Roelen B, Sauer S, Schinzer D, Slagboom E, Spector T, Stunnenberg HG, Tiligada E, Torres-Padilla ME, Tsonaka R, Van Soom A, Vidakovi M, Widschwendter M. Relationship between genome and epigenome - challenges and requirements for future research. *BMC Genomics.* Jun 18;15(1):487.

Avery CL, Sitlani CM, Arking DE, Arnett DK, Bis JC, Boerwinkle E, Buckley BM, Ida Chen YD, de Craen AJ, Eijgelsheim M, Enquobahrie D, Evans DS, Ford I, Garcia ME, Gudnason V, Harris TB, Heckbert SR, Hochner H, Hofman A, Hsueh WC, Isaacs A, Jukema JW, Knekt P, Kors JA, Krijthe BP, Kristiansson K, Laaksonen M, Liu Y, Li X, Macfarlane PW, Newton-Cheh C, Nieminen MS, Oostra BA, Peloso GM, Porthan K, Rice K, Rivadeneira FF, Rotter JI, Salomaa V, Sattar N, Siscovick DS, Slagboom PE, Smith AV, Sotoodehnia N, Stott DJ, Stricker BH, Sturmer T, Trompet S, Uitterlinden AG, van Duijn CM, Westendorp RG, Wittteman JC, Whitsel EA, Psaty BM. Drug-gene interactions and the search for missing heritability: a cross-sectional pharmacogenomics study of the QT interval. *Pharmacogenomics J* 14:6-13. doi:10.1038/tpj.2013.4

Baumert J, Huang J, McKnight B, Sabater-Lleal M, Steri M, Chu AY, Trompet S, Lopez LM, Fornage M, Teumer A, Tang W, Rudnicka AR, Mälarstig A, Hottenga JJ, Kavousi M, Lahti J, Tanaka T, Hayward C, Huffman JE, Morange PE, Rose LM, Basu S, Rumley A, Stott DJ, Buckley BM, de Craen AJ, Sanna S, Masala M, Biffar R, Homuth G, Silveira A, Sennblad B, Goel A, Watkins H, Müller-Nurasyid M, Ruckerl R, Taylor K, Chen MH, de Geus EJ, Hofman A, Wittteman JC, de Maat MP, Palotie A, Davies G, Siscovick DS, Kolcic I, Wild SH, Song J, McArdle WL, Ford I, Sattar N, Schlessinger D, Grotevendt A, Franzosi MG, Illig T, Waldenberger M, Lumley T, Toffer GH, Willemsen G, Uitterlinden AG, Rivadeneira F, Räikkönen K, Chasman DI, Folsom AR, Lowe GD, Westendorp RG, Slagboom PE, Cucca F, Wallaschofski H, Strawbridge RJ, Seedorf U, Koenig W, Bis JC, Mukamal KJ, van Dongen J, Widen E,

Franco OH, Starr JM, Liu K, Ferrucci L, Polasek O, Wilson JF, Oudot-Mellakh T, Campbell H, Navarro P, Bandinelli S, Eriksson J, Boomsma DI, Dehghan A, Clarke R, Hamsten A, Boerwinkle E, Jukema JW, Naitza S, Ridker PM, Völzke H, Deary IJ, Reiner AP, Trégouët DA, O'Donnell CJ, Strachan DP, Peters A, Smith NL. No evidence for genome-wide interactions on plasma fibrinogen by smoking, alcohol consumption and body mass index: results from meta-analyses of 80,607 subjects. *PLoS One*. Dec 31;9(12):e111156. doi: 10.1371/journal.pone.0111156. eCollection 2014.

Beenakker KG, Koopman JJ, van Bodegom D, Kuningas M, Slagboom PE, Meij JJ, Maier AB, Westendorp RG. Variants of the IL-10 gene associate with muscle strength in elderly from rural Africa: a candidate gene study. *Aging Cell*. Oct;13(5):862-868. doi: 10.1111/accel.12244.

Bijsterbosch J, Meulenbelt I, Watt I, Rosendaal FR, Huizinga TW, Kloppenburg M. Clustering of hand osteoarthritis progression and its relationship to progression of osteoarthritis at the knee. *Ann Rheum Dis*. Mar;73(3):567-72. doi: 10.1136/annrheumdis-2012-202461

Boomsma DI, Wijmenga C, Slagboom EP, Swertz MA, Karssen LC, Abdellaoui A, Ye K, Guryev V, Vermaat M, van DF, Francioli LC, Hottenga JJ, Laros JF, Li Q, Li Y, Cao H, Chen R, Du Y, Li N, Cao S, van SJ, Menelaou A, Pulit SL, Hehir-Kwa JY, Beekman M, Elbers CC, Byelas H, de Craen AJ, Deelen P, Dijkstra M, den Dunnen JT, de KP, Houwing-Duistermaat J, Koval V, Estrada K, Hofman A, Kanterakis A, van Enckevort D, Mai H, Kattenberg M, van Leeuwen EM, Neerincx PB, Oostra B, Rivadeneira F, Suchiman EH, Uitterlinden AG, Willemsen G, Wolffenbuttel BH, Wang J, de Bakker PI, van Ommen GJ, van Duijn CM. The Genome of the Netherlands: design, and project goals. *Eur J Hum Genet* 22:221-227. doi:10.1038/ejhg.2013.118

Boraska V, Franklin CS, Floyd JA, Thornton LM, Huckins LM, Southam L, Rayner NW, Tachmazidou I, Klump KL, Treasure J, Lewis CM, Schmidt U, Tozzi F, Kiezebrink K, Hebebrand J, Gorwood P, Adan RA, Kas MJ, Favaro A, Santonastaso P, Fernández-Aranda F, Gratacos M, Rybakowski F, Dmitrzak-Weglarz M, Kaprio J, Keski-Rahkonen A, Raevuori A, Van Furth EF, Slof-Op 't Landt MC, Hudson JI, Reichborn-Kjennerud T, Knudsen GP, Monteleone P, Kaplan AS, Karwautz A, Hakonarson H, Berrettini WH, Guo Y, Li D, Schork NJ, Komaki G, Ando T, Inoko H, Esko T, Fischer K, Männik K, Metspalu A, Baker JH, Cone RD, Dackor J, Desocio JE, Hilliard CE, O'Toole JK, Pantel J, Szatkiewicz JP, Taico C, Zerwas S, Trace SE, Davis OS, Helder S, Bühren K, Burghardt R, de Zwaan M, Egberts K, Ehrlich S, Herpertz-Dahlmann B, Herzog W, Imgart H, Scherag A, Scherag S, Zipfel S, Boni C, Ramoz N, Versini A, Brandys MK, Danner UN, de Kovel C, Hendriks J, Koeleman BP, Ophoff RA, Strengman E, van Elburg AA, Bruson A, Clementi M, Degortes D, Forzan M, Tenconi E, Docampo E, Escaramís G, Jiménez-Murcia S, Lissowska J, Rajewski A, Szeszenia-Dabrowska N, Slopian A, Hauser J, Karhunen L, Meulenbelt I, Slagboom PE, Tortorella A, Maj M, Dedoussis G, Dikeos D, Gonidakis F, Tziouvas K, Tsitsika A, Papezova H, Slachtova L, Martaskova D, Kennedy JL, Levitan RD, Yilmaz Z, Huemer J, Koubek D, Merl E, Wagner G, Lichtenstein P, Breen G, Cohen-Woods S, Farmer A, McGuffin P, Cichon S, Giegling I, Herms S, Rujescu D, Schreiber S, Wichmann HE, Dina C, Sladek R, Gambaro G, Soranzo N, Julia A, Marsal S, Rabionet R, Gaborieau V, Dick DM, Palotie A, Ripatti S, Widén E, Andreassen OA, Espeseth T, Lundervold A, Reinvang I, Steen VM, Le Hellard S, Mattingsdal M, Ntalla I, Bencko V, Foretova L, Janout V, Navratilova M, Gallinger S, Pinto D, Scherer SW, Aschauer H, Carlberg L, Schosser A, Alfredsson L, Ding B, Klareskog L, Padyukov L, Courtet P, Guillaume S, Jausent I, Finan C, Kalsi G, Roberts M, Logan DW, Peltonen L, Ritchie GR, Barrett JC; The Wellcome Trust Case Control Consortium 3, Estivill X, Hinney A, Sullivan PF, Collier DA, Zeggini E, Bulik CM. A genome-wide association study of anorexia nervosa. *Mol Psychiatry*. Oct;19(10):1085-94. doi: 10.1038/mp.2013.187.

Broer L, Raschenberger J, Deelen J, Mangino M, Codd V, Pietiläinen KH, Albrecht E, Amin N, Beekman M, de Craen AJ, Gieger C, Haun M, Henneman P, Herder C, Hovatta I, Laser A, Kedenko I, Koenig W, Kollerits B, Moilanen E, Oostra BA, Paulweber B, Quaye L, Rissanen A, Roden M, Surakka I, Valdes AM, Vuolteenaho K, Thorand B, van Dijk KW, Kaprio J, Spector TD, Slagboom PE, Samani NJ, Kronenberg F, van Duijn CM, Ladwig KH. Association of adiponectin and leptin with relative telomere length in seven independent cohorts including 11,448 participants. *Eur J Epidemiol*. Sep;29(9):629-38. doi: 10.1007/s10654-014-9940-1.

Broer L, Buchman AS, Deelen J, Evans DS, Faul JD, Lunetta KL, Sebastiani P, Smith JA, Smith AV, Tanaka T, Yu L, Arnold AM, Aspelund T, Benjamin EJ, De Jager PL, Eiriksdottir G, Evans DA, Garcia ME, Hofman A, Kaplan RC, Kardina SL, Kiel DP, Oostra BA, Orwoll ES, Parimi N, Psaty BM, Rivadeneira F, Rotter JI, Seshadri S, Singleton A, Tiemeier H, Uitterlinden AG, Zhao W, Bandinelli S, Bennett DA, Ferrucci L, Gudnason V, Harris TB, Karasik D, Launer LJ, Perls TT, Slagboom PE, Tranah GJ, Weir DR, Newman AB, van Duijn CM, Murabito JM. GWAS of Longevity in CHARGE Consortium Confirms APOE and FOXO3 Candidacy. *J Gerontol A Biol Sci Med Sci*. 2015 Jan;70(1):110-8. doi: 10.1093/gerona/glu166

Cevenini E, Cotichini R, Stazi MA, Taccaceli V, Palmas MG, Capri M, De Rango F, Dato S, Passarino G, Jeune B, Franceschi C; GEHA Project Consortium. Health status and 6 years survival of 552 90+ Italian sib-ships recruited

within the EU Project GEHA (Genetics of Healthy Ageing). *Age (Dordr)*. Apr;36(2):949-66. doi: 10.1007/s11357-013-9604-1

Claessen KM, Kloppenburg M, Kroon HM, Bijsterbosch J, Pereira AM, Romijn JA, van der Straaten T, Nelissen RG, Hofman A, Uitterlinden AG, Duijnisveld BJ, Lakenberg N, Beekman M, van Meurs JB, Slagboom PE, Biermasz NR, Meulenbelt I. Relationship between the functional exon 3 deleted growth hormone receptor polymorphism and symptomatic osteoarthritis in women. *Ann Rheum Dis* 73:433-436. doi:10.1136/annrheumdis-2012-202713

Dane AD, Hendriks MM, Reijmers TH, Harms AC, Troost J, Vreeken RJ, Boomsma DI, van Duijn CM, Slagboom EP, Hankemeier T. Integrating Metabolomics Profiling Measurements Across Multiple Biobanks. *Anal Chem*. May 6;86(9):4110-4. doi: 10.1021/ac404191a.

Deelen J, Beekman M, Codd V, Trompet S, Broer L, Hägg S, Fischer K, Thijssen PE, Suchiman HE, Postmus I, Uitterlinden AG, Hofman A, de Craen AJ, Metspalu A, Pedersen NL, van Duijn CM, Jukema JW, Houwing-Duistermaat JJ, Samani NJ, Slagboom PE. Leukocyte telomere length associates with prospective mortality independent of immune-related parameters and known genetic markers. *Int J Epidemiol*. Jun;43(3):878-86. doi: 10.1093/ije/dyt267.

Deelen J, Beekman M, Uh HW, Broer L, Ayers KL, Tan Q, Kamatani Y, Bennet AM, Tamm R, Trompet S, Guðbjartsson DF, Flachsbarth F, Rose G, Viktorin A, Fischer K, Nygaard M, Cordell HJ, Crocco P, van den Akker EB, Böhringer S, Helmer Q, Nelson CP, Saunders GI, Alver M, Andersen-Ranberg K, Breen ME, van der Breggen R, Caliebe A, Capri M, Cevenini E, Collerton JC, Dato S, Davies K, Ford I, Gampe J, Garagnani P, de Geus EJ, Harrow J, van Heemst D, Heijmans BT, Heinsen FA, Hottenga JJ, Hofman A, Jeune B, Jonsson PV, Lathrop M, Lechner D, Martin-Ruiz C, Mcnerlan SE, Mihailov E, Montesanto A, Mooijaart SP, Murphy A, Nohr EA, Paternoster L, Postmus I, Rivadeneira F, Ross OA, Salvioli S, Sattar N, Schreiber S, Stefánsson H, Stott DJ, Tiemeier H, Uitterlinden AG, Westendorp RG, Willemsen G, Samani NJ, Galan P, Sørensen TI, Boomsma DI, Jukema JW, Rea IM, Passarino G, de Craen AJ, Christensen K, Nebel A, Stefánsson K, Metspalu A, Magnusson P, Blanché H, Christiansen L, Kirkwood TB, van Duijn CM, Franceschi C, Houwing-Duistermaat JJ, Slagboom PE. Genome-wide association meta-analysis of human longevity identifies a novel locus conferring survival beyond 90 years of age. *Hum Mol Genet*. Aug 15;23(16):4420-32. doi: 10.1093/hmg/ddu139.

Deelen P, Menelaou A, van Leeuwen EM, Kanterakis A, van Dijk F, Medina-Gomez C, Francioli LC, Hottenga JJ, Karssen LC, Estrada K, Kreiner-Møller E, Rivadeneira F, van Setten J, Gutierrez-Achury J, Westra HJ, Franke L, van Enckevort D, Dijkstra M, Byelas H, van Duijn CM; Genome of the Netherlands Consortium, de Bakker PI, Wijmenga C, Swertz MA. Improved imputation quality of low-frequency and rare variants in European samples using the 'Genome of The Netherlands'. *Eur J Hum Genet*. Nov;22(11):1321-6. doi: 10.1038/ejhg.2014.

Derhovanessian E, Maier AB, Hähnel K, McElhane JE, Slagboom EP, Pawelec G. Latent Infection with Cytomegalovirus Is Associated with Poor Memory CD4 Responses to Influenza A Core Proteins in the Elderly. *Immunol*. Oct 1;193(7):3624-31. doi: 10.4049/jimmunol.1303361

van Dongen J, Ehli EA, Sliker RC, Bartels M, Weber ZM, Davies GE, Slagboom PE, Heijmans BT, Boomsma DI. Epigenetic variation in monozygotic twins: a genome-wide analysis of DNA methylation in buccal cells. *Genes (Basel)*. May 5;5(2):347-65. doi: 10.3390/genes5020347.

Evangelou E, Kerkhof HJ, Stykarsdottir U, Ntzani EE, Bos SD, Esko T, Evans DS, Metrustry S, Panoutsopoulou K, Ramos YF, Thorleifsson G, Tsilidis KK; arcOGEN Consortium, Arden N, Aslam N, Bellamy N, Birrell F, Blanco FJ, Carr A, Chapman K, Day-Williams AG, Deloukas P, Doherty M, Engström G, Helgadottir HT, Hofman A, Ingvarsson T, Jonsson H, Keis A, Keurentjes JC, Kloppenburg M, Lind PA, McCaskie A, Martin NG, Milani L, Montgomery GW, Nelissen RG, Nevitt MC, Nilsson PM, Ollier WE, Parimi N, Rai A, Ralston SH, Reed MR, Riancho JA, Rivadeneira F, Rodriguez-Fontenla C, Southam L, Thorsteinsdottir U, Tsezou A, Wallis GA, Wilkinson JM, Gonzalez A, Lane NE, Lohmänder LS, Loughlin J, Metspalu A, Uitterlinden AG, Jonsdottir I, Stefansson K, Slagboom PE, Zeggini E, Meulenbelt I, Ioannidis JP, Spector TD, van Meurs JB, Valdes AM. A meta-analysis of genome-wide association studies identifies novel variants associated with osteoarthritis of the hip. *Ann Rheum Dis*. Dec;73(12):2130-6. doi: 10.1136/annrheumdis-2012-203114.

Francioli LC, Menelaou A, Pulit SL, van Dijk F, Palamara PF, Elbers CC, Neerincx PB, Ye K, Guryev V, Kloosterman WP, Deelen P, Abdellaoui A, van Leeuwen EM, van Oven M, Vermaat M, Li M, Laros JF, Karssen LC, Kanterakis A, Amin N, Hottenga JJ, Lameijer EW, Kattenberg M, Dijkstra M, Byelas H, van Setten J, van Schaik BD, Bot J, Nijman IJ, Renkens I, Marschall T, Schönhuth A, Hehir-Kwa JY, Handsaker RE, Polak P, Sohail M, Vuzman D, Hormozdiari F, van Enckevort D, Mei H, Koval V, Moed MH, van der Velde KJ, Rivadeneira F, Estrada K, Medina-Gomez C, Isaacs A, McCarroll SA, Beekman M, de Craen AJ, Suchiman HE, Hofman A, Oostra B, Uitterlinden AG, Willemsen G,

Study LC, Platteel M, Veldink JH, van den Berg LH, Pitts SJ, Potluri S, Sundar P, Cox DR, Sunyaev SR, den Dunnen JT, Stoneking M, de Knijff P, Kayser M, Li Q, Li Y, Du Y, Chen R, Cao H, Li N, Cao S, Wang J, Bovenberg JA, Pe'er I, Slagboom PE, van Duijn CM, Boomsma DI, van Ommen GJ, de Bakker PI, Swertz MA, Wijmenga C. Genome of the Netherlands Consortium. Whole-genome sequence variation, population structure and demographic history of the Dutch population. *Nat Genet.* Aug;46(8):818-25. doi: 10.1038/ng.3021.

de Goeij MC, Halbesma N, Dekker FW, Wijsman CA, van Heemst D, Maier AB, Mooijaart SP, Slagboom PE, Westendorp RG, de Craen AJ. Renal function in familial longevity: the Leiden Longevity Study. *Exp Gerontol.* Mar;51:65-70. doi: 10.1016/j.exger.2013.12.012.

Guigas B, de Leeuw van Weenen JE, van Leeuwen N, Simonis-Bik AM, van Haeften TW, Nijpels G, Houwing-Duistermaat JJ, Beekman M, Deelen J, Havekes LM, Penninx BW, Vogelzangs N, van 't Riet E, Dehghan A, Hofman A, Witteman JC, Uitterlinden AG, Grarup N, Jørgensen T, Witte DR, Lauritzen T, Hansen T, Pedersen O, Hottenga J, Romijn JA, Diamant M, Kramer MH, Heine RJ, Willemsen G, Dekker JM, Eekhoff EM, Pijl H, de Geus EJ, Slagboom PE, 't Hart LM. Sex-specific effects of naturally occurring variants in the dopamine receptor D2 locus on insulin secretion and Type 2 diabetes susceptibility. *Diabet Med.* Aug;31(8):1001-8. doi: 10.1111/dme.12464.

Hafkemeijer A, Altmann-Schneider I, de Craen AJ, Slagboom PE, van der Grond J, Rombouts SA. Associations between age and gray matter volume in anatomical brain networks in middle-aged to older adults. *Aging Cell.* Dec;13(6):1068-74. doi: 10.1111/acel.12271.

den Hollander W, Ramos YF, Bos SD, Bomer N, van der Breggen R, Lakenberg N, de Dijcker WJ, Duijnsveld BJ, Slagboom PE, Nelissen RG, Meulenbelt I. Knee and hip articular cartilage have distinct epigenomic landscapes: implications for future cartilage regeneration approaches. *Ann Rheum Dis.* Dec;73(12):2208-12. doi: 10.1136/annrheumdis-2014-205980.

Huang J, Huffman JE, Yamkauchi M, Trompet S, Asselbergs FW, Sabater-Lleal M, Trégouët DA, Chen WM, Smith NL, Kleber ME, Shin SY, Becker DM, Tang W, Dehghan A, Johnson AD, Truong V, Folkersen L, Yang Q, Oudot-Mellkah T, Buckley BM, Moore JH, Williams FM, Campbell H, Silbernagel G, Vitart V, Rudan I, Tofler GH, Navis GJ, Destefano A, Wright AF, Chen MH, de Craen AJ, Worrall BB, Rudnicka AR, Rumley A, Bookman EB, Psaty BM, Chen F, Keene KL, Franco OH, Böhm BO, Uitterlinden AG, Carter AM, Jukema JW, Sattar N, Bis JC, Ikram MA; Cohorts for Heart and Aging Research in Genome Epidemiology (CHARGE) Consortium Neurology Working Group, Sale MM, McKnight B, Fornage M, Ford I, Taylor K, Slagboom PE, McArdle WL, Hsu FC, Franco-Cereceda A, Goodall AH, Yanek LR, Furie KL, Cushman M, Hofman A, Witteman JC, Folsom AR, Basu S, Matijevic N, van Gilst WH, Wilson JF, Westendorp RG, Kathiresan S, Reilly MP; CARDIoGRAM Consortium, Tracy RP, Polasek O, Winkelmann BR, Grant PJ, Hillege HL, Cambien F, Stott DJ, Lowe GD, Spector TD, Meigs JB, Marz W, Eriksson P, Becker LC, Morange PE, Soranzo N, Williams SM, Hayward C, van der Harst P, Hamsten A, Lowenstein CJ, Strachan DP, O'Donnell CJ; CHARGE Consortium Hemostatic Factor Working Group. Genome-Wide Association Study for Circulating Tissue Plasminogen Activator Levels and Functional Follow-Up Implicates Endothelial STXBP5 and STX2. *Arterioscler Thromb Vasc Biol.* May;34(5):1093-101. doi: 10.1161/ATVBAHA.113.302088.

GCAN. Huckins LM, Boraska V, Franklin CS, Floyd JA, Southam L, Boraska V, Franklin CS, Floyd JA, Thornton LM, Huckins LM, Southam L, Rayner NW, Tachmazidou I, Klump KL, Treasure J, Lewis CM, Schmidt U, Tozzi F, Kiezebrink K, Hebebrand J, Gorwood P, Adan RA, Kas MJ, Avaro AF, Santonastaso P, Fernández-Aranda F, Gratacos M, Rybakowski F, Dmitrzak-Weglarz M, Kaprio J, Keski-Rahkonen A, Raevuori A, Van Furth EF, Slof-Op 't Landt MC, Hudson JI, Reichborn-Kjennerud T, Knudsen GP, Monteleone P, Kaplan AS, Karwautz A, Hakonarson H, Berrettini WH, Guo Y, Li D, Schork NJ, Komaki G, Ando T, Inoko H, Esko T, Fischer K, Männik K, Metspalu A, Baker JH, Cone RD, Dackor J, Desocio JE, Hilliard CE, O'Toole JK, Pantel J, Szatkiewicz JP, Taico C, Zerwas S, Trace SE, Davis OS, Helder S, Bühren K, Burghardt R, de Zwaan M, Egberts K, Ehrlich S, Herpertz-Dahlmann B, Herzog W, Imgart H, Scherag A, Scherag S, Zipfel S, Boni C, Ramoz N, Versini A, Brandys MK, Danner UN, de Kove C, Hendriks J, Koeleman BP, Ophoff RA, Strengman E, van Elburg AA, Bruson A, Clementi M, Degortes D, Forzan M, Tenconi E, Docampo E, Escaramís G, Jiménez-Murcia S, Lissowska J, Rajewski A, Szeszenia-Dabrowska N, Slopian A, Hauser J, Karhunen L, Meulenbelt I, Slagboom PE, Tortorella A, Maj M, Dedoussis G, Dikeos D, Gonidakis F, Tziouvas K, Tsitsika A, Papezova H, Slachtova L, Martaskova D, Kennedy JL, Levitan RD, Yilmaz Z, Huemer J, Koubek D, Merl E, Wagner G, Lichtenstein P, Breen G, Cohen-Woods S, Farmer A, McGuffin P, Cichon S, Giegling I, Herms S, Rujescu D, Schreiber S, Wichmann HE, Dina C, Sladek R, Gambaro G, Soranzo N, Julia A, Marsal S, Rabionet RA, Gaborieau V, Dick DM, Palotie A, Ripatti S, Widén E, Andreassen OA, Espeseth T, Lundervold A, Reinvang I, Steen VM, Hellard SL, Mattingsda M, Ntalla I, Bencko V, Foretova L, Janout V, Navratilova M, Gallinger S, Pinto D, Scherer SW, Aschauer H, Carlberg L, Schosser A, Alfredsson L, Ding B, Klareskog L, Padyukov L, Finan C, Kalsi G, Roberts M, Logan DW, Peltonen L, Ritchie GR, Courtet P, Guillaume S, Jaussent I, Barrett JC, Estivill X, Hinney A, Sullivan PF, Collier DA, Zeggini E, Bulik CM, Anderson CA, Barrett JC, Floyd JA, Franklin CS, McGinnis R, Soranzo N, Zeggini E, Sambrook J, Stephens J, Ouwehand WH, McArdle WL, Ring SM, Strachan DP, Alexander G, Bulik CM, Collier DA,

Conlon PJ, Dominiczak A, Duncanson A, Hill A, Langford C, Lord G, Maxwell AP, Morgan L, Peltonen L, Sandford RN, Sheerin N, Soranzo N, Vannberg FO, Barrett JC, Genotyping DN, Blackburn H, Chen WM, Edkins S, Gillman M, Gray E, Hunt SE, Langford C, Nengut-Gumuscu S, Potter S, Rich SS, Simpkin D, Whittaker P, Sullivan PF, Bulik CM, Collier DA, Tyler-Smith C, Zeggini E, Tachmazidou I. Using ancestry-informative markers to identify fine structure across 15 populations of European origin. *Eur J Hum Genet*. Oct;22(10):1190-200. doi: 10.1038/ejhg.2014.1.

van Iterson M, Tobi EW, Sliker RC, den Hollander W, Luijk R, Slagboom PE, Heijmans BT. MethyAid: visual and interactive quality control of large Illumina 450k datasets. *Bioinformatics*. Dec 1;30(23):3435-7. doi: 10.1093/bioinformatics/btu566.

Klein-Wieringa IR, Andersen SN, Herb-van Toorn L, Kwekkeboom JC, van der Helm-van Mil AH, Meulenbelt I, Huizinga TW, Kloppenburg M, Toes RE, Ioan-Facsinay A. Are baseline high molecular weight adiponectin levels associated with radiographic progression in rheumatoid arthritis and osteoarthritis? *J Rheumatol*. May;41(5):853-7. doi: 10.3899/jrheum.130888.

Kroft LJ, van der Bijl N, van der Grond J, Altmann-Schneider I, Slagboom PE, Westendorp RG, de Roos A, de Craen AJ. Low computed tomography coronary artery calcium scores in familial longevity: the Leiden Longevity Study. *Age (Dordr)*. Aug;36(4):9668. doi: 10.1007/s11357-014-9668-6.

van Leeuwen N, Beekman M, Deelen J, van den Akker EB, de Craen AJ, Slagboom PE, 't Hart LM. Low mitochondrial DNA content associates with familial longevity: the Leiden Longevity Study. *Age (Dordr)*. Jun;36(3):9629. doi: 10.1007/s11357-014-9629-0.

Lotz M, Martel-Pelletier J, Christiansen C, Brandi ML, Bruyère O, Chapurlat R, Collette J, Cooper C, Giacovelli G, Kanis JA, Karsdal MA, Kraus V, Lems WF, Meulenbelt I, Pelletier JP, Raynaud JP, Reiter-Niesert S, Rizzoli R, Sandell LJ, Van Spil WE, Reginster JY. Republished: Value of biomarkers in osteoarthritis: current status and perspectives. *Postgrad Med J*. Mar;90(1061):171-8. doi: 10.1136/postgradmedj-2013-203726rep

van Mil NH, Steegers-Theunissen RP, Bouwland-Both MI, Verbiest MM, Rijlaarsdam J, Hofman A, Steegers EA, Heijmans BT, Jaddoe VW, Verhulst FC, Stolk L, Eilers PH, Uitterlinden AG, Tiemeier H. DNA methylation profiles at birth and child ADHD symptoms. *J Psychiatr Res* 49:51-59.

Oei L, Hsu YH, Styrkarsdottir U, Eussen BH, de KA, Peters MJ, Halldorsson B, Liu CT, Alonso N, Kaptoge SK, Thorleifsson G, Hallmans G, Hocking LJ, Husted LB, Jameson KA, Kruk M, Lewis JR, Patel MS, Scollen S, Svensson O, Trompet S, van Schoor NM, Zhu K, Buckley BM, Cooper C, Ford I, Goltzman D, Gonzalez-Macias J, Langdahl BL, Leslie WD, Lips P, Lorenc RS, Olmos JM, Pettersson-Kymmer U, Reid DM, Riancho JA, Slagboom PE, Garcia-Ibarbia C, Ingvarsson T, Johannsdottir H, Luben R, Medina-Gomez C, Arp P, Nandakumar K, Palsson ST, Sigurdsson G, van Meurs JB, Zhou Y, Hofman A, Jukema JW, Pols HA, Prince RL, Cupples LA, Marshall CR, Pinto D, Sato D, Scherer SW, Reeve J, Thorsteinsdottir U, Karasik D, Richards JB, Stefansson K, Uitterlinden AG, Ralston SH, Ioannidis JP, Kiel DP, Rivadeneira F, Estrada K. A genome-wide copy number association study of osteoporotic fractures points to the 6p25.1 locus. *J Med Genet* 51:122-131. doi:10.1136/jmedgenet-2013-102064

Postmus I, Johnson PC, Trompet S, de Craen AJ, Slagboom PE, Devlin JJ, Shiffman D, Sacks FM, Kearney PM, Stott DJ, Buckley BM, Sattar N, Ford I, Westendorp RG, Jukema JW. In search for genetic determinants of clinically meaningful differential cardiovascular event reduction by pravastatin in the PHarmacogenetic study of Statins in the Elderly at risk (PHASE)/PROSPER study. *Atherosclerosis*. Jul;235(1):58-64. doi: 10.1016/j.atherosclerosis.2014.04.009.

Postmus I, Trompet S, Deshmukh HA, Barnes MR, Li X, Warren HR, Chasman DI, Zhou K, Arsenault BJ, Donnelly LA, Wiggins KL, Avery CL, Griffin P, Feng Q, Taylor KD, Li G, Evans DS, Smith AV, de Keyser CE, Johnson AD, de Craen AJ, Stott DJ, Buckley BM, Ford I, Westendorp RG, Eline Slagboom P, Sattar N, Munroe PB, Sever P, Poulter N, Stanton A, Shields DC, O'Brien E, Shaw-Hawkins S, Ida Chen YD, Nickerson DA, Smith JD, Pierre Dubé M, Matthijs Boekholdt S, Kees Hovingh G, Kastelein JJ, McKeigue PM, Betteridge J, Neil A, Durrington PN, Doney A, Carr F, Morris A, McCarthy MI, Groop L, Ahlqvist E; Welcome Trust Case Control Consortium, Bis JC, Rice K, Smith NL, Lumley T, Whitsel EA, Stürmer T, Boerwinkle E, Ngwa JS, O'Donnell CJ, Vasani RS, Wei WQ, Wilke RA, Liu CT, Sun F, Guo X, Heckbert SR, Post W, Sotoodehnia N, Arnold AM, Stafford JM, Ding J, Herrington DM, Kritchevsky SB, Eiriksdottir G, Launer LJ, Harris TB, Chu AY, Giulianini F, MacFadyen JG, Barratt BJ, Nyberg F, Stricker BH, Uitterlinden AG, Hofman A, Rivadeneira F, Emilsson V, Franco OH, Ridker PM, Gudnason V, Liu Y, Denny JC, Ballantyne CM, Rotter JJ, Adrienne Cupples L, Psaty BM, Palmer CN, Tardif JC, Colhoun HM, Hitman G, Krauss RM, Wouter Jukema J, Caulfield MJ; Membership of Wellcome Trust Case Control Consortium; Data and Analysis Group; DNA, Genotyping, Data QC and Informatics Group; Publications Committee; Membership of Wellcome Trust Case Control Consortium; Data and Analysis Group; DNA Genotyping Data QC and Informatics Group;

Publications Committee. Pharmacogenetic meta-analysis of genome-wide association studies of LDL cholesterol response to statins. *Nat Commun.* Oct 28;5:5068. doi: 10.1038/ncomms6068.

Ramos YF, den Hollander W, Bovée JV, Bomer N, van der Breggen R, Lakenberg N, Keurentjes JC, Goeman JJ, Slagboom PE, Nelissen RG, Bos SD, Meulenbelt I. Genes Involved in the Osteoarthritis Process Identified through Genome Wide Expression Analysis in Articular Cartilage; the RAAK Study. *PLoS One.* Jul 23;9(7):e103056. doi: 10.1371/journal.pone.0103056.

Ramos YF, Mestrustry S, Arden N, Bay-Jensen AC, Beekman M, de Craen AJ, Cupples LA, Esko T, Evangelou E, Felson DT, Hart DJ, Ioannidis JP, Karsdal M, Kloppenburg M, Lafeber F, Metspalu A, Panoutsopoulou K, Slagboom PE, Spector TD, van Spil EW, Uitterlinden AG, Zhu Y; arcOGEN consortium; TreatOA collaborators, Valdes AM, van Meurs JB, Meulenbelt I; arcOGEN consortium. Meta-analysis identifies loci affecting levels of the potential osteoarthritis biomarkers sCOMP and uCTX-II with genome wide significance. *J Med Genet.* Sep;51(9):596-604. doi: 10.1136/jmedgenet-2014-102478.

Ramos YF, Bos SD, Lakenberg N, Böhringer S, den Hollander WJ, Kloppenburg M, Slagboom PE, Meulenbelt I. Genes expressed in blood link osteoarthritis with apoptotic pathways. *Ann Rheum Dis.* Oct;73(10):1844-53. doi: 10.1136/annrheumdis-2013-203405.

Raule N, Sevini F, Li S, Barbieri A, Tallaro F, Lomartire L, Vianello D, Montesanto A, Moilanen JS, Bezrukov V, Blanché H, Hervonen A, Christensen K, Deiana L, Gonos ES, Kirkwood TB, Kristensen P, Leon A, Pelicci PG, Poulain M, Rea IM, Remacle J, Robine JM, Schreiber S, Sikora E, Eline Slagboom P, Spazzafumo L, Antonietta Stazi M, Toussaint O, Vaupel JW, Rose G, Majamaa K, Perola M, Johnson TE, Bolund L, Yang H, Passarino G, Franceschi C. The co-occurrence of mtDNA mutations on different oxidative phosphorylation subunits, not detected by haplogroup analysis, affects human longevity and is population specific. *Aging Cell.* Jun;13(3):401-7. doi: 10.1111/acel.12186.

Rodriguez-Fontenla C, Calaza M, Evangelou E, Valdes AM, Arden N, Blanco FJ, Carr A, Chapman K, Deloukas P, Doherty M, Esko T, Garces CM, Gomez-Reino JJ, Helgadottir H, Hofman A, Jonsdottir I, Kerkhof HJ, Kloppenburg M, McCaskie A, Ntzani EE, Ollier WE, Oreiro N, Panoutsopoulou K, Ralston SH, Ramos YF, Riancho JA, Rivadeneira F, Slagboom PE, Styrkarsdottir U, Thorsteinsdottir U, Thorleifsson G, Tsezou A, Uitterlinden AG, Wallis GA, Wilkinson JM, Zhai G, Zhu Y; the arcOGEN consortium, Felson DT, Ioannidis JP, Loughlin J, Metspalu A, Meulenbelt I, Stefansson K, van Meurs JB, Zeggini E, Spector TD, Gonzalez A. Assessment of osteoarthritis candidate genes in a meta-analysis of 9 genome-wide association studies. *Arthritis Rheumatol.* Apr;66(4):940-9. doi: 10.1002/art.38300.

Sala M, Kroft LJ, Röell B, van der Grond J, Slagboom PE, Mooijaart SP, de Roos A, van Heemst D. Association of liver enzymes and computed tomography markers of liver steatosis with familial longevity. *PLoS One.* Mar 14;9(3):e91085. doi: 10.1371/journal.pone.0091085. eCollection 2014.

Sala M, de Roos A, van den Berg A, Altmann-Schneider I, Slagboom PE, Westendorp RG, van Buchem MA, de Craen AJ, van der Grond J. Microstructural brain tissue damage in metabolic syndrome. *Diabetes Care* 37:493-500. doi:10.2337/dc13-1160

Slof-Op 't Landt MC, van Furth EF, Meulenbelt I, Bartels M, Hottenga JJ, Slagboom PE, Boomsma DI. Association study of the estrogen receptor I gene (ESR1) in anorexia nervosa and eating disorders: No replication found. *Int J Eat Disord.* Mar;47(2):211-4. doi: 10.1002/eat.22228

Slof-Op't Landt MC, DeRijk RH, van Son GE, Suchiman HE, Meulenbelt I, Slagboom PE, Van Furth EF. A common mineralocorticoid receptor polymorphism (I180V) interacts with life events in relation to perfectionism in eating disorders: a pilot study. *Eur Eat Disord Rev.* Nov;22(6):423-9. doi: 10.1002/erv.2319.

Spaans VM, Trietsch MD, Crobach S, Stelloo E, Kremer D, Osse EM, Haar NT, van Eijk R, Muller S, van Wezel T, Trimbos JB, Bosse T, Smit VT, Fleuren GJ. Designing a high-throughput somatic mutation profiling panel specifically for gynaecological cancers. *PLoS One.* Mar 26;9(3):e93451. doi: 10.1371/journal.pone.0093451. eCollection 2014

van Steenbergen HW, Luijk R, Shoemaker R, Heijmans BT, Huizinga TW, van der Helm-van Mil AH. Differential methylation within the major histocompatibility complex region in rheumatoid arthritis: a replication study. *Rheumatology (Oxford).* Dec;53(12):2317-8. doi: 10.1093/rheumatology/keu380.

Styrkarsdóttir U, Thorleifsson G, Helgadóttir HT, Bomer N, Metrustry S, Bierma-Zeinstra S, Strijbosch AM, Evangelou E, Hart D, Beekman M, Jonasdóttir A, Sigurdsson A, Eiriksson FF, Thorsteinsdóttir M, Frigge ML, Kong A, Gudjonsson SA, Magnusson OT, Masson G; TREAT-OA Consortium; arcOGEN Consortium, Hofman A, Arden NK, Ingvarsson T, Lohmander S, Kloppenburg M, Rivadeneira F, Nelissen RG, Spector T, Uitterlinden A, Slagboom PE, Thorsteinsdóttir U, Jonsdóttir I, Valdes AM, Meulenbelt I, van Meurs J, Jonsson H, Stefansson K. Severe osteoarthritis of the hand associates with common variants within the ALDH1A2 gene and with rare variants at 1p31. *Nat Genet.* May;46(5):498-502. doi: 10.1038/ng.2957.

Tan Q, Frost M, Heijmans BT, von Bornemann Hjelmberg J, Tobi EW, Christensen K, Christiansen L. Epigenetic signature of birth weight discordance in adult twins. *BMC Genomics.* Dec 4;15:1062. doi: 10.1186/1471-2164-15-1062

Thung D, de Ligt J, Vissers L, Steehouwer M, Kroon M, de Vries P, Slagboom EP, Ye K, Veltman JA, Hehir-Kwa JY. Mobster: accurate detection of mobile element insertions in next generation sequencing data. *Genome Biol.* Oct 28;15(10):488.

Tobi EW, Goeman JJ, Monajemi R, Gu H, Putter H, Zhang Y, Sliker RC, Stok AP, Thijssen PE, Müller F, van Zwet EW, Bock C, Meissner A, Lumey LH, Eline Slagboom P, Heijmans BT. DNA methylation signatures link prenatal famine exposure to growth and metabolism. *Nat Commun.* Nov 26;5:5592. doi: 10.1038/ncomms6592

Vaarhorst AA, Verhoeven A, Weller CM, Böhringer S, Göröler S, Meissner A, Deelder AM, Henneman P, Gorgels AP, van den Brandt PA, Schouten LJ, van Greevenbroek MM, Merry AH, Verschuren WM, van den Maagdenberg AM, van Dijk KW, Isaacs A, Boomsma D, Oostra BA, van Duijn CM, Jukema JW, Boer JM, Feskens E, Heijmans BT, Slagboom PE. A metabolomic profile is associated with the risk of incident coronary heart disease. *Am Heart J.* Jul;168(1):45-52.e7. doi: 10.1016/j.ahj.2014.01.019.

Valdes AM, Meulenbelt I, Chassaing E, Arden NK, Bierma-Zeinstra S, Hart D, Hofman A, Karsdal M, Kloppenburg M, Kroon HM, Slagboom EP, Spector TD, Uitterlinden AG, van Meurs JB, Bay-Jensen AC. Large scale meta-analysis of urinary C-terminal telopeptide, serum cartilage oligomeric protein and matrix metalloproteinase degraded type II collagen and their role in prevalence, incidence and progression of osteoarthritis. *Osteoarthritis Cartilage.* May;22(5):683-9. doi: 10.1016/j.joca.2014.02.007

Vroege DP, Wijsman CA, Broekhuizen K, de Craen AJ, van Heemst D, van der Ouderaa FJ, van Mechelen W, Slagboom PE, Catt M, Westendorp RG, Verhagen EA, Mooijaart SP. Dose-response effects of a web-based physical activity program on body composition and metabolic health in inactive older adults: additional analyses of a randomized controlled trial. *J Med Internet Res.* Dec 4;16(12):e265. doi: 10.2196/jmir.3643.

Walsh KM, Codd V, Smirnov IV, Rice T, Decker PA, Hansen HM, Kollmeyer T, Kosel ML, Molinaro AM, McCoy LS, Bracci PM, Cabriga BS, Pekmezci M, Zheng S, Wiemels JL, Pico AR, Tihan T, Berger MS, Chang SM, Prados MD, Lachance DH, O'Neill BP, Sicotte H, Eckel-Passow JE; ENGAGE Consortium Telomere Group (Codd V, Nelson CP, Albrecht E, Mangino M, Deelen J, Buxton JL, Hottenga JJ, Fischer K, Esko T, Surakka I, Broer L, Nyholt DR, Leach IM, Salo P, Hägg S, Matthews MK, Palmén J, Norata GD, O'Reilly PF, Saleheen D, Amin N, Balmforth AJ, Beekman M, de Boer RA, Böhringer S, Braund PS, Burton PR, de Craen AJ, Denniff M, Dong Y, Douroudís K, Dubinina E, Eriksson JG, Garlaschelli K, Guo D, Hartikainen AL, Henders AK, Houwing-Duistermaat JJ, Kananen L, Karssen LC, Kettunen J, Klopp N, Lagou V, van Leeuwen EM, Madden PA, Mägi R, Magnusson PK, Männistö S, McCarthy MI, Medland SE, Mihailov E, Montgomery GW, Oostra BA, Palotie A, Peters A, Pollard H, Pouta A, Prokopenko I, Ripatti S, Salomaa V, Suchiman H, Valdes AM, Verweij N, Viñuela A, Wang X, Wichmann HE, Widen E, Willemssen G, Wright MJ, Xia K, Xiao X, van Veldhuisen DJ, Catapano AL, Tobin MD, Hall AS, Blakemore AI, van Gilst WH, Zhu H, Erdmann J, Reilly MP, Kathiresan S, Schunkert H, Talmud PJ, Pedersen NL, Perola M, Ouwehand W, Kaprio J, Martin NG, van Duijn CM, Hovatta I, Gieger C, Metspalu A, Boomsma DI, Jarvelin MR, Slagboom P, Thompson JR, Spector TD, van der Harst P, Samani NJ), van der Harst P, Wiencke JK, Samani NJ, Jenkins RB, Wrensch MR. Variants near TERT and TERC influencing telomere length are associated with high-grade glioma risk. *Nat Genet.* Jul;46(7):731-5. doi: 10.1038/ng.3004.

Wood AR, Esko T, Yang J, Vedantam S, Pers TH, Gustafsson S, Chu AY, Estrada K, Luan J, Kutalik Z, Amin N, Buchkovich ML, Croteau-Chonka DC, Day FR, Duan Y, Fall T, Fehrmann R, Ferreira T, Jackson AU, Karjalainen J, Lo KS, Locke AE, Mägi R, Mihailov E, Porcu E, Randall JC, Scherag A, Vinkhuyzen AA, Westra HJ, Winkler TW, Workalemahu T, Zhao JH, Absher D, Albrecht E, Anderson D, Baron J, Beekman M, Demirkan A, Ehret GB, Feenstra B, Feitosa MF, Fischer K, Fraser RM, Goel A, Gong J, Justice AE, Kanoni S, Kleber ME, Kristiansson K, Lim U, Lotay V, Lui JC, Mangino M, Leach IM, Medina-Gomez C, Nalls MA, Nyholt DR, Palmer CD, Pasko D, Pechlivanis S, Prokopenko I, Ried JS, Ripke S, Shungin D, Stancáková A, Strawbridge RJ, Sung YJ, Tanaka T, Teumer A, Trompet S, van der Laan SW, van Setten J, Van Vliet-Ostaptchouk JV, Wang Z, Yengo L, Zhang W, Afzal U, Arnlöv J, Arscott

GM, Bandinelli S, Barrett A, Bellis C, Bennett AJ, Berne C, Blüher M, Bolton JL, Böttcher Y, Boyd HA, Bruinenberg M, Buckley BM, Buyske S, Caspersen IH, Chines PS, Clarke R, Claudi-Boehm S, Cooper M, Daw EW, De Jong PA, Deelen J, Delgado G, Denny JC, Dhonukshe-Rutten R, Dimitriou M, Doney AS, Dörr M, Eklund N, Eury E, Folkersen L, Garcia ME, Geller F, Giedraitis V, Go AS, Grallert H, Grammer TB, Gräßler J, Grönberg H, de Groot LC, Groves CJ, Haessler J, Hall P, Haller T, Hallmans G, Hannemann A, Hartman CA, Hassinen M, Hayward C, Heard-Costa NL, Helmer Q, Hemani G, Henders AK, Hillege HL, Hlatky MA, Hoffmann W, Hoffmann P, Holmen O, Houwing-Duistermaat JJ, Illig T, Isaacs A, James AL, Jeff J, Johansen B, Johansson A, Jolley J, Juliusdottir T, Junttila J, Kho AN, Kinnunen L, Klopp N, Kocher T, Kratzer W, Lichtner P, Lind L, Lindström J, Lobbens S, Lorentzon M, Lu Y, Lyssenko V, Magnusson PK, Mahajan A, Maillard M, McArdle WL, McKenzie CA, McLachlan S, McLaren PJ, Menni C, Merger S, Milani L, Moayyeri A, Monda KL, Morken MA, Müller G, Müller-Nurasyid M, Musk AW, Narisu N, Nauck M, Nolte IM, Nöthen MM, Oozageer L, Pilz S, Rayner NW, Renstrom F, Robertson NR, Rose LM, Rousset R, Sanna S, Scharnagl H, Scholtens S, Schumacher FR, Schunkert H, Scott RA, Sehmi J, Seufferlein T, Shi J, Silventoinen K, Smit JH, Smith AV, Smolonska J, Stanton AV, Stirrups K, Stott DJ, Stringham HM, Sundström J, Swertz MA, Syvänen AC, Tayo BO, Thorleifsson G, Tyrer JP, van Dijk S, van Schoor NM, van der Velde N, van Heemst D, van Oort FV, Vermeulen SH, Verweij N, Vonk JM, Waite LL, Waldenberger M, Wennauer R, Wilkens LR, Willenborg C, Wilsgaard T, Wojczynski MK, Wong A, Wright AF, Zhang Q, Arveiler D, Bakker SJ, Beilby J, Bergman RN, Bergmann S, Biffar R, Blangero J, Boomsma DI, Bornstein SR, Bovet P, Brambilla P, Brown MJ, Campbell H, Caulfield MJ, Chakravarti A, Collins R, Collins FS, Crawford DC, Cupples LA, Danesh J, de Faire U, den Ruijter HM, Erbel R, Erdmann J, Eriksson JG, Farrall M, Ferrannini E, Ferrières J, Ford I, Forouhi NG, Forrester T, Gansevoort RT, Gejman PV, Gieger C, Golay A, Gottesman O, Gudnason V, Gyllenstein U, Haas DW, Hall AS, Harris TB, Hattersley AT, Heath AC, Hengstenberg C, Hicks AA, Hindorf LA, Hingorani AD, Hofman A, Hovingh GK, Humphries SE, Hunt SC, Hyppönen E, Jacobs KB, Jarvelin MR, Jousilahti P, Jula AM, Kaprio J, Kastelein JJ, Kayser M, Kee F, Keinanen-Kiukaanniemi SM, Kiemeny LA, Kooner JS, Kooperberg C, Koskinen S, Kovacs P, Kraja AT, Kumari M, Kuusisto J, Lakka TA, Langenberg C, Le Marchand L, Lehtimäki T, Lupoli S, Madden PA, Männistö S, Manunta P, Marette A, Matisse TC, McKnight B, Meitinger T, Moll FL, Montgomery GW, Morris AD, Morris AP, Murray JC, Nelis M, Ohlsson C, Oldehinkel AJ, Ong KK, Ouwehand WH, Pasterkamp G, Peters A, Pramstaller PP, Price JF, Qi L, Raitakari OT, Rankinen T, Rao DC, Rice TK, Ritchie M, Rudan I, Salomaa V, Samani NJ, Saramies J, Sarzynski MA, Schwarz PE, Sebert S, Sever P, Shuldiner AR, Sinisalo J, Steinthorsdottir V, Stolk RP, Tardif JC, Tönjes A, Tremblay A, Tremoli E, Virtamo J, Vohl MC; The Electronic Medical Records and Genomics (eMERGE) Consortium; The MIGen Consortium; The PAGE Consortium; The LifeLines Cohort Study, Amouyel P, Asselbergs FW, Assimes TL, Bochud M, Boehm BO, Boerwinkle E, Bottinger EP, Bouchard C, Cauchi S, Chambers JC, Chanock SJ, Cooper RS, de Bakker PI, Dedoussis G, Ferrucci L, Franks PW, Froguel P, Groop LC, Haiman CA, Hamsten A, Hayes MG, Hui J, Hunter DJ, Hveem K, Jukema JW, Kaplan RC, Kivimäki M, Kuh D, Laakso M, Liu Y, Martin NG, März W, Melbye M, Moebus S, Munroe PB, Njølstad I, Oostra BA, Palmer CN, Pedersen NL, Perola M, Pérusse L, Peters U, Powell JE, Power C, Quertermous T, Rauramaa R, Reinmaa E, Ridker PM, Rivadeneira F, Rotter JJ, Saaristo TE, Saleheen D, Schlessinger D, Slagboom PE, Snieder H, Spector TD, Strauch K, Stumvoll M, Tuomilehto J, Uusitupa M, van der Harst P, Völzke H, Walker M, Wareham NJ, Watkins H, Wichmann HE, Wilson JF, Zanen P, Deloukas P, Heid IM, Lindgren CM, Mohlke KL, Speliotes EK, Thorsteinsdottir U, Barroso I, Fox CS, North KE, Strachan DP, Beckmann JS, Berndt SI, Boehnke M, Borecki IB, McCarthy MI, Metspalu A, Stefansson K, Uitterlinden AG, van Duijn CM, Franke L, Willer CJ, Price AL, Lettre G, Loos RJ, Weedon MN, Ingelsson E, O'Connell JR, Abecasis GR, Chasman DI, Goddard ME, Visscher PM, Hirschhorn JN, Frayling TM. Defining the role of common variation in the genomic and biological architecture of adult human height. *Nat Genet.* Oct;46(11):1173–1186 doi:10.1038/ng.3097

2013

Albrechtsen A, Grarup N, Li Y, Sparsø T, Tian G, Cao H, Jiang T, Kim SY, Korneliusen T, Li Q, Nie C, Wu R, Skotte L, Morris AP, Ladenvall C, Cauchi S, Stančáková A, Andersen G, Astrup A, Banasik K, Bennett AJ, Bolund L, Charpentier G, Chen Y, Dekker JM, Doney AS, Dorkhan M, Forsen T, Frayling TM, Groves CJ, Gui Y, Hallmans G, Hattersley AT, He K, Hitman GA, Holmkvist J, Huang S, Jiang H, Jin X, Justesen JM, Kristiansen K, Kuusisto J, Lajer M, Lantieri O, Li W, Liang H, Liao Q, Liu X, Ma T, Ma X, Manijak MP, Marre M, Mokrosiński J, Morris AD, Mu B, Nielsen AA, Nijpels G, Nilsson P, Palmer CN, Rayner NW, Renström F, Ribel-Madsen R, Robertson N, Rolandsson O, Rossing P, Schwartz TW, Slagboom PE, Sterner M; D.E.S.I.R. Study Group, Tang M, Tarnow L; the DIAGRAM Consortium, Tuomi T, Van't Riet E, van Leeuwen N, Varga TV, Vestmar MA, Walker M, Wang B, Wang Y, Wu H, Xi F, Yengo L, Yu C, Zhang X, Zhang J, Zhang Q, Zhang W, Zheng H, Zhou Y, Altshuler D, 't Hart LM, Franks PW, Balkau B, Froguel P, McCarthy MI, Laakso M, Groop L, Christensen C, Brandslund I, Lauritzen T, Witte DR, Linneberg A, Jørgensen T, Hansen T, Wang J, Nielsen R, Pedersen O. Exome sequencing-driven discovery of coding polymorphisms associated with common metabolic phenotypes. *Diabetologia.* Feb;56(2):298-310.

Altmann-Schneider I, van der Grond J, Slagboom PE, Westendorp RG, Maier AB, van Buchem MA, de Craen AJ. Lower Susceptibility to Cerebral Small Vessel Disease in Human Familial Longevity: The Leiden Longevity Study. *Stroke.* Jan;44(1):9-14. doi: 10.1161/STROKEAHA.112.671438.

Bay-Jensen AC, Slagboom E, Chen-An P, Alexandersen P, Qvist P, Christiansen C, Meulenbelt I, Karsdal MA. Role of hormones in cartilage and joint metabolism: understanding an unhealthy metabolic phenotype in osteoarthritis. *Menopause*. May;20(5):578-86. doi: 10.1097/GME.0b013e3182745993.

Beekman M, Blanché H, Perola M, Hervonen A, Bezrukov V, Sikora E, Flachsbarth F, Christiansen L, De Craen AJ, Kirkwood TB, Rea IM, Poulain M, Robine JM, Valensin S, Stazi MA, Passarino G, Deiana L, Gonos ES, Paternoster L, Sørensen TI, Tan Q, Helmer Q, Van den Akker EB, Deelen J, Martella F, Cordell HJ, Ayers KL, Vaupel JW, Törnwall O, Johnson TE, Schreiber S, Lathrop M, Skytthe A, Westendorp RG, Christensen K, Gampe J, Nebel A, Houwing-Duistermaat JJ, Eline Slagboom P, Franceschi C; The GEHA consortium. Genome-wide linkage analysis for human longevity: Genetics of Healthy Ageing Study. *Aging Cell*. Apr;12(2):184-93. doi: 10.1111/accel.12039.

Beenakker KG, Westendorp RG, de Craen AJ, Slagboom PE, van HD, Maier AB. Pro-inflammatory capacity of classically activated monocytes relates positively to muscle mass and strength. *Aging Cell* 12:682-689. doi: 10.1111/accel.12095.

Bijsterbosch J, Kloppenburg M, Reijnen M, Rosendaal FR, Huizinga TW, Slagboom PE, Meulenbelt I. Association study of candidate genes for the progression of hand osteoarthritis. *Osteoarthritis Cartilage*. Apr;21(4):565-9. doi: 10.1016/j.joca.2013.01.011.

Bos SD, Beekman M, Maier AB, Karsdal MA, Kwok WY, Bay-Jensen AC, Kloppenburg M, Slagboom PE, Meulenbelt I. Metabolic health in families enriched for longevity is associated with low prevalence of hand osteoarthritis and influences OA biomarker profiles. *Ann Rheum Dis*. Oct 1;72(10):1669-74. doi: 10.1136/annrheumdis-2012-202013.

Bouwland-Both MI, van Mil NH, Stolk L, Eilers PH, Verbiest MM, Heijmans BT, Tiemeier H, Hofman A, Steegers EA, Jaddoe VW, Steegers-Theunissen RP. DNA Methylation of IGF2DMR and H19 Is Associated with Fetal and Infant Growth: The Generation R Study. *PLoS One* 8:e81731.

Brandys MK, Kas MJ, van Elburg AA, Ophoff R, Slof-Op't Landt MC, Middeldorp CM, Boomsma DI, van Furth EF, Slagboom PE, Adan RA. The Val66Met polymorphism of the BDNF gene in anorexia nervosa: New data and a meta-analysis. *World J Biol Psychiatry*. Aug;14(6):441-51. doi: 10.3109/15622975.2011.605470.

Broer L, Codd V, Nyholt DR, Deelen J, Mangino M, Willemsen G, Albrecht E, Amin N, Beekman M, de Geus EJ, Henders A, Nelson CP, Steves CJ, Wright MJ, de Craen AJ, Isaacs A, Matthews M, Moayyeri A, Montgomery GW, Oostra BA, Vink JM, Spector TD, Slagboom PE, Martin NG, Samani NJ, van Duijn CM, Boomsma DI. Meta-analysis of telomere length in 19 713 subjects reveals high heritability, stronger maternal inheritance and a paternal age effect. *Eur J Hum Genet*. Oct;21(10):1163-8. doi: 10.1038/ejhg.2012.303.

Codd V, Nelson CP, Albrecht E, Mangino M, Deelen J, Buxton JL, Hottenga JJ, Fischer K, Esko T, Surakka I, Broer L, Nyholt DR, Mateo Leach I, Salo P, Hägg S, Matthews MK, Palmen J, Norata GD, O'Reilly PF, Saleheen D, Amin N, Balmforth AJ, Beekman M, de Boer RA, Böhringer S, Braund PS, Burton PR, Craen AJ, Denniff M, Dong Y, Douroudis K, Dubinina E, Eriksson JG, Garlaschelli K, Guo D, Hartikainen AL, Henders AK, Houwing-Duistermaat JJ, Kananen L, Karssen LC, Kettunen J, Klopp N, Lagou V, van Leeuwen EM, Madden PA, Mägi R, Magnusson PK, Männistö S, McCarthy MI, Medland SE, Mihailov E, Montgomery GW, Oostra BA, Palotie A, Peters A, Pollard H, Pouta A, Prokopenko I, Ripatti S, Salomaa V, Suchiman HE, Valdes AM, Verweij N, Viñuela A, Wang X, Wichmann HE, Widen E, Willemsen G, Wright MJ, Xia K, Xiao X, van Veldhuisen DJ, Catapano AL, Tobin MD, Hall AS, Blakemore AI, van Gilst WH, Zhu H, Consortium C, Erdmann J, Reilly MP, Kathiresan S, Schunkert H, Talmud PJ, Pedersen NL, Perola M, Ouwehand W, Kaprio J, Martin NG, van Duijn CM, Hovatta I, Gieger C, Metspalu A, Boomsma DI, Jarvelin MR, Slagboom PE, Thompson JR, Spector TD, van der Harst P, Samani NJ. Identification of seven loci affecting mean telomere length and their association with disease. *Nat Genet*. Apr;45(4):422-7, 427e1-2. doi: 10.1038/ng.2528.

Dall'olio F, Vanhooren V, Chen CC, Slagboom PE, Wuhrer M, Franceschi C. N-glycomic biomarkers of biological aging and longevity: A link with inflammaging. *Ageing Res Rev*. Mar;12(2):685-98. doi: 10.1016/j.arr.2012.02.002.

Dastani Z, Johnson T, Kronenberg F, Nelson CP, Assimes TL, März W; CARDIoGRAM Consortium; ADIPOGen Consortium, Richards JB. The shared allelic architecture of adiponectin levels and coronary artery disease. *Atherosclerosis*. Jul;229(1):145-8. doi: 10.1016/j.atherosclerosis.2013.03.034.

Deelen J, Uh HW, Monajemi R, van Heemst D, Thijssen PE, Böhringer S, van den Akker EB, de Craen AJ, Rivadeneira F, Uitterlinden AG, Westendorp RG, Goeman JJ, Slagboom PE, Houwing-Duistermaat JJ, Beekman M.

Gene set analysis of GWAS data for human longevity highlights the relevance of the insulin/IGF-1 signaling and telomere maintenance pathways. *Age (Dordr)*. Feb;35(1):235-49. doi: 10.1007/s11357-011-9340-3.

Deelen J, Beekman M, Capri M, Franceschi C, Slagboom PE. Identifying the genomic determinants of aging and longevity in human population studies: Progress and challenges. *Bioessays*. Apr;35(4):386-96. doi: 10.1002/bies.201200148.

Derhovanessian E, Maier AB, Hahnel K, Zelba H, de Craen AJ, Roelofs H, Slagboom EP, Westendorp RG, Pawelec G. Lower proportion of naive peripheral CD8+ T cells and an unopposed pro-inflammatory response to human Cytomegalovirus proteins in vitro are associated with longer survival in very elderly people. *Age (Dordr)* 35:1387-1399.

Draisma HH, Beekman M, Pool R, van Ommen GJ, Adamski J, Prehn C, Vaarhorst AA, de Craen AJ, Willemsen G, Slagboom PE, Boomsma DI. Familial resemblance for serum metabolite concentrations. *Twin Res Hum Genet* 16:948-961. doi: 10.1017/thg.2013.59

Evangelou E, Valdes AM, Castano-Betancourt MC, Doherty M, Doherty S, Esko T, Ingvarsson T, Ioannidis JP, Kloppenburg M, Metspalu A, Ntzani EE, Panoutsopoulou K, Slagboom PE, Southam L, Spector TD, Styrkarsdottir U, Stefansson K, Uitterlinden AG, Wheeler M, Zeggini E, Meulenbelt I, van Meurs JB; arcOGEN consortium, the TREAT-OA consortium. The DOT1L rs12982744 polymorphism is associated with osteoarthritis of the hip with genome-wide statistical significance in males. *Ann Rheum Dis*. Jul;72(7):1264-5. doi: 10.1136/annrheumdis-2012-203182

Gonzalez-Covarrubias V, Beekman M, Uh HW, Dane A, Troost J, Paliukhovich I, van der Kloet FM, Houwing-Duistermaat J, Vreeken RJ, Hankemeier T, Slagboom EP. Lipidomics of familial longevity. *Aging Cell*. Jun;12(3):426-34. doi: 10.1111/accel.12064

Gunn DA, de Craen AJ, Dick JL, Tomlin CC, van Heemst D, Catt SD, Griffiths T, Ogden S, Maier AB, Murray PG, Griffiths CE, Slagboom PE, Westendorp RG. Facial Appearance Reflects Human Familial Longevity and Cardiovascular Disease Risk in Healthy Individuals. *J Gerontol A Biol Sci Med Sci*. 68(2):145-52. doi: 10.1093/gerona/gls154.

't Hart LM, Fritsche A, Nijpels G, van Leeuwen N, Donnelly LA, Dekker JM, Alsema M, Fadista J, Carlotti F, Gjesing AP, Palmer CN, van Haften TW, Herzberg-Schäfer SA, Simonis-Bik AM, Houwing-Duistermaat JJ, Helmer Q, Deelen J, Guigas B, Hansen T, Machicao F, Willemsen G, Heine RJ, Kramer MH, Holst JJ, de Koning EJ, Häring HU, Pedersen O, Groop L, de Geus EJ, Slagboom PE, Boomsma DI, Eekhoff EM, Pearson ER, Diamant M. The CTRB1/2 locus affects diabetes susceptibility and treatment via the incretin pathway. *Diabetes*. Sep;62(9):3275-81. doi: 10.2337/db13-0227.

Kiezun A, Pulit SL, Francioli LC, van Dijk F, Swertz M, Boomsma DI, van Duijn CM, Slagboom PE, van Ommen GJ, Wijmenga C; Genome of the Netherlands Consortium, de Bakker PI, Sunyaev SR. Deleterious alleles in the human genome are on average younger than neutral alleles of the same frequency. *PLoS Genet*. Feb;9(2):e1003301. doi: 10.1371/journal.pgen.1003301.

Khan TA, Shah T, Prieto D, Zhang W, Price J, Fowkes GR, Cooper J, Talmud PJ, Humphries SE, Sundstrom J, Hubacek JA, Ebrahim S, Lawlor DA, Ben-Shlomo Y, Abdollahi MR, Slooter AJ, Szolnoki Z, Sandhu M, Wareham N, Frikke-Schmidt R, Tybjaerg-Hansen A, Fillenbaum G, Heijmans BT, Katsuya T, Gromadzka G, Singleton A, Ferrucci L, Hardy J, Worrall B, Rich SS, Matarin M, Whittaker J, Gaunt TR, Whincup P, Morris R, Deanfield J, Donald A, Davey Smith G, Kivimaki M, Kumari M, Smeeth L, Khaw KT, Nalls M, Meschia J, Sun K, Hui R, Day I, Hingorani AD, Casas JP. Apolipoprotein E genotype, cardiovascular biomarkers and risk of stroke: Systematic review and meta-analysis of 14 015 stroke cases and pooled analysis of primary biomarker data from up to 60 883 individuals. *Int J Epidemiol*. Apr;42(2):475-492.

Lammers Y, Kremer D, Brakefield PM, Groenenberg DS, Pirovano W, Schilthuisen M. SNP genotyping for detecting the 'rare allele phenomenon' in hybrid zones. *Mol Ecol Resour*. Mar;13(2):237-42. doi: 10.1111/1755-0998.12044

Lauc G, Huffman JE, Pučić M, Zgaga L, Adamczyk B, Mužinić A, Novokmet M, Polašek O, Gornik O, Krištić J, Keser T, Vitart V, Scheijen B, Uh HW, Molokhia M, Patrick AL, McKeigue P, Kolčić I, Lukić IK, Swann O, van Leeuwen FN, Ruhaak LR, Houwing-Duistermaat JJ, Slagboom PE, Beekman M, de Craen AJ, Deelder AM, Zeng Q, Wang W, Hastie ND, Gyllenstein U, Wilson JF, Wuhrer M, Wright AF, Rudd PM, Hayward C, Aulchenko Y, Campbell H, Rudan I. Loci associated with N-glycosylation of human immunoglobulin g show pleiotropy with autoimmune diseases and haematological cancers. *PLoS Genet*. Jan;9(1):e1003225. doi: 10.1371/journal.pgen.1003225.

Leijten JC, Bos SD, Landman EB, Georgi N, Jahr H, Meulenbelt I, Post JN, van Blitterswijk CA, Karperien M. GREM1, FRZB and DKK1 mRNA levels correlate with osteoarthritis and are regulated by osteoarthritis-associated factors. *Arthritis Res Ther* 15:R126. doi: 10.1186/ar4306

Lotz M, Martel-Pelletier J, Christiansen C, Brandi ML, Bruyere O, Chapurlat R, Collette J, Cooper C, Giacovelli G, Kanis JA, Karsdal MA, Kraus V, Lems WF, Meulenbelt I, Pelletier JP, Raynaud JP, Reiter-Niesert S, Rizzoli R, Sandell LJ, Van Spil WE, Reginster JY. Value of biomarkers in osteoarthritis: current status and perspectives. *Ann Rheum Dis* 72:1756-1763. doi: 10.1136/annrheumdis-2013-203726

Mill J, Heijmans BT. From promises to practical strategies in epigenetic epidemiology. *Nat Rev Genet* 14:585-594. doi: 10.1038/nrg3405

Noordam R, Gunn DA, Tomlin CC, Maier AB, Mooijaart SP, Slagboom PE, Westendorp RG, de Craen AJ, van Heemst D. High serum glucose levels are associated with a higher perceived age. *Age (Dordr)*. Feb;35(1):189-195.

Noordam R, Gunn DA, Tomlin CC, Maier AB, Griffiths T, Catt SD, Ogden S, Slagboom PE, Westendorp RG, Griffiths CE, van Heemst D, de Craen AJ; on behalf of the Leiden Longevity Study group. Serum insulin-like growth factor 1 and facial ageing: high levels associate with reduced skin wrinkling in a cross-sectional study. *Br J Dermatol* Mar;168(3):533-8. doi: 10.1111/bjd.12131

Obermann-Borst SA, Eilers PH, Tobi EW, de Jong FH, Slagboom PE, Heijmans BT, Steegers-Theunissen RP. Duration of breastfeeding and gender are associated with methylation of the LEPTIN gene in very young children. *Pediatr Res*. Sep;74(3):344-9. doi: 10.1038/pr.2013.95.

Passtoors WM, Beekman M, Deelen J, van der Breggen R, Maier AB, Guigas B, Derhovanessian E, van Heemst D, de Craen AJ, Gunn DA, Pawelec G, Slagboom PE. Gene expression analysis of mTOR pathway: association with human longevity. *Aging Cell*. Feb;12(1):24-31. doi: 10.1111/ace1.12015.

Peters MJ, Broer L, Willems HL, Eiriksdottir G, Hocking LJ, Holliday KL, Horan MA, Meulenbelt I, Neogi T, Popham M, Schmidt CO, Soni A, Valdes AM, Amin N, Dennison EM, Eijkelkamp N, Harris TB, Hart DJ, Hofman A, Huygen FJ, Jameson KA, Jones GT, Launer LJ, Kerkhof HJ, de Kruijff M, McBeth J, Kloppenburg M, Ollier WE, Oostra B, Payton A, Rivadeneira F, Smith BH, Smith AV, Stolk L, Teumer A, Thomson W, Uitterlinden AG, Wang K, van Wingerden SH, Arden NK, Cooper C, Felson D, Gudnason V, Macfarlane GJ, Pendleton N, Slagboom PE, Spector TD, Völzke H, Kavelaars A, van Duijn CM, Williams FM, van Meurs JB. Genome-wide association study meta-analysis of chronic widespread pain: evidence for involvement of the 5p15.2 region. *Ann Rheum Dis*. Mar;72(3):427-36. doi: 10.1136/annrheumdis-2012-201742

Porcu E, Medici M, Pistis G, Volpato CB, Wilson SG, Cappola AR, Bos SD, Deelen J, den Heijer M, Freathy RM, Lahti J, Liu C, Lopez LM, Nolte IM, O'Connell JR, Tanaka T, Trompet S, Arnold A, Bandinelli S, Beekman M, Böhringer S, Brown SJ, Buckley BM, Camaschella C, de Craen AJ, Davies G, de Visser MC, Ford I, Forsen T, Frayling TM, Fugazzola L, Gögele M, Hattersley AT, Hermus AR, Hofman A, Houwing-Duistermaat JJ, Jensen RA, Kajantie E, Kloppenburg M, Lim EM, Masciullo C, Mariotti S, Minelli C, Mitchell BD, Nagaraja R, Netea-Maier RT, Palotie A, Persani L, Piras MG, Psaty BM, Rääkkönen K, Richards JB, Rivadeneira F, Sala C, Sabra MM, Sattar N, Shields BM, Soranzo N, Starr JM, Stott DJ, Sweep FC, Usala G, van der Klauw MM, van Heemst D, van Mullem A, H Vermeulen S, Visser WE, Walsh JP, Westendorp RG, Widen E, Zhai G, Cucca F, Deary IJ, Eriksson JG, Ferrucci L, Fox CS, Jukema JW, Kiemeny LA, Pramstaller PP, Schlessinger D, Shuldiner AR, Slagboom EP, Uitterlinden AG, Vaidya B, Visser TJ, Wolfenbutter BH, Meulenbelt I, Rotter JJ, Spector TD, Hicks AA, Toniolo D, Sanna S, Peeters RP, Naitza S. A meta-analysis of thyroid-related traits reveals novel Loci and gender-specific differences in the regulation of thyroid function. *PLoS Genet*. Feb;9(2):e1003266. doi: 10.1371/journal.pgen.1003266.

Postmus I, Trompet S, de Craen AJ, Buckley BM, Ford I, Stott DJ, Sattar N, Slagboom PE, Westendorp RG, Jukema JW. PCSK9 SNP rs11591147 is associated with low cholesterol levels but not with cognitive performance or noncardiovascular clinical events in an elderly population. *J Lipid Res*. Feb;54(2):561-6. doi: 10.1194/jlr.P033969.

Ruhaak LR, Koeleman CA, Uh HW, Stam JC, van Heemst D, Maier AB, Houwing-Duistermaat JJ, Hensbergen PJ, Slagboom PE, Deelder AM, Wuhrer M. Targeted biomarker discovery by high throughput glycosylation profiling of human plasma alpha1-antitrypsin and immunoglobulin a. *PLoS One*. Sep 9;8(9):e73082. doi: 10.1371/journal.pone.0073082.

Sanchez-Faddeev H, Pijpe J, van der Hulle T, Meij HJ, J van der Gaag K, Slagboom PE, Westendorp RG, de Knijff P. The influence of clan structure on the genetic variation in a single Ghanaian village. *Eur J Hum Genet*. Eur J Hum Genet. Oct;21(10):1134-9. doi: 10.1038/ejhg.2013.12.

Slieker RC, Bos SD, Goeman JJ, Bovée JV, Talens RP, van der Breggen R, Suchiman HE, Lameijer EW, Putter H, van den Akker EB, Zhang Y, Jukema JW, Slagboom PE, Meulenbelt I, Heijmans BT. Identification and systematic annotation of tissue-specific differentially methylated regions using the Illumina 450k array. *Epigenetics Chromatin*. Aug 6;6(1):26. doi: 10.1186/1756-8935-6-26.

Slof-Op't Landt MC, Bartels M, Middeldorp CM, van Beijsterveldt CE, Slagboom PE, Boomsma DI, van Furth EF, Meulenbelt I. Genetic Variation at the TPH2 Gene Influences Impulsivity in Addition to Eating Disorders. *Behav Genet*. Jan;43(1):24-33. doi: 10.1007/s10519-012-9569-3.

Soerensen M, Dato S, Tan Q, Thinggaard M, Kleindorp R, Beekman M, Suchiman HE, Jacobsen R, McGue M, Stevnsner T, Bohr VA, de Craen AJ, Westendorp RG, Schreiber S, Slagboom PE, Nebel A, Vaupel JW, Christensen K, Christiansen L. Evidence from case-control and longitudinal studies supports associations of genetic variation in APOE, CETP, and IL6 with human longevity. *Age (Dordr)*. Apr;35(2):487-500. doi: 10.1007/s11357-011-9373-7.

Stijntjes M, de Craen AJ, van Heemst D, Meskers CG, van Buchem MA, Westendorp RG, Slagboom PE, Maier AB. Familial Longevity Is Marked by Better Cognitive Performance at Middle Age: The Leiden Longevity Study. *PLoS One*. 8(3):e57962.

Streppel MT, de Vries JH, Meijboom S, Beekman M, de Craen AJ, Slagboom PE, Feskens EJ. Relative validity of the food frequency questionnaire used to assess dietary intake in the Leiden Longevity Study. *Nutr J*. Jun 7;12:75. doi: 10.1186/1475-2891-12-75.

Thijssen PE, Tobi EW, Balog J, Schouten SG, Kremer D, El Bouazzaoui F, Henneman P, Putter H, Eline Slagboom P, Heijmans BT, Van der Maarel SM. Chromatin remodeling of human subtelomeres and TERRA promoters upon cellular senescence: Commonalities and differences between chromosomes. *Epigenetics*. Apr 17;8(5):512-521. doi: 10.4161/epi.24450

Verschuren JJ, Trompet S, Deelen J, Stott DJ, Sattar N, Buckley BM, Ford I, Heijmans BT, Guchelaar HJ, Houwing-Duistermaat JJ, Slagboom PE, Jukema JW. Non-homologous end-joining pathway associated with occurrence of myocardial infarction: gene set analysis of genome-wide association study data. *PLoS One* 8(2):e56262. doi: 10.1371/journal.pone.0056262.

Verschuren JJ, Boden H, Wessels JA, van der Hoeven BL, Trompet S, Heijmans BT, Putter H, Guchelaar HJ, Schali J MJ, Jukema JW. Value of platelet pharmacogenetics in common clinical practice of patients with ST-segment elevation myocardial infarction. *Int J Cardiol*. Sep 10;167(6):2882-8. doi: 10.1016/j.ijcard.2012.07.020.

de Visser MC, van Minkelen R, van Marion V, den Heijer M, Eikenboom J, Vos HL, Slagboom PE, Houwing-Duistermaat JJ, Rosendaal FR, Bertina RM. Genome-wide linkage scan in affected sibling pairs identifies novel susceptibility region for venous thromboembolism: Genetics In Familial Thrombosis (GIFT) study. *J Thromb Haemost*. J Thromb Haemost. Aug;11(8):1474-84. doi: 10.1111/jth.12313

Wijsman CA, van Heemst D, Hoogeveen ES, Slagboom PE, Maier AB, de Craen AJ, van der Ouderaa F, Pijl H, Westendorp RG, Mooijaart SP. Ambulant 24-hour glucose rhythms mark calendar and biological age in apparently healthy individuals. *Aging Cell*. Apr;12(2):207-13. doi: 10.1111/accel.12042.

Wijsman CA, Westendorp RG, Verhagen EA, Catt M, Slagboom PE, de Craen AJ, Broekhuizen K, van Mechelen W, van Heemst D, van der Ouderaa F, Mooijaart SP. Effects of a web-based intervention on physical activity and metabolism in older adults: randomized controlled trial. *J Med Internet Res* 15:e233. doi: 10.2196/jmir.2843

Willemsen G, Vink JM, Abdellaoui A, den Braber A, van Beek JH, Draisma HH, van Dongen J, van 't Ent D, Geels LM, van Lien R, Ligthart L, Kattenberg M, Mbarek H, de Moor MH, Neijts M, Pool R, Stroo N, Klufft C, Suchiman HE, Slagboom PE, de Geus EJ, Boomsma DI. The Adult Netherlands Twin Register: Twenty-Five Years of Survey and Biological Data Collection. *Twin Res Hum Genet*. Jan 8:1-11.

Williams FM, Bansal AT, van Meurs JB, Bell JT, Meulenbelt I, Suri P, Rivadeneira F, Sambrook PN, Hofman A, Bierma-Zeinstra S, Menni C, Kloppenburg M, Slagboom PE, Hunter DJ, Macgregor AJ, Uitterlinden AG, Spector TD. Novel genetic variants associated with lumbar disc degeneration in northern Europeans: a meta-analysis of 4600 subjects. *Ann Rheum Dis*. Mar;72(3):427-36. doi: 10.1136/annrheumdis-2012-201742.

Ye K, Beekman M, Lameijer EW, Zhang Y, Moed MH, van den Akker EB, Deelen J, Houwing-Duistermaat JJ, Kremer D, Anvar SY, Laros JF, Jones D, Raine K, Blackburne B, Potluri S, Long Q, Guryev V, van der Breggen R, Westendorp RG, 't Hoen PA, den Dunnen JT, van Ommen GJ, Willemsen G, Pitts SJ, Cox DR, Ning Z, Boomsma DI, Slagboom PE.

Aging as accelerated accumulation of somatic variants: whole-genome sequencing of centenarian and middle-aged monozygotic twin pairs. *Twin Res Hum Genet* 16:1026-1032. doi:10.1017/thg.2013.73

2012

Altmann-Schneider I, de Craen AJ, Slagboom PE, Westendorp RG, van Buchem MA, Maier AB, van der Grond J. Brain tissue volumes in familial longevity. The Leiden Longevity Study. *Aging Cell. Aging Cell. Dec*;11(6):933-9. doi:10.1111/j.1474-9726.2012.00868.x.

Barzilai N, Guarente L, Kirkwood TB, Partridge L, Rando TA, Slagboom PE. The place of genetics in ageing research. *Nat Rev Genet* 13:589-594.

Bos SD, Bovee JV, Duijnisveld BJ, Raine EV, van Dalen WJ, Ramos YF, van der Breggen R, Nelissen RG, Slagboom PE, Loughlin J, Meulenbelt I. Increased type II deiodinase protein in OA-affected cartilage and allelic imbalance of OA risk polymorphism rs225014 at DIO2 in human OA joint tissues. *Ann Rheum Dis* 71:1254-1258.

Brandys MK, Slof-Op't Landt MC, van Elburg AA, Ophoff R, Verduijn W, Meulenbelt I, Middeldorp CM, Boomsma DI, van Furth EF, Slagboom E, Kas MJ, Adan RA. Anorexia nervosa and the Val158Met polymorphism of the COMT gene: meta-analysis and new data. *Psychiatr Genet.* 22(3):130-136.

Dastani Z, Hivert MF, Timpson N, Perry JR, Yuan X, Scott RA, Henneman P, Heid IM, Kizer JR, Lyytikäinen LP, Fuchsberger C, Tanaka T, Morris AP, Small K, Isaacs A, Beekman M, Coassin S, Lohman K, Qi L, Kanoni S, Pankow JS, Uh HW, Wu Y, Bidulescu A, Rasmussen-Torvik LJ, Greenwood CM, Ladouceur M, Grimsby J, Manning AK, Liu CT, Kooner J, Mooser VE, Vollenweider P, Kapur KA, Chambers J, Wareham NJ, Langenberg C, Frants R, Willems-Vandijk K, Oostra BA, Willems SM, Lamina C, Winkler TW, Psaty BM, Tracy RP, Brody J, Chen I, Viikari J, Kähönen M, Pramstaller PP, Evans DM, St Pourcain B, Sattar N, Wood AR, Bandinelli S, Carlson OD, Egan JM, Böhringer S, van Heemst D, Kedenko L, Kristiansson K, Nuotio ML, Loo BM, Harris T, Garcia M, Kanaya A, Haun M, Klopp N, Wichmann HE, Deloukas P, Katsareli E, Couper DJ, Duncan BB, Kloppenburg M, Adair LS, Borja JB; DIAGRAM+ Consortium; MAGIC Consortium; GLGC Investigators; MuTHER Consortium, Wilson JG, Musani S, Guo X, Johnson T, Semple R, Teslovich TM, Allison MA, Redline S, Buxbaum SG, Mohlke KL, Meulenbelt I, Ballantyne CM, Dedoussis GV, Hu FB, Liu Y, Paulweber B, Spector TD, Slagboom PE, Ferrucci L, Jula A, Perola M, Raitakari O, Florez JC, Salomaa V, Eriksson JG, Frayling TM, Hicks AA, Lehtimäki T, Smith GD, Siscovick DS, Kronenberg F, van Duijn C, Loos RJ, Waterworth DM, Meigs JB, Dupuis J, Richards JB, Voight BF, Scott LJ, Steinthorsdottir V, Dina C, Welch RP, Zeggini E, Huth C, Aulchenko YS, Thorleifsson G, McCulloch LJ, Ferreira T, Grallert H, Amin N, Wu G, Willer CJ, Raychaudhuri S, McCarroll SA, Hofmann OM, Segrè AV, van Hoek M, Navarro P, Ardlie K, Balkau B, Benediktsson R, Bennett AJ, Blagieva R, Boerwinkle E, Bonnycastle LL, Boström KB, Bravenboer B, Bumpstead S, Burt NP, Charpentier G, Chines PS, Cornelis M, Crawford G, Doney AS, Elliott KS, Elliott AL, Erdos MR, Fox CS, Franklin CS, Ganser M, Gieger C, Grarup N, Green T, Griffin S, Groves CJ, Guiducci C, Hadjadj S, Hassanali N, Herder C, Isomaa B, Jackson AU, Johnson PR, Jørgensen T, Kao WH, Kong A, Kraft P, Kuusisto J, Lauritzen T, Li M, Lieve A, Lindgren CM, Lyssenko V, Marre M, Meitinger T, Midthjell K, Morken MA, Narisu N, Nilsson P, Owen KR, Payne F, Petersen AK, Platou C, Proença C, Prokopenko I, Rathmann W, Rayner NW, Robertson NR, Rocheleau G, Roden M, Sampson MJ, Saxena R, Shields BM, Shrader P, Sigurdsson G, Sparsø T, Strassburger K, Stringham HM, Sun Q, Swift AJ, Thorand B, Tichet J, Tuomi T, van Dam RM, van Haefen TW, van Herpt T, van Vliet-Ostapchouk JV, Walters GB, Weedon MN, Wijmenga C, Witteman J, Bergman RN, Cauchi S, Collins FS, Gloyn AL, Gyllenstein U, Hansen T, Hide WA, Hitman GA, Hofman A, Hunter DJ, Hveem K, Laakso M, Morris AD, Palmer CN, Rudan I, Sijbrands E, Stein LD, Tuomilehto J, Uitterlinden A, Walker M, Watanabe RM, Abecasis GR, Boehm BO, Campbell H, Daly MJ, Hattersley AT, Pedersen O, Barroso I, Groop L, Sladek R, Thorsteinsdottir U, Wilson JF, Illig T, Froguel P, van Duijn CM, Stefansson K, Alshuler D, Boehnke M, McCarthy MI, Soranzo N, Wheeler E, Glazer NL, Bouatia-Naji N, Mägi R, Randall J, Elliott P, Rybin D, Dehghan A, Hottenga JJ, Song K, Goel A, Lajunen T, Doney A, Cavalcanti-Proença C, Kumari M, Timpson NJ, Zabena C, Ingelsson E, An P, O'Connell J, Luan J, Elliott A, McCarroll SA, Roccascaccia RM, Pattou F, Sethupathy P, Ariyurek Y, Barter P, Beilby JP, Ben-Shlomo Y, Bergmann S, Bochud M, Bonnefond A, Borch-Johnsen K, Böttcher Y, Brunner E, Bumpstead SJ, Chen YD, Chines P, Clarke R, Coin LJ, Cooper MN, Crisponi L, Day IN, de Geus EJ, Delplanque J, Fedson AC, Fischer-Rosinsky A, Forouhi NG, Franzosi MG, Galan P, Goodarzi MO, Graessler J, Grundy S, Gwilliam R, Hallmans G, Hammond N, Han X, Hartikainen AL, Hayward C, Heath SC, Hercberg S, Hillman DR, Hingorani AD, Hui J, Hung J, Kaakinen M, Kaprio J, Kesaniemi YA, Kivimäki M, Knight B, Koskinen S, Kovacs P, Kyvik KO, Lathrop GM, Lawlor DA, Le Bacquer O, Lecoquer C, Li Y, Mahley R, Mangino M, Martínez-Larrad MT, McAteer JB, McPherson R, Meisinger C, Melzer D, Meyre D, Mitchell BD, Mukherjee S, Naitza S, Neville MJ, Orrù M, Pakyz R, Paolisso G, Pattaro C, Pearson D, Peden JF, Pedersen NL, Pfeiffer AF, Pichler I, Polasek O, Posthuma D, Potter SC, Pouta A, Province MA, Rayner NW, Rice K, Ripatti S, Rivadeneira F, Rolandsson O, Sandbaek A, Sandhu M, Sanna S, Sayer AA, Scheet P, Seedorf U, Sharp SJ, Shields B, Sigurdsson G, Sijbrands EJ, Silveira A, Simpson L, Singleton A, Smith NL, Sovio U, Swift A, Syddall H, Syvänen AC, Tönjes A, Uitterlinden AG, van Dijk KW, Varma D, Visvikis-Siest S, Vitart V, Vogelzangs N, Waeber G, Wagner PJ,

Walley A, Ward KL, Watkins H, Wild SH, Willemsen G, Witteman JC, Yarnell JW, Zelenika D, Zethelius B, Zhai G, Zhao JH, Zillikens MC; DIAGRAM Consortium; GIANT Consortium; Global B Pgen Consortium, Borecki IB, Meneton P, Magnusson PK, Nathan DM, Williams GH, Silander K, Bornstein SR, Schwarz P, Spranger J, Karpe F, Shuldiner AR, Cooper C, Serrano-Ríos M, Lind L, Palmer LJ, Hu FB 1st, Franks PW, Ebrahim S, Marmot M, Kao WH, Pramstaller PP, Wright AF, Stumvoll M, Hamsten A; Procardis Consortium, Buchanan TA, Valle TT, Rotter JI, Penninx BW, Boomsma DI, Cao A, Scuteri A, Schlessinger D, Uda M, Ruokonen A, Jarvelin MR, Peltonen L, Mooser V, Sladek R; MAGIC investigators; GLGC Consortium, Musunuru K, Smith AV, Edmondson AC, Stylianou IM, Koseki M, Pirruccello JP, Chasman DI, Johansen CT, Fouchier SW, Peloso GM, Barbalic M, Barbalic M, Bis JC, Feitosa MF, Orho-Melander M, Melander O, Li X, Li M, Cho YS, Go MJ, Kim YJ, Lee JY, Park T, Kim K, Sim X, Ong RT, Croteau-Chonka DC, Lange LA, Smith JD, Ziegler A, Zhang W, Zee RY, Whitfield JB, Thompson JR, Surakka I, Spector TD, Smit JH, Sinisalo J, Scott J, Saharinen J, Sabatti C, Rose LM, Roberts R, Rieder M, Parker AN, Pare G, O'Donnell CJ, Nieminen MS, Nickerson DA, Montgomery GW, McArdle W, Masson D, Martin NG, Marroni F, Lucas G, Luben R, Lokki ML, Lettre G, Launer LJ, Lakatta EG, Laaksonen R, Kyvik KO, König IR, Khaw KT, Kaplan LM, Johansson Å, Janssens AC, Igl W, Hovingh GK, Hengstenberg C, Havulinna AS, Hastie ND, Harris TB, Haritunians T, Hall AS, Groop LC, Gonzalez E, Freimer NB, Erdmann J, Ejebe KG, Döring A, Dominiczak AF, Demissie S, Deloukas P, de Faire U, Crawford G, Chen YD, Caulfield MJ, Boekholdt SM, Assimes TL, Quertermous T, Seielstad M, Wong TY, Tai ES, Feranil AB, Kuzawa CW, Taylor HA Jr, Gabriel SB, Holm H, Gudnason V, Krauss RM, Ordovas JM, Munroe PB, Kooner JS, Tall AR, Hegele RA, Kastelein JJ, Schadt EE, Strachan DP, Reilly MP, Samani NJ, Schunkert H, Cupples LA, Sandhu MS, Ridker PM, Rader DJ, Kathiresan S. Novel loci for adiponectin levels and their influence on type 2 diabetes and metabolic traits: a multi-ethnic meta-analysis of 45,891 individuals. *PLoS Genet.* 8(3):e1002607.

Dekker P, Meissner A, Dirks RW, Slagboom PE, van Heemst D, Deelder AM, Tanke HJ, Westendorp RG, Maier AB. Human in vivo longevity is reflected in vitro by differential metabolism as measured by (1)H-NMR profiling of cell culture supernatants. *Mol Biosyst* 8:783-789.

Dekker P, van Baalen LM, Dirks RW, Slagboom PE, van Heemst D, Tanke HJ, Westendorp RG, Maier AB. Chronic inhibition of the respiratory chain in human fibroblast cultures: differential responses related to subject chronological and biological age. *J Gerontol A Biol Sci Med Sci* 67:456-464.

van Dongen J, Slagboom PE, Draisma HH, Martin NG, Boomsma DI. The continuing value of twin studies in the omics era. *Nat Rev Genet.* Aug 14;13(9):640-53. doi: 10.1038/nrg3243.

Estrada K, Styrkarsdottir U, Evangelou E, Hsu YH, Duncan EL, Ntzani EE, Oei L, Albagha OM, Amin N, Kemp JP, Koller DL, Li G, Liu CT, Minster RL, Moayyeri A, Vandenput L, Willner D, Xiao SM, Yerges-Armstrong LM, Zheng HF, Alonso N, Eriksson J, Kammerer CM, Kaptoge SK, Leo PJ, Thorleifsson G, Wilson SG, Wilson JF, Aalto V, Alen M, Aragaki AK, Aspelund T, Center JR, Dailiana Z, Duggan DJ, Garcia M, Garcia-Giralt N, Giroux S, Hallmans G, Hocking LJ, Husted LB, Jameson KA, Khusainova R, Kim GS, Kooperberg C, Koromila T, Kruk M, Laaksonen M, Lacroix AZ, Lee SH, Leung PC, Lewis JR, Masi L, Mencej-Bedrac S, Nguyen TV, Nogue X, Patel MS, Prezelj J, Rose LM, Scollen S, Siggeirsdottir K, Smith AV, Svensson O, Trompet S, Trummer O, van Schoor NM, Woo J, Zhu K, Balcells S, Brandi ML, Buckley BM, Cheng S, Christiansen C, Cooper C, Dedoussis G, Ford I, Frost M, Goltzman D, González-Macías J, Kähönen M, Karlsson M, Khusnutdinova E, Koh JM, Kollia P, Langdahl BL, Leslie WD, Lips P, Ljunggren O, Lorenc RS, Marc J, Mellström D, Obermayer-Pietsch B, Olmos JM, Pettersson-Kymmer U, Reid DM, Riancho JA, Ridker PM, Rousseau F, Slagboom PE, Tang NL, Urreizti R, Van Hul W, Viikari J, Zarrabeitia MT, Aulchenko YS, Castano-Betancourt M, Grundberg E, Herrera L, Ingvarsson T, Johannsdottir H, Kwan T, Li R, Luben R, Medina-Gómez C, Th Palsson S, Reppe S, Rotter JI, Sigurdsson G, van Meurs JB, Verlaan D, Williams FM, Wood AR, Zhou Y, Gautvik KM, Pastinen T, Raychaudhuri S, Cauley JA, Chasman DI, Clark GR, Cummings SR, Danoy P, Dennison EM, Eastell R, Eisman JA, Gudnason V, Hofman A, Jackson RD, Jones G, Jukema JW, Khaw KT, Lehtimäki T, Liu Y, Lorentzon M, McCloskey E, Mitchell BD, Nandakumar K, Nicholson GC, Oostra BA, Peacock M, Pols HA, Prince RL, Raitakari O, Reid IR, Robbins J, Sambrook PN, Sham PC, Shuldiner AR, Tylavsky FA, van Duijn CM, Wareham NJ, Cupples LA, Econs MJ, Evans DM, Harris TB, Kung AW, Psaty BM, Reeve J, Spector TD, Streeten EA, Zillikens MC, Thorsteinsdottir U, Ohlsson C, Karasik D, Richards JB, Brown MA, Stefansson K, Uitterlinden AG, Ralston SH, Ioannidis JP, Kiel DP, Rivadeneira F. Genome-wide meta-analysis identifies 56 bone mineral density loci and reveals 14 loci associated with risk of fracture. *Nat Genet.* 15;44(5):491-501. doi: 10.1038/ng.2249.

Heijmans BT, Mill J. Commentary: The seven plagues of epigenetic epidemiology. *Int J Epidemiol* 41:74-78.

Hogervorst T, Eilander W, Flikkers JT, Meulenbelt I. Hip Ontogenesis: How Evolution, Genes, and Load History Shape Hip Morphotype and Cartilotype. *Clin Orthop Relat Res.* Dec;470(12):3284-96. doi: 10.1007/s11999-012-2511-4.

Huffman DM, Deelen J, Ye K, Bergman A, Slagboom EP, Barzilai N, Atzmon G. Distinguishing Between Longevity and Buffered-Deleterious Genotypes for Exceptional Human Longevity: The Case of the MTP Gene. *J Gerontol A Biol Sci Med Sci*. Nov;67(11):1153-60. doi: 10.1093/gerona/gls103.

Johnson MD, Plantinga TS, van de Vosse E, Velez Edwards DR, Smith PB, Alexander BD, Yang JC, Kremer D, Laird GM, Oosting M, Joosten LA, van der Meer JW, van Dissel JT, Walsh TJ, Perfect JR, Kullberg BJ, Scott WK, Netea MG. Cytokine gene polymorphisms and the outcome of invasive candidiasis: a prospective cohort study. *Clin Infect Dis* 54:502-510.

Kerkhof HJ, Evangelou E, Meulenbelt I, van Meurs JB, Zeggini E, Valdes AM. Reply to "Human genetic studies on osteoarthritis from clinicians' viewpoints". *Osteoarthritis Cartilage* 20:250-251.

van Leeuwen N, Nijpels G, Becker ML, Deshmukh H, Zhou K, Stricker BH, Uitterlinden AG, Hofman A, van 't Riet E, Palmer CN, Guigas B, Slagboom PE, Durrington P, Calle RA, Neil A, Hitman G, Livingstone SJ, Colhoun H, Holman RR, McCarthy MI, Dekker JM, 't Hart LM, Pearson ER. A gene variant near ATM is significantly associated with metformin treatment response in type 2 diabetes: a replication and meta-analysis of five cohorts. *Diabetologia* 55:1971-1977.

Ling CH, de Craen AJ, Slagboom PE, Westendorp RG, Maier AB. Handgrip strength at midlife and familial longevity: The Leiden Longevity Study. *Age (Dordr)*. Oct;34(5):1261-8.

Lu Y, Vaarhorst A, Merry AH, Dollé ME, Hovenier R, Imholz S, Schouten LJ, Heijmans BT, Müller M, Slagboom PE, van den Brandt PA, Gorgels AP, Boer JM, Feskens EJ. Markers of Endogenous Desaturase Activity and Risk of Coronary Heart Disease in the CAREMA Cohort Study. *PLoS One* 7(7):e41681.

MacArthur DG, Balasubramanian S, Frankish A, Huang N, Morris J, Walter K, Jostins L, Habegger L, Pickrell JK, Montgomery SB, Albers CA, Zhang ZD, Conrad DF, Lunter G, Zheng H, Ayub Q, DePristo MA, Banks E, Hu M, Handsaker RE, Rosenfeld JA, Fromer M, Jin M, Mu XJ, Khurana E, Ye K, Kay M, Saunders GI, Suner MM, Hunt T, Barnes IH, Amid C, Carvalho-Silva DR, Bignell AH, Snow C, Yngvadottir B, Bumpstead S, Cooper DN, Xue Y, Romero IG; 1000 Genomes Project Consortium, Wang J, Li Y, Gibbs RA, McCarroll SA, Dermitzakis ET, Pritchard JK, Barrett JC, Harrow J, Hurler ME, Gerstein MB, Tyler-Smith C. A systematic survey of loss-of-function variants in human protein-coding genes. *Science* 335(6070):823-8.

Meulenbelt I. Osteoarthritis year 2011 in review: genetics. *Osteoarthritis Cartilage* 20:218-222.

Mortensen LH, Maier AB, Slagboom PE, Pawelec G, Derhovanessian E, Petersen I, Jahn G, Westendorp RG, Christensen K. Early-life environment influencing susceptibility to cytomegalovirus infection: evidence from the Leiden Longevity Study and the Longitudinal Study of Aging Danish Twins. *Epidemiol Infect*. May;140(5):835-41.

Noordam R, Jansen SW, Akintola AA, Oei NY, Maier AB, Pijl H, Slagboom PE, Westendorp RG, van der Grond J, de Craen AJ, van Heemst D. Familial Longevity Is Marked by Lower Diurnal Salivary Cortisol Levels: The Leiden Longevity Study. *PLoS One* 7:e31166.

Noordam R, de Craen AJ, Pedram P, Maier AB, Mooijaart SP, van Pelt J, Feskens EJ, Streppel MT, Slagboom PE, Westendorp RG, Beekman M, van Heemst D. Levels of 25-hydroxyvitamin D in familial longevity: the Leiden Longevity Study. *CMAJ*. Dec 11;184(18):E963-8. doi: 10.1503/cmaj.120233.

Noordam R, Gunn DA, Tomlin CC, Rozing MP, Maier AB, Slagboom PE, Westendorp RG, van Heemst D, de Craen AJ; On behalf of the Leiden Longevity Study group. Cortisol serum levels in familial longevity and perceived age: The Leiden Longevity Study. *Psychoneuroendocrinology*. Oct;37(10):1669-1675.

Obermann-Borst SA, Heijmans BT, Eilers PH, Tobi EW, Steegers EA, Slagboom PE, Steegers-Theunissen RP. Periconception maternal smoking and low education are associated with methylation of INSIGF in children at the age of 17 months. *J Dev Orig Health Dis*. Oct;3(5):315-20. doi: 10.1017/S2040174412000293.

Passtoors WM, Boer JM, Goeman JJ, van den Akker EB, Deelen J, Zwaan BJ, Scarborough A, van der Breggen R, Vossen RH, Houwing-Duistermaat JJ, van Ommen GJ, Westendorp RG, Heemst D, de Craen AJ, White AJ, Gunn DA, Beekman M, Slagboom PE. Transcriptional profiling of human familial longevity indicates a role for ASF1A and IL7R. *PLoS One* 7:e27759. Erratum in: *PLoS One*. 7(5): doi/10.1371/annotation/d4d3b1fb-35e0-4c4d-89bc-e6a839504e54.

Plantinga TS, Johnson MD, Scott WK, van de Vosse E, Velez Edwards DR, Smith PB, Alexander BD, Yang JC, Kremer D, Laird GM, Oosting M, Joosten LA, van der Meer JW, van Dissel JT, Walsh TJ, Perfect JR, Kullberg BJ, Netea MG. Toll-like receptor 1 polymorphisms increase susceptibility to candidemia. *J Infect Dis* 205:934-943. Postmus I, Verschuren JJ, de Craen AJ, Slagboom PE, Westendorp RG, Jukema JW, Trompet S. Pharmacogenetics of statins: achievements, whole-genome analyses and future perspectives. *Pharmacogenomics*. May;13(7):831-40.

van Raalte DH, van Leeuwen N, Simonis-Bik AM, Nijpels G, van Haeften TW, Schafer SA, Boomsma DI, Kramer MH, Heine J, Maassen JA, Staiger H, Machicao F, Haring HU, Slagboom PE, Willemsen G, de Geus EJ, Dekker JM, Fritsche A, Eekhoff EM, Diamant M, 't Hart LM. Glucocorticoid receptor gene polymorphisms are associated with reduced first-phase glucose-stimulated insulin secretion and disposition index in women, but not in men. *Diabet Med* 29:e211-e216.

Rius-Ottenheim N, Kromhout D, de Craen AJ, Geleijnse JM, van der Mast RC, Zitman FG, Westendorp RG, Slagboom PE, Giltay EJ. Parental longevity correlates with offspring's optimism in two cohorts of community-dwelling older subjects. *Age (Dordr)* 34:461-468.

Shiffman D, Trompet S, Louie JZ, Rowland CM, Catanese JJ, Iakoubova OA, Kirchgessner TG, Westendorp RG, de Craen AJ, Slagboom PE, Buckley BM, Stott DJ, Sattar N, Devlin JJ, Packard CJ, Ford I, Sacks FM, Jukema JW. Genome-wide study of gene variants associated with differential cardiovascular event reduction by pravastatin therapy. *PLoS One*. 7(5):e38240.

Soerensen M, Dato S, Tan Q, Thinggaard M, Kleindorp R, Beekman M, Jacobsen R, Suchiman HE, de Craen AJ, Westendorp RG, Schreiber S, Stevnsner T, Bohr VA, Slagboom PE, Nebel A, Vaupel JW, Christensen K, McGue M, Christiansen L. Human longevity and variation in GH/IGF-1/insulin signaling, DNA damage signaling and repair and pro/antioxidant pathway genes: Cross sectional and longitudinal studies. *Exp Gerontol*. 47(5):379-87.

Talens RP, Jukema JW, Trompet S, Kremer D, Westendorp RG, Lumey LH, Sattar N, Putter H, Slagboom PE, Heijmans BT. Hypermethylation at loci sensitive to the prenatal environment is associated with increased incidence of myocardial infarction. *Int J Epidemiol* 41:106-115.

Talens RP, Christensen K, Putter H, Willemsen G, Christiansen L, Kremer D, Suchiman HE, Slagboom PE, Boomsma DI, Heijmans BT. Epigenetic variation during the adult lifespan: cross-sectional and longitudinal data on monozygotic twin pairs. *Aging Cell* 11:694-703.

Tobi EW, Slagboom PE, van Dongen J, Kremer D, Stein AD, Putter H, Heijmans BT, Lumey LH. Prenatal Famine and Genetic Variation Are Independently and Additively Associated with DNA Methylation at Regulatory Loci within IGF2/H19. *PLoS One*. 7(5):e37933.

Uh HW, Deelen J, Beekman M, Helmer Q, Rivadeneira F, Hottenga JJ, Boomsma DI, Hofman A, Uitterlinden AG, Slagboom PE, Böhringer S, Houwing-Duistermaat JJ. How to deal with the early GWAS data when imputing and combining different arrays is necessary. *Eur J Hum Genet*. 20(5):572-6. doi: 10.1038/ejhg.2011.231.

Vaarhorst AA, Lu Y, Heijmans BT, Dollé ME, Böhringer S, Putter H, Imholz S, Merry AH, van Greevenbroek MM, Jukema JW, Gorgels AP, van den Brandt PA, Müller M, Schouten LJ, Feskens EJ, Boer JM, Slagboom PE. Literature-based genetic risk scores for coronary heart disease: the Cardiovascular Registry Maastricht (CAREMA) prospective cohort study. *Circ Cardiovasc Genet*. 5(2):202-9.

Verschuren JJ, Trompet S, Postmus I, Sampietro ML, Heijmans BT, Houwing-Duistermaat JJ, Slagboom PE, Jukema JW. Systematic Testing of Literature Reported Genetic Variation Associated with Coronary Restenosis: Results of the GENDER Study. *PLoS One*. 7(8):e42401.

van Vliet-Ostapchouk JV, van Haeften TW, Landman GW, Reiling E, Kleefstra N, Bilo HJ, Klungel OH, de Boer A, van Diemen CC, Wijmenga C, Boezen HM, Dekker JM, van 't Riet E, Nijpels G, Welschen LM, Zavrelova H, Bruin EJ, Elbers CC, Bauer F, Onland-Moret NC, van der Schouw YT, Grobbee DE, Spijkerman AM, van der A DL, Simonis-Bik AM, Eekhoff EM, Diamant M, Kramer MH, Boomsma DI, de Geus EJ, Willemsen G, Slagboom PE, Hofker MH, 't Hart LM. Common Variants in the Type 2 Diabetes KCNQ1 Gene Are Associated with Impairments in Insulin Secretion During Hyperglycaemic Glucose Clamp. *PLoS One* 7:e32148.

Waaijer ME, Parish WE, Strongitharm BH, van Heemst D, Slagboom PE, de Craen AJ, Sedivy JM, Westendorp RG, Gunn DA, Maier AB. The number of p16INK4a positive cells in human skin reflects biological age. *Aging Cell* 11:722-725.

Waaier ME, Gunn DA, Catt SD, van Ginkel M, de Craen AJ, Hudson NM, van Heemst D, Slagboom PE, Westendorp RG, Maier AB. Morphometric skin characteristics dependent on chronological and biological age: the Leiden Longevity Study. *Age (Dordr)*. Dec;34(6):1543-52. doi: 10.1007/s11357-011-9314-5.

Webb BT, Guo AY, Maher BS, Zhao Z, van den Oord EJ, Kendler KS, Riley BP, Gillespie NA, Prescott CA, Middeldorp CM, Willemsen G, de Geus EJ, Hottenga JJ, Boomsma DI, Slagboom EP, Wray NR, Montgomery GW, Martin NG, Wright MJ, Heath AC, Madden PA, Gelernter J, Knowles JA, Hamilton SP, Weissman MM, Fyer AJ, Huezo-Diaz P, McGuffin P, Farmer A, Craig IW, Lewis C, Sham P, Crowe RR, Flint J, Hettema JM. Meta-analyses of genome-wide linkage scans of anxiety-related phenotypes. *Eur J Hum Genet*. Oct;20(10):1078-84. doi: 10.1038/ejhg.2012.47.

Wijsman CA, van Opstal AM, Kan HE, Maier AB, Westendorp RG, Slagboom PE, Webb AG, Mooijaart SP, van Heemst D. Proton magnetic resonance spectroscopy shows lower intramyocellular lipid accumulation in middle-aged subjects predisposed to familial longevity. *Am J Physiol Endocrinol Metab* 302:E344-E348.

Zhang Y, Lameijer EW, 't Hoen PA, Ning Z, Slagboom PE, Ye K. PASSion: a pattern growth algorithm-based pipeline for splice junction detection in paired-end RNA-Seq data. *Bioinformatics* 28:479-486.

Zeggini E, Panoutsopoulou K, Southam L, Day-Williams AG, Lopes MC, Boraska V, Beazley C, Blackburn H, Bumpstead S, Hunt SE, Potter SC, Shin SY, Yadav VK, Deloukas P, Southam L, Rayner NW, Lopes M, Elliott KS, Rayner NW, Boraska V, Esko T, Metspalu A, Esko T, Metspalu A, Esko T, Metspalu A, Evangelou E, Ioannidis JP, Hofman A, Kerkhof HJ, Rivadeneira F, Uitterlinden AG, van Meurs JB, Houwing-Duistermaat JJ, Kloppenburg M, Bos SD, Slagboom PE, Meulenbelt I, Ingvarsson T, Ingvarsson T, Jonsdottir I, Jonsson H, Stefansson K, Jonsdottir I, Thorleifsson G, Stefansson K, Styrkarsdottir U, Mangino M, Metrustry S, Zhai G, O'Neill F, Valdes AM, Spector TD, Raine EV, Ratnayake M, Birrell F, McCaskie A, Loughlin J, Ricketts M, Koller NC, Salter D, Ralston SH, Zhai G, Sherburn K, Dixon K, Ollier WE, Arden E, Battley PK, Aslam N, Joseph J, Rai A, Carluke I, Reed MR, Walker K, Birrell F, Doherty S, Wheeler M, Doherty M, Gordon A, Paling E, Swift D, Wilkinson JM, Keen R, Mitchell S, McCaskie A, Paling E, Swift D, Wilkinson JM, Watkins B, Chapman K, Arden N, Carr A, Ioannidis PA, Ioannidis PA, Wallis GA, Arden N; arcOGEN Consortium and arcOGEN Collaborators. Identification of new susceptibility loci for osteoarthritis (arcOGEN): a genome-wide association study. *Lancet*. Sep 1;380(9844):815-23.

2011

van den Akker EB, Verbruggen B, Heijmans BT, Beekman M, Kok JN, Slagboom PE, Reinders MJ. Integrating protein-protein interaction networks with gene-gene co-expression networks improves gene signatures for classifying breast cancer metastasis. *J Integr Bioinform* 8(2):188.

van Beijsterveldt CE, Middeldorp CM, Slof-Op't Landt MC, Bartels M, Hottenga JJ, Suchiman HE, Slagboom PE, Boomsma DI. Influence of candidate genes on attention problems in children: a longitudinal study. *Behav Genet* 41:155-164.

Bijsterbosch J, van Bemmel JM, Watt I, Meulenbelt I, Rosendaal FR, Huizinga TW, Kloppenburg M. Systemic and local factors are involved in the evolution of erosions in hand osteoarthritis. *Ann Rheum Dis* 70:326-330.

Bijsterbosch J, Watt I, Meulenbelt I, Rosendaal FR, Huizinga TW, Kloppenburg M. Clinical and radiographic disease course of hand osteoarthritis and determinants of outcome after 6 years. *Ann Rheum Dis* 70:68-73.

de Boer MG, Jolink H, Halkes CJ, van der Heiden PL, Kremer D, Falkenburg JH, van de Vosse E, van Dissel JT. Influence of polymorphisms in innate immunity genes on susceptibility to invasive aspergillosis after stem cell transplantation. *PLoS One* 6:e18403.

Deelen J, Beekman M, Uh HW, Helmer Q, Kuningas M, Christiansen L, Kremer D, van der Breggen R, Suchiman HE, Lakenberg N, van den Akker EB, Passtoors WM, Tiemeier H, van Heemst D, de Craen AJ, Rivadeneira F, de Geus EJ, Perola M, van der Ouderaa FJ, Gunn DA, Boomsma DI, Uitterlinden AG, Christensen K, van Duijn CM, Heijmans BT, Houwing-Duistermaat JJ, Westendorp RG, Slagboom PE. Genome-wide association study identifies a single major locus contributing to survival into old age; the APOE locus revisited. *Aging Cell* 10:686-698.

Derhovanessian E, Maier AB, Hahnel K, Beck R, de Craen AJ, Slagboom EP, Westendorp RG, Pawelec G. Infection with cytomegalovirus but not herpes simplex virus induces the accumulation of late-differentiated CD4+ and CD8+ T-cells in humans. *J Gen Virol* 92:2746-2756.

Euser AM, Finken MJ, Kharagjitsingh AV, Alizadeh BZ, Roep BO, Meulenbelt I, Dekker FW, Wit JM. IGF1 Promoter Polymorphism and Cranial Growth in Individuals Born Very Preterm. *Horm Res Paediatr* 76:27-34.

Evangelou E, Valdes AM, Kerkhof HJ, Styrkarsdottir U, Zhu Y, Meulenbelt I, Lories RJ, Karassa FB, Tylzanowski P, Bos SD, Akune T, Arden NK, Carr A, Chapman K, Cupples LA, Dai J, Deloukas P, Doherty M, Doherty S, Engstrom G, Gonzalez A, Halldorsson BV, Hammond CL, Hart DJ, Helgadottir H, Hofman A, Ikegawa S, Ingvarsson T, Jiang Q, Jonsson H, Kaprio J, Kawaguchi H, Kisand K, Kloppenburg M, Kujala UM, Lohmander LS, Loughlin J, Luyten FP, Mabuchi A, McCaskie A, Nakajima M, Nilsson PM, Nishida N, Ollier WE, Panoutsopoulou K, van de Putte T, Ralston SH, Rivadeneira F, Saarela J, Schulte-Merker S, Shi D, Slagboom PE, Sudo A, Tamm A, Tamm A, Thorleifsson G, Thorsteinsdottir U, Tsezou A, Wallis GA, Wilkinson JM, Yoshimura N, Zeggini E, Zhai G, Zhang F, Jonsdottir I, Uitterlinden AG, Felson DT, van Meurs JB, Stefansson K, Ioannidis JP, Spector TD. Meta-analysis of genome-wide association studies confirms a susceptibility locus for knee osteoarthritis on chromosome 7q22. *Ann Rheum Dis* 70:349-355.

Finken MJ, Meulenbelt I, Dekker FW, Frolich M, Walther FJ, Romijn JA, Slagboom PE, Wit JM. Abdominal fat accumulation in adults born preterm exposed antenatally to maternal glucocorticoid treatment is dependent on glucocorticoid receptor gene variation. *J Clin Endocrinol Metab* 96:E1650-E1655.

Freeman DJ, Robertson M, Brown EA, Rumley A, Tobias ES, Frolich M, Slagboom PE, Jukema JW, de Craen AJ, Sattar N, Ford I, Gaw A, Greer IA, Lowe GD, Stott DJ. Incident venous thromboembolic events in the Prospective Study of Pravastatin in the Elderly at Risk (PROSPER). *BMC Geriatr* 11:8.

Güler-Yüksel M, Bijsterbosch J, Allaart CF, Meulenbelt I, Kroon HM, Watt I, Lems WF, Kloppenburg M. Accelerated metacarpal bone mineral density loss is associated with radiographic progressive hand osteoarthritis. *Ann Rheum Dis* 70:1625-1630.

Kerkhof HJ, Doherty M, Arden NK, Abramson SB, Attur M, Bos SD, Cooper C, Dennison EM, Doherty SA, Evangelou E, Hart DJ, Hofman A, Javadi K, Kerna I, Kisand K, Kloppenburg M, Krasnokutsky S, Maciewicz RA, Meulenbelt I, Muir KR, Rivadeneira F, Samuels J, Sezgin M, Slagboom E, Smith AJ, Spector TD, Tamm A, Tamm A, Uitterlinden AG, Wheeler M, Zhai G, Zhang W, van Meurs JB, Valdes AM. Large-scale meta-analysis of interleukin-1 beta and interleukin-1 receptor antagonist polymorphisms on risk of radiographic hip and knee osteoarthritis and severity of knee osteoarthritis. *Osteoarthritis Cartilage* 19:265-271.

Kerkhof HJ, Meulenbelt I, Akune T, Arden NK, Aromaa A, Bierma-Zeinstra SM, Carr A, Cooper C, Dai J, Doherty M, Doherty SA, Felson D, Gonzalez A, Gordon A, Harilainen A, Hart DJ, Hauksson VB, Heliovaara M, Hofman A, Ikegawa S, Ingvarsson T, Jiang Q, Jonsson H, Jonsdottir I, Kawaguchi H, Kloppenburg M, Kujala UM, Lane NE, Leino-Arjas P, Lohmander LS, Luyten FP, Malizos KN, Nakajima M, Nevitt MC, Pols HA, Rivadeneira F, Shi D, Slagboom E, Spector TD, Stefansson K, Sudo A, Tamm A, Tamm AE, Tsezou A, Uchida A, Uitterlinden AG, Wilkinson JM, Yoshimura N, Valdes AM, van Meurs JB. Recommendations for standardization and phenotype definitions in genetic studies of osteoarthritis: the TREAT-OA consortium. *Osteoarthritis Cartilage* 19:254-264.

Kwok WY, Bijsterbosch J, Malm SH, Biermasz NR, Huetink K, Nelissen RG, Meulenbelt I, Huizinga TW, van 't Klooster R, Stoel BC, Kloppenburg M. Validity of joint space width measurements in hand osteoarthritis. *Osteoarthritis Cartilage* 19:1349-1355.

Ling CH, de Craen AJ, Slagboom PE, Gunn DA, Stokkel MP, Westendorp RG, Maier AB. Accuracy of direct segmental multi-frequency bioimpedance analysis in the assessment of total body and segmental body composition in middle-aged adult population. *Clin Nutr* 30:610-615.

Long Q, Jeffares DC, Zhang Q, Ye K, Nizhynska V, Ning Z, Tyler-Smith C, Nordborg M. PoolHap: inferring haplotype frequencies from pooled samples by next generation sequencing. *PLoS One* 6:e15292.

Martella F, Vermunt JK, Beekman M, Westendorp RG, Slagboom PE, Houwing-Duistermaat JJ. A mixture model with random-effects components for classifying sibling pairs. *Stat Med* 30:3252-3264.

Meulenbelt I, Bos SD, Chapman K, van der Breggen R, Houwing-Duistermaat JJ, Kremer D, Kloppenburg M, Carr A, Tsezou A, Gonzalez A, Loughlin J, Slagboom PE. Meta-analyses of genes modulating intracellular T3 bio-availability reveal a possible role for the DIO3 gene in osteoarthritis susceptibility. *Ann Rheum Dis* 70:164-167.

Meulenbelt I, Kraus VB, Sandell LJ, Loughlin J. Summary of the OA biomarkers workshop 2. *Osteoarthritis Cartilage* 19:1091-1094.

Mills RE, Walter K, Stewart C, Handsaker RE, Chen K, Alkan C, Abyzov A, Yoon SC, Ye K, Cheetham RK, Chinwalla A, Conrad DF, Fu Y, Grubert F, Hajirasouliha I, Hormozdiari F, Iakoucheva LM, Iqbal Z, Kang S, Kidd JM, Konkel MK, Korn J, Khurana E, Kural D, Lam HY, Leng J, Li R, Li Y, Lin CY, Luo R, Mu XJ, Nemes J, Peckham HE, Rausch T, Scally

A, Shi X, Stromberg MP, Stutz AM, Urban AE, Walker JA, Wu J, Zhang Y, Zhang ZD, Batzer MA, Ding L, Marth GT, McVean G, Sebat J, Snyder M, Wang J, Ye K, Eichler EE, Gerstein MB, Hurles ME, Lee C, McCarroll SA, Korbel JO. Mapping copy number variation by population-scale genome sequencing. *Nature* 470:59-65.

Mooijaart SP, van Heemst D, Noordam R, Rozing MP, Wijsman CA, de Craen AJ, Westendorp RG, Beekman M, Slagboom PE. Polymorphisms associated with type 2 diabetes in familial longevity: The Leiden Longevity Study. *Aging (Albany NY)* 3:55-62.

Panoutsopoulou K, Southam L, Elliott KS, Wrayner N, Zhai G, Beazley C, Thorleifsson G, Arden NK, Carr A, Chapman K, Deloukas P, Doherty M, McCaskie A, Ollier WE, Ralston SH, Spector TD, Valdes AM, Wallis GA, Wilkinson JM, Arden E, Battley K, Blackburn H, Blanco FJ, Bumpstead S, Cupples LA, Day-Williams AG, Dixon K, Doherty SA, Esko T, Evangelou E, Felson D, Gomez-Reino JJ, Gonzalez A, Gordon A, Gwilliam R, Halldorsson BV, Hauksson VB, Hofman A, Hunt SE, Ioannidis JP, Ingvarsson T, Jonsdottir I, Jonsson H, Keen R, Kerkhof HJ, Kloppenburg MG, Koller N, Lakenberg N, Lane NE, Lee AT, Metspalu A, Meulenbelt I, Nevitt MC, O'Neill F, Parimi N, Potter SC, Rego-Perez I, Riancho JA, Sherburn K, Slagboom PE, Stefansson K, Styrkarsdottir U, Sumillera M, Swift D, Thorsteinsdottir U, Tsezou A, Uitterlinden AG, van Meurs JB, Watkins B, Wheeler M, Mitchell S, Zhu Y, Zmuda JM, Zeggini E, Loughlin J. Insights into the genetic architecture of osteoarthritis from stage 1 of the arcOGEN study. *Ann Rheum Dis* 70:864-867.

Pons D, Trompet S, de Craen AJ, Thijssen PE, Quax PH, de Vries MR, Wierda RJ, van den Elsen PJ, Monraats PS, Ewing MM, Heijmans BT, Slagboom PE, Zwinderman AH, Doevendans PA, Tio RA, de Winter RJ, de Maat MP, Iakoubova OA, Sattar N, Shepherd J, Westendorp RG, Jukema JW. Genetic variation in PCAF, a key mediator in epigenetics, is associated with reduced vascular morbidity and mortality: evidence for a new concept from three independent prospective studies. *Heart* 97:143-150.

Rius-Ottenheim N, de Craen AJ, Geleijnse JM, Slagboom PE, Kromhout D, van der Mast RC, Zitman FG, Westendorp RG, Giltay EJ. C-reactive protein haplotypes and dispositional optimism in obese and nonobese elderly subjects. *Inflamm Res* 61:43-51.

Rozing MP, Mooijaart SP, Beekman M, Wijsman CA, Maier AB, Bartke A, Westendorp RG, Slagboom EP, van Heemst D. C-reactive protein and glucose regulation in familial longevity. *Age (Dordr)* 33:623-630.

Ruhaak LR, Uh HW, Beekman M, Hokke CH, Westendorp RG, Houwing-Duistermaat J, Wuhrer M, Deelder AM, Slagboom PE. Plasma protein N-glycan profiles are associated with calendar age, familial longevity and health. *J Proteome Res* 10:1667-1674.

Sampietro ML, Trompet S, Verschuren JJ, Talens RP, Deelen J, Heijmans BT, de Winter RJ, Tio RA, Doevendans PA, Ganesh SK, Nabel EG, Westra HJ, Franke L, van den Akker EB, Westendorp RG, Zwinderman AH, Kastrati A, Koch W, Slagboom PE, de Knijff P, Jukema JW. A genome-wide association study identifies a region at chromosome 12 as a potential susceptibility locus for restenosis after Percutaneous Coronary Intervention. *Hum Mol Genet*. Dec 1;20(23):4748-57

Saviouk V, Hottenga JJ, Slagboom EP, Distel MA, de Geus EJ, Willemsen G, Boomsma DI. ADHD in Dutch adults: heritability and linkage study. *Am J Med Genet B Neuropsychiatr Genet* 156B:352-362.

Slagboom PE, Beekman M, Passtoors WM, Deelen J, Vaarhorst AA, Boer JM, van den Akker EB, van Heemst D, de Craen AJ, Maier AB, Rozing M, Mooijaart SP, Heijmans BT, Westendorp RG. Genomics of human longevity. *Philos Trans R Soc Lond B Biol Sci* 366:35-42.

Slof-Op 't Landt MC, Meulenbelt I, Bartels M, Suchiman E, Middeldorp CM, Houwing-Duistermaat JJ, van TJ, Onkenhout EJ, Vink JM, van Beijsterveldt CE, Brandys MK, Sanders N, Zipfel S, Herzog W, Herpertz-Dahlmann B, Klampfl K, Fleischhaker C, Zeeck A, de ZM, Herpertz S, Ehrlich S, van Elburg AA, Adan RA, Scherag S, Hinney A, Hebebrand J, Boomsma DI, van Furth EF, Slagboom PE. Association study in eating disorders: TPH2 associates with anorexia nervosa and self-induced vomiting. *Genes Brain Behav* 10:236-243.

Skytthe A, Valensin S, Jeune B, Cevenini E, Balard F, Beekman M, Bezrukov V, Blanche H, Bolund L, Broczek K, Carru C, Christensen K, Christiansen L, Collerton JC, Cotichini R, de Craen AJ, Dato S, Davies K, de BG, Deiana L, Flachsbarth F, Gampe J, Gilbault C, Gonos ES, Haimes E, Hervonen A, Hurme MA, Janiszewska D, Jylha M, Kirkwood TB, Kristensen P, Laiho P, Leon A, Marchisio A, Masciulli R, Nebel A, Passarino G, Pelicci G, Peltonen L, Perola M, Poulain M, Rea IM, Remacle J, Robine JM, Schreiber S, Scurti M, Sevini F, Sikora E, Skouteri A, Slagboom PE, Spazzafumo L, Stazi MA, Tuccaceli V, Toussaint O, Tornwall O, Vaupel JW, Voutetakis K, Franceschi C. Design,

recruitment, logistics, and data management of the GEHA (Genetics of Healthy Ageing) project. *Exp Gerontol* 46:934-945.

Smith NL, Huffman JE, Strachan DP, Huang J, Dehghan A, Trompet S, Lopez LM, Shin SY, Baumert J, Vitart V, Bis JC, Wild SH, Rumley A, Yang Q, Uitterlinden AG, Stott DJ, Davies G, Carter AM, Thorand B, Polasek O, McKnight B, Campbell H, Rudnicka AR, Chen MH, Buckley BM, Harris SE, Peters A, Pulanic D, Lumley T, de Craen AJ, Liewald DC, Gieger C, Campbell S, Ford I, Gow AJ, Luciano M, Porteous DJ, Guo X, Sattar N, Tenesa A, Cushman M, Slagboom PE, Visscher PM, Spector TD, Illig T, Rudan I, Bovill EG, Wright AF, McArdle WL, Tofler G, Hofman A, Westendorp RG, Starr JM, Grant PJ, Karakas M, Hastie ND, Psaty BM, Wilson JF, Lowe GD, O'Donnell CJ, Witteman JC, Jukema JW, Deary IJ, Soranzo N, Koenig W, Hayward C. Genetic predictors of fibrin D-dimer levels in healthy adults. *Circulation* 123:1864-1872.

Tobi EW, Heijmans BT, Kremer D, Putter H, Deleamarre-van de Waal HA, Finken MJ, Wit JM, Slagboom PE. DNA methylation of IGF2, GNASAS, INSIGF and LEP and being born small for gestational age. *Epigenetics* 6:171-176.

Trompet S, de Craen AJ, Jukema JW, Pons D, Slagboom PE, Kremer D, Bollen EL, Westendorp RG. Variation in the CBP gene involved in epigenetic control associates with cognitive function. *Neurobiol Aging* 32:549-8.

Trompet S, Pons D, Kanse SM, de Craen AJ, Ikram MA, Verschuren JJ, Zwinderman AH, Doevendans PA, Tio RA, de Winter RJ, Slagboom PE, Westendorp RG, Jukema JW. Factor VII Activating Protease Polymorphism (G534E) Is Associated with Increased Risk for Stroke and Mortality. *Stroke Res Treat* 2011:424759.

Trompet S, de Craen AJ, Postmus I, Ford I, Sattar N, Caslake M, Stott DJ, Buckley BM, Sacks F, Devlin JJ, Slagboom PE, Westendorp RG, Jukema JW. Replication of LDL GWAs hits in PROSPER/PHASE as validation for future (pharmac) genetic analyses. *BMC Med Genet*. Oct 6;12:131

Vaarhorst AA, Beekman M, Suchiman EH, van Heemst D, Houwing-Duistermaat JJ, Westendorp RG, Slagboom PE, Heijmans BT. Lipid metabolism in long-lived families: the Leiden Longevity Study. *Age (Dordr)* 33:219-227.

Waarsing JH, Kloppenburg M, Slagboom PE, Kroon HM, Houwing-Duistermaat JJ, Weinans H, Meulenbelt I. Osteoarthritis susceptibility genes influence the association between hip morphology and osteoarthritis. *Arthritis Rheum* 63:1349-1354.

Wassenaar MJ, Biermasz NR, Bijsterbosch J, Pereira AM, Meulenbelt I, Smit JW, Roelfsema F, Kroon HM, Romijn JA, Kloppenburg M. Arthropathy in long-term cured acromegaly is characterised by osteophytes without joint space narrowing: a comparison with generalised osteoarthritis. *Ann Rheum Dis* 70:320-325.

Wijsman CA, Rozing MP, Streefland TC, le Cessie S, Mooijaart SP, Slagboom PE, Westendorp RG, Pijl H, van Heemst D. Familial longevity is marked by enhanced insulin sensitivity. *Aging Cell* 10:114-121.

Wijsman CA, van Heemst D, Rozing MP, Slagboom PE, Beekman M, de Craen AJ, Maier AB, Westendorp RG, Blom HJ, Mooijaart SP. Homocysteine and familial longevity: the Leiden Longevity Study. *PLoS One* 6:e17543.

Yusuf E, Bijsterbosch J, Slagboom PE, Kroon HM, Rosendaal FR, Huizinga TW, Kloppenburg M. Association between several clinical and radiological determinants with long-term clinical progression and good prognosis of lower limb osteoarthritis. *PLoS One* 6:e25426.

Yusuf E, Bijsterbosch J, Slagboom PE, Rosendaal FR, Huizinga TW, Kloppenburg M. Body mass index and alignment and their interaction as risk factors for progression of knees with radiographic signs of osteoarthritis. *Osteoarthritis Cartilage* 19:1117-1122.

Yusuf E, Ioan-Facsinay A, Bijsterbosch J, Klein-Wieringa I, Kwekkeboom J, Slagboom PE, Huizinga TW, Kloppenburg M. Association between leptin, adiponectin and resistin and long-term progression of hand osteoarthritis. *Ann Rheum Dis* 70:1282-1284.

2010

't Hart LM, Simonis-Bik AM, Nijpels G, van Haefen TW, Schafer SA, Houwing-Duistermaat JJ, Boomsma DI, Groenewoud MJ, Reiling E, van Hove EC, Diamant M, Kramer MH, Heine RJ, Maassen JA, Kirchoff K, Machicao F, Haring HU, Slagboom PE, Willemsen G, Eekhoff EM, de Geus EJ, Dekker JM, Fritsche A. Combined risk allele score of eight type 2 diabetes genes is associated with reduced first-phase glucose-stimulated insulin secretion during hyperglycemic clamps. *Diabetes* 59:287-292.

Beekman M, Nederstigt C, Suchiman HE, Kremer D, van der Breggen, Lakenberg N, Alemayehu WG, de Craen AJ, Westendorp RG, Boomsma DI, de Geus EJ, Houwing-Duistermaat JJ, Heijmans BT, Slagboom PE Genome-wide association study (GWAS)-identified disease risk alleles do not compromise human longevity. *Proc Natl Acad Sci U S A* 107:18046-18049.

Bijsterbosch J, Watt I, Meulenbelt I, Rosendaal FR, Huizinga TW, Kloppenburg M Clinical burden of erosive hand osteoarthritis and its relationship to nodes. *Ann Rheum Dis*. 69:1784-1788

Bijsterbosch J, Visser W, Kroon HM, Stamm T, Meulenbelt I, Huizinga TW, Kloppenburg M Thumb base involvement in symptomatic hand osteoarthritis is associated with more pain and functional disability. *Ann Rheum Dis* 69:585-587.

Bijsterbosch J, Wassenaar MJ, le Cessie S, Slagboom PE, Rosendaal FR, Huizinga TW, Kloppenburg M Doyle Index is a valuable additional pain measure in osteoarthritis. *Osteoarthritis Cartilage* 18:1046-1050.

Bos SD, Lakenberg N, van der Breggen, Houwing-Duistermaat JJ, Kloppenburg M, de Craen AJ, Beekman M, Meulenbelt I, Slagboom PE A genome-wide linkage scan reveals CD53 as an important regulator of innate TNF-alpha levels. *Eur J Hum Genet* 18:953-959.

Caliebe A, Kleindorp R, Blanche H, Christiansen L, Puca AA, Rea IM, Slagboom E, Flachsbarth F, Christensen K, Rimbach G, Schreiber S, Nebel A. No or only population-specific effect of PON1 on human longevity: a comprehensive meta-analysis. *Ageing Res Rev* 9:238-244.

Callegaro A, Meulenbelt I, Kloppenburg M, Slagboom PE, Houwing-Duistermaat JJ. Allele-sharing statistics using information on family history. *Ann Hum Genet* 74:547-554.

Derhovanessian E, Maier AB, Beck R, Jahn G, Hahnel K, Slagboom PE, de Craen AJ, Westendorp RG, Pawelec G. Hallmark features of immunosenescence are absent in familial longevity. *J Immunol* 185:4618-4624.

Haverkamp MH, Lindeboom JA, de Visser AW, Kremer D, Kuijpers TW, van de Vosse E, van Dissel JT. Nontuberculous mycobacterial cervicofacial lymphadenitis in children from the multicenter, randomized, controlled trial in The Netherlands: relevance of polymorphisms in candidate host immunity genes. *Int J Pediatr Otorhinolaryngol* 74:752-754.

Kerkhof HJ, Lories RJ, Meulenbelt I, Jonsdottir I, Valdes AM, Arp P, Ingvarsson T, Jhamai M, Jonsson H, Stolk L, Thorleifsson G, Zhai G, Zhang F, Zhu Y, van der Breggen R, Carr A, Doherty M, Doherty S, Felson DT, Gonzalez A, Halldorsson BV, Hart DJ, Hauksson VB, Hofman A, Ioannidis JP, Kloppenburg M, Lane NE, Loughlin J, Luyten FP, Nevitt MC, Parimi N, Pols HA, Rivadeneira F, Slagboom EP, Stykarsdottir U, Tsezou A, van de Putte T, Zmuda J, Spector TD, Stefansson K, Uitterlinden AG, van Meurs JB A genome-wide association study identifies an osteoarthritis susceptibility locus on chromosome 7q22. *Arthritis Rheum* 62:499-510.

Kerkhof HJ, Meulenbelt I, Carr A, Gonzalez A, Hart D, Hofman A, Kloppenburg M, Lane NE, Loughlin J, Nevitt MC, Pols HA, Rivadeneira F, Slagboom EP, Spector TD, Stolk L, Tsezou A, Uitterlinden AG, Valdes AM, van Meurs JB Common genetic variation in the Estrogen Receptor Beta (ESR2) gene and osteoarthritis: results of a meta-analysis. *BMC Med Genet* 11:164.

Kuningas M, van Bodegom D., May L, Meij JJ, Slagboom PE, Westendorp RG Common CFTR gene variants influence body composition and survival in rural Ghana. *Hum Genet* 127:201-206.

Lu Y, Feskens EJ, Boer JM, Imholz S, Verschuren WM, Wijmenga C, Vaarhorst A, Slagboom E, Muller M, Dolle ME Exploring genetic determinants of plasma total cholesterol levels and their predictive value in a longitudinal study. *Atherosclerosis* 213:200-205.

May L, Kuningas M, van Bodegom D, Meij HJ, Frolich M, Slagboom PE, Mantovani A, Westendorp RG Genetic variation in pentraxin (PTX) 3 gene associates with PTX3 production and fertility in women. *Biol Reprod* 82:299-304.

May L, van Bodegom D, Frolich M, van Lieshout L, Slagboom PE, Westendorp RG, Kuningas M Polymorphisms in TLR4 and TLR2 genes, cytokine production and survival in rural Ghana. *Eur J Hum Genet* 18:490-495.

Meulenbelt I, Bos SD, Kloppenburg M, Lakenberg N, Houwing-Duistermaat JJ, Watt I, de Craen AJ, van Duijn CM, Slagboom PE Interleukin-1 gene cluster variants with innate cytokine production profiles and osteoarthritis in subjects from the Genetics, Osteoarthritis and Progression Study. *Arthritis Rheum* 62:1119-1126.

Middeldorp CM, Slof-Op 't Landt MC, Medland SE, Beijsterveldt CE, Bartels M, Willemsen G, Hottenga JJ, Geus EJ, Suchiman HE, Dolan CV, Neale MC, Slagboom PE, Boomsma DI. Anxiety and depression in children and adults: influence of serotonergic and neurotrophic genes? *Genes Brain Behav.* 9:808-816

Moxley G, Meulenbelt I, Chapman K, van Duijn CM, Slagboom PE, Neale MC, Smith AJ, Carr AJ, Loughlin J. Interleukin-1 region meta-analysis with osteoarthritis phenotypes. *Osteoarthritis Cartilage* 18:200-207.

Newman AB, Walter S, Lunetta KL, Garcia ME, Slagboom PE, Christensen K, Arnold AM, Aspelund T, Aulchenko YS, Benjamin EJ, Christiansen L, D'Agostino RB, Sr., Fitzpatrick AL, Franceschini N, Glazer NL, Gudnason V, Hofman A, Kaplan R, Karasik D, Kelly-Hayes M, Kiel DP, Launer LJ, Marcianti KD, Massaro JM, Miljkovic I, Nalls MA, Hernandez D, Psaty BM, Rivadeneira F, Rotter J, Seshadri S, Smith AV, Taylor KD, Tiemeier H, Uh HW, Uitterlinden AG, Vaupel JW, Walston J, Westendorp RG, Harris TB, Lumley T, van Duijn CM, Murabito JM A meta-analysis of four genome-wide association studies of survival to age 90 years or older: the Cohorts for Heart and Aging Research in Genomic Epidemiology Consortium. *J Gerontol A Biol Sci Med Sci* 65:478-487.

Reiling E, Jafar-Mohammadi B, van 't Riet E, Weedon MN, van Vliet-Ostaptchouk JV, Hansen T, Saxena R, van Haeften TW, Arp PA, Das S, Nijpels G, Groenewoud MJ, van Hove EC, Uitterlinden AG, Smit JW, Morris AD, Doney AS, Palmer CN, Guiducci C, Hattersley AT, Frayling TM, Pedersen O, Slagboom PE, Altshuler DM, Groop L, Romijn JA, Maassen JA, Hofker MH, Dekker JM, McCarthy MI, 't Hart LM Genetic association analysis of LARS2 with type 2 diabetes. *Diabetologia* 53:103-110.

Rozing MP, Westendorp RG, de Craen AJ, Frolich M, Heijmans BT, Beekman M, Wijsman C, Mooijaart SP, Blauw GJ, Slagboom PE, van Heemst D. Low serum free triiodothyronine levels mark familial longevity: the Leiden Longevity Study. *J Gerontol A Biol Sci Med Sci* 65:365-368.

Rozing MP, Westendorp RG, de Craen AJ, Frolich M, de Goeij MC, Heijmans BT, Beekman M, Wijsman CA, Mooijaart SP, Blauw GJ, Slagboom PE, van Heemst D. Favorable glucose tolerance and lower prevalence of metabolic syndrome in offspring without diabetes mellitus of nonagenarian siblings: the Leiden longevity study. *J Am Geriatr Soc* 58:564-569.

Rozing MP, Houwing-Duistermaat JJ, Slagboom PE, Beekman M, Frolich M, de Craen AJ, Westendorp RG, van Heemst D. Familial Longevity Is Associated with Decreased Thyroid Function. *J Clin Endocrinol Metab.* 95:4979-4984

Ruhaak LR, Uh HW, Beekman M, Koeleman CA, Hokke CH, Westendorp RG, Wuhler M, Houwing-Duistermaat JJ, Slagboom PE, Deelder AM Decreased levels of bisecting GlcNAc glycoforms of IgG are associated with human longevity. *PLoS One* 5:e12566.

Simonis-Bik AM, Nijpels G, van Haeften TW, Houwing-Duistermaat JJ, Boomsma DI, Reiling E, van Hove EC, Diamant M, Kramer MH, Heine RJ, Maassen JA, Slagboom PE, Willemsen G, Dekker JM, Eekhoff EM, de Geus EJ, 't Hart LM Gene variants in the novel type 2 diabetes loci CDC123/CAMK1D, THADA, ADAMTS9, BCL11A, and MTNR1B affect different aspects of pancreatic beta-cell function. *Diabetes* 59:293-301.

Talens RP, Boomsma DI, Tobi EW, Kremer D, Jukema JW, Willemsen G, Putter H, Slagboom PE, Heijmans BT Variation, patterns, and temporal stability of DNA methylation: considerations for epigenetic epidemiology. *FASEB J* 24:3135-3144.

Terracciano A, Sanna S, Uda M, Deiana B, Usala G, Busonero F, Maschio A, Scally M, Patriciu N, Chen WM, Distel MA, Slagboom EP, Boomsma DI, Villafuerte S, Sliwerska E, Burmeister M, Amin N, Janssens AC, van Duijn CM, Schlessinger D, Abecasis GR, Costa PT, Jr Genome-wide association scan for five major dimensions of personality. *Mol Psychiatry* 15:647-656.

Trompet S, Craen AJ, Jukema JW, Pons D, Slagboom PE, Kremer D, Bollen EL, Westendorp RG Variation in the CBP gene involved in epigenetic control associates with cognitive function. *Neurobiol Aging.*

Tufan A, Meulenbelt I, Bijsterbosch J, Kroon HM, Bierma-Zeinstra SM, Nelissen RG, Kloppenburg M Familial influence on tibiofemoral alignment. *Ann Rheum Dis* 69:542-545.

Vaarhorst AA, Beekman M, Suchiman HE, van Heemst D, Houwing-Duistermaat JJ, Westendorp RG, Slagboom PE, Heijmans BT Lipid metabolism in long-lived families: the Leiden Longevity Study. *Age (Dordr)* 11 Jun;33(2):219-27.

Willemsen G, de Geus EJ, Bartels M, van Beijsterveldt CE, Brooks AI, Estourgie-van Burk GF, Fugman DA, Hoekstra C, Hottenga JJ, Klufft K, Meijer P, Montgomery GW, Rizzu P, Sondervan D, Smit AB, Spijker S, Suchiman HE, Tischfield JA, Lehner T, Slagboom PE, Boomsma DI The Netherlands Twin Register biobank: a resource for genetic epidemiological studies. *Twin Res Hum Genet* 13:231-245.

2009

Albers HM, Kurreeman FA, Stoeken-Rijsbergen G, Brinkman DM, Kamphuis SS, van Rossum MA, Girschick HJ, Wouters C, Saurenmann RK, Hoppenreijts E, Slagboom P, Houwing-Duistermaat JJ, Verduijn W, Huizinga TW, Ten CR, Toes RE, Schilham MW Association of the autoimmunity locus 4q27 with juvenile idiopathic arthritis. *Arthritis Rheum* 60:901-904.

Bijsterbosch J, Scharloo M, Visser AW, Watt I, Meulenbelt I, Huizinga TW, Kaptein AA, Kloppenburg M Illness perceptions in patients with osteoarthritis: change over time and association with disability. *Arthritis Rheum* 61:1054-1061.

Bijsterbosch J, Visser W, Kroon HM, Stamm T, Meulenbelt I, Huizinga TW, Kloppenburg M Thumb base involvement in symptomatic hand osteoarthritis is associated with more pain and functional disability. *Ann Rheum Dis*.

Bos SD, Kloppenburg M, Suchiman HE, van BE, Slagboom PE, Meulenbelt I The role of plasma cytokine levels, CRP and Selenoprotein S gene variation in OA. *Osteoarthritis Cartilage* 17:621-626.

Botha-Scheepers S, Riyazi N, Watt I, Rosendaal FR, Slagboom E, Bellamy N, Breedveld FC, Kloppenburg M Progression of hand osteoarthritis over 2 years: a clinical and radiological follow-up study. *Ann Rheum Dis* 68:1260-1264.

Dieguez-Gonzalez R, Calaza M, Shi D, Meulenbelt I, Loughlin J, Tsezou A, Dai J, Malizos KN, Slagboom EP, Kloppenburg M, Chapman K, Jiang Q, Kremer D, Gomez-Reino JJ, Nakajima N, Ikegawa S, Gonzalez A Testing the druggable endothelial differentiation gene 2 knee osteoarthritis genetic factor for replication in a wide range of sample collections. *Ann Rheum Dis* 68:1017-1021.

Evangelou E, Chapman K, Meulenbelt I, Karassa FB, Loughlin J, Carr A, Doherty M, Doherty S, Gomez-Reino JJ, Gonzalez A, Halldorsson BV, Hauksson VB, Hofman A, Hart DJ, Ikegawa S, Ingvarsson T, Jiang Q, Jonsdottir I, Jonsson H, Kerkhof HJ, Kloppenburg M, Lane NE, Li J, Lories RJ, van Meurs JB, Nakki A, Nevitt MC, Rodriguez-Lopez J, Shi D, Slagboom PE, Stefansson K, Tsezou A, Wallis GA, Watson CM, Spector TD, Uitterlinden AG, Valdes AM, Ioannidis JP Large-scale analysis of association between GDF5 and FRZB variants and osteoarthritis of the hip, knee, and hand. *Arthritis Rheum* 60:1710-1721.

Heijmans BT, Tobi EW, Lumey LH, Slagboom PE The epigenome: archive of the prenatal environment. *Epigenetics* 4:526-531.

Houwing-Duistermaat JJ, Callegaro A, Beekman M, Westendorp RG, Slagboom PE, van Houwelingen JC Weighted statistics for aggregation and linkage analysis of human longevity in selected families: the Leiden Longevity Study. *Stat Med* 28:140-151.

Kettunen J, Perola M, Martin NG, Cornes BK, Wilson SG, Montgomery GW, Benjamin B, Harris JR, Boomsma D, Willemsen G, Hottenga JJ, Slagboom PE, Christensen K, Kyvik KO, Sorensen TI, Pedersen NL, Magnusson PK, Andrew T, Spector TD, Widen E, Silventoinen K, Kaprio J, Palotie A, Peltonen L Multicenter dizygotic twin cohort study confirms two linkage susceptibility loci for body mass index at 3q29 and 7q36 and identifies three further potential novel loci. *Int J Obes (Lond)* 33:1235-1242.

Kuningas M, May L, Tamm R, van BD, van den Biggelaar AH, Meij JJ, Frolich M, Ziem JB, Suchiman HE, Metspalu A, Slagboom PE, Westendorp RG Selection for genetic variation inducing pro-inflammatory responses under adverse environmental conditions in a Ghanaian population. *PLoS One* 4:e7795.

Kuningas M, Mooijaart SP, Jolles J, Slagboom PE, Westendorp RG, van Heemst D. VDR gene variants associate with cognitive function and depressive symptoms in old age. *Neurobiol Aging* 30:466-473.

Lescai F, Blanche H, Nebel A, Beekman M, Sahbatou M, Flachsbarth F, Slagboom E, Schreiber S, Sorbi S, Passarino G, Franceschi C Human longevity and 11p15.5: a study in 1321 centenarians. *Eur J Hum Genet* 17:1515-1519.

Meulenbelt I, Chapman K, eguez-Gonzalez R, Shi D, Tsezou A, Dai J, Malizos KN, Kloppenburg M, Carr A, Nakajima M, van der Breggen R, Lakenberg N, Gomez-Reino JJ, Jiang Q, Ikegawa S, Gonzalez A, Loughlin J, Slagboom EP Large replication study and meta-analyses of DVWA as an osteoarthritis susceptibility locus in European and Asian populations. *Hum Mol Genet* 18:1518-1523.

Middeldorp CM, Sullivan PF, Wray NR, Hottenga JJ, de Geus EJ, van den BM, Montgomery GW, Coventry WL, Statham DJ, Andrews G, Slagboom PE, Boomsma DI, Martin NG Suggestive linkage on chromosome 2, 8, and 17 for lifetime major depression. *Am J Med Genet B Neuropsychiatr Genet* 150B:352-358.

Pons D, de Vries FR, van den Elsen PJ, Heijmans BT, Quax PH, Jukema JW Epigenetic histone acetylation modifiers in vascular remodelling: new targets for therapy in cardiovascular disease. *Eur Heart J* 30:266-277.

Reiling E, van Vliet-Ostapchouk JV, van 't Riet E, van Haeften TW, Arp PA, Hansen T, Kremer D, Groenewoud MJ, van Hove EC, Romijn JA, Smit JW, Nijpels G, Heine RJ, Uitterlinden AG, Pedersen O, Slagboom PE, Maassen JA, Hofker MH, 't Hart LM, Dekker JM Genetic association analysis of 13 nuclear-encoded mitochondrial candidate genes with type II diabetes mellitus: the DAMAGE study. *Eur J Hum Genet* 17:1056-1062.

Rodriguez-Lopez J, Pombo-Suarez M, Loughlin J, Tsezou A, Blanco FJ, Meulenbelt I, Slagboom PE, Valdes AM, Spector TD, Gomez-Reino JJ, Gonzalez A Association of a nsSNP in ADAMTS14 to some osteoarthritis phenotypes. *Osteoarthritis Cartilage* 17:321-327.

Roziing MP, Westendorp RG, Frolich M, de Craen AJ, Beekman M, Heijmans BT, Mooijaart SP, Blauw GJ, Slagboom PE, van Heemst D. Human insulin/IGF-1 and familial longevity at middle age. *Aging (Albany NY)* 1:714-722.

Sampietro ML, Pons D, de Knijff P, Slagboom PE, Zwinderman A, Jukema JW A genome wide association analysis in the GENDER study. *Neth Heart J* 17:262-264.

Slof-Op 't Landt MC, Dolan CV, Rebollo-Mesa I, Bartels M, van Furth EF, van Beijsterveldt CE, Meulenbelt I, Slagboom PE, Boomsma DI Sex differences in sum scores may be hard to interpret: the importance of measurement invariance. *Assessment* 16:415-423.

Stegers-Theunissen RP, Obermann-Borst SA, Kremer D, Lindemans J, Siebel C, Steegers EA, Slagboom PE, Heijmans BT Periconceptional maternal folic acid use of 400 microg per day is related to increased methylation of the IGF2 gene in the very young child. *PLoS One* 4:e7845.

Tobi EW, Lumey LH, Talens RP, Kremer D, Putter H, Stein AD, Slagboom PE, Heijmans BT DNA methylation differences after exposure to prenatal famine are common and timing- and sex-specific. *Hum Mol Genet* 18:4046-4053.

Vink JM, Smit AB, de Geus EJ, Sullivan P, Willemsen G, Hottenga JJ, Smit JH, Hoogendijk WJ, Zitman FG, Peltonen L, Kaprio J, Pedersen NL, Magnusson PK, Spector TD, Kyvik KO, Morley KI, Heath AC, Martin NG, Westendorp RG, Slagboom PE, Tiemeier H, Hofman A, Uitterlinden AG, Aulchenko YS, Amin N, van DC, Penninx BW, Boomsma DI Genome-wide association study of smoking initiation and current smoking. *Am J Hum Genet* 84:367-379.

Westendorp RG, van Heemst D. , Roziing MP, Frolich M, Mooijaart SP, Blauw GJ, Beekman M, Heijmans BT, de Craen AJ, Slagboom PE Nonagenarian siblings and their offspring display lower risk of mortality and morbidity than sporadic nonagenarians: The Leiden Longevity Study. *J Am Geriatr Soc* 57:1634-1637.

White WB, Schnitzer TJ, Fleming R, Duquesroix B, Beekman M Effects of the cyclooxygenase inhibiting nitric oxide donator naproxinod versus naproxen on systemic blood pressure in patients with osteoarthritis. *Am J Cardiol* 104:840-845.

Zhai G, van Meurs JB, Livshits G, Meulenbelt I, Valdes AM, Soranzo N, Hart D, Zhang F, Kato BS, Richards JB, Williams FM, Inouye M, Kloppenburg M, Deloukas P, Slagboom E, Uitterlinden A, Spector TD A genome-wide association study suggests that a locus within the ataxin 2 binding protein 1 gene is associated with hand osteoarthritis: the Treat-OA consortium. *J Med Genet* 46:614-616.

2008

Bos SD, Slagboom PE, Meulenbelt I New insights into osteoarthritis: early developmental features of an ageing-related disease. *Curr Opin Rheumatol* 20:553-559.

Bos SD, Suchiman HE, Kloppenburg M, Houwing-Duistermaat JJ, le Graverand MP, Seymour AB, Kroon HM, Slagboom PE, Meulenbelt I Allelic variation at the C-reactive protein gene associates to both hand osteoarthritis severity and serum high sensitive C-reactive protein levels in the GARP study. *Ann Rheum Dis* 67:877-879.

Botha-Scheepers S, Watt I, Slagboom E, de Craen AJ, Meulenbelt I, Rosendaal FR, Breedveld FC, Huizinga TW, Kloppenburg M Innate production of tumour necrosis factor alpha and interleukin 10 is associated with radiological progression of knee osteoarthritis. *Ann Rheum Dis* 67:1165-1169.

Chapman K, Takahashi A, Meulenbelt I, Watson C, Rodriguez-Lopez J, Egli R, Tsezou A, Malizos KN, Kloppenburg M, Shi D, Southam L, van der Breggen R, Donn R, Qin J, Doherty M, Slagboom PE, Wallis G, Kamatani N, Jiang Q, Gonzalez A, Loughlin J, Ikegawa S A meta-analysis of European and Asian cohorts reveals a global role of a functional SNP in the 5' UTR of GDF5 with osteoarthritis susceptibility. *Hum Mol Genet* 17:1497-1504.

Colas F, Meulenbelt I, Houwing-Duistermaat JJ, Kloppenburg M, Watt I, van Rooden SM, Visser M, Marinus J, van Hilten JJ, Slagboom P, Kok JN Reliability of cluster results for different types of time adjustments in complex disease research. *Conf Proc IEEE Eng Med Biol Soc* 2008:4601-4604.

Heijmans BT, Tobi EW, Stein AD, Putter H, Blauw GJ, Susser ES, Slagboom PE, Lumey LH Persistent epigenetic differences associated with prenatal exposure to famine in humans. *Proc Natl Acad Sci U S A* 105:17046-17049.

Hughes WO, Oldroyd BP, Beekman M, Ratnieks FL Ancestral monogamy shows kin selection is key to the evolution of eusociality. *Science* 320:1213-1216.

Jordan LA, Allsopp MH, Beekman M, Wessler TC, Oldroyd BP Inheritance of traits associated with reproductive potential in *Apis mellifera capensis* and *Apis mellifera scutellata* workers. *J Hered* 99:376-381.

Kuningas M, Mooijaart SP, van Heemst D, Zwaan BJ, Slagboom PE, Westendorp RG Genes encoding longevity: from model organisms to humans. *Aging Cell* 7:270-280.

Macgregor S, Hottenga JJ, Lind PA, Suchiman HE, Willemsen G, Slagboom PE, Montgomery GW, Martin NG, Visscher PM, Boomsma DI Vitamin D receptor gene polymorphisms have negligible effect on human height. *Twin Res Hum Genet* 11:488-494.

Meulenbelt I, Min JL, Bos S, Riyazi N, Houwing-Duistermaat JJ, van der Wijk HJ, Kroon HM, Nakajima M, Ikegawa S, Uitterlinden AG, van Meurs JB, van der Deure WM, Visser TJ, Seymour AB, Lakenberg N, van der Breggen R, Kremer D, van Duijn CM, Kloppenburg M, Loughlin J, Slagboom PE Identification of DIO2 as a new susceptibility locus for symptomatic osteoarthritis. *Hum Mol Genet* 17:1867-1875.

Middeldorp CM, Hottenga JJ, Slagboom PE, Sullivan PF, de Geus EJ, Posthuma D, Willemsen G, Boomsma DI Linkage on chromosome 14 in a genome-wide linkage study of a broad anxiety phenotype. *Mol Psychiatry* 13:84-89.

Passtoors WM, Beekman M, Gunn D, Boer JM, Heijmans BT, Westendorp RG, Zwaan BJ, Slagboom PE Genomic studies in ageing research: the need to integrate genetic and gene expression approaches. *J Intern Med* 263:153-166.

Riyazi N, Rosendaal FR, Slagboom E, Kroon HM, Breedveld FC, Kloppenburg M Risk factors in familial osteoarthritis: the GARP sibling study. *Osteoarthritis Cartilage* 16:654-659.

Shifman S, Bhomra A, Smiley S, Wray NR, James MR, Martin NG, Hottenga JM, An SS, Neale MC, van den Oord EJ, Kendler KS, Chen X, Boomsma DI, Middeldorp CM, Hottenga JJ, Slagboom PE, Flint J A whole genome association study of neuroticism using DNA pooling. *Mol Psychiatry* 13:302-312.

Slagboom E, Meulenbelt I Genetics of osteoarthritis: early developmental clues to an old disease. *Nat Clin Pract Rheumatol* 4:563.

Slof-Op 't Landt MC, Bartels M, van Furth EF, van Beijsterveldt CE, Meulenbelt I, Slagboom PE, Boomsma DI Genetic influences on disordered eating behaviour are largely independent of body mass index. *Acta Psychiatr Scand* 117:348-356.

Trompet S, de Craen AJ, Slagboom P, Shepherd J, Blauw GJ, Murphy MB, Bollen EL, Buckley BM, Ford I, Gaw A, Macfarlane PW, Packard CJ, Stott DJ, Jukema JW, Westendorp RG Genetic variation in the interleukin-1 beta-converting enzyme associates with cognitive function. The PROSPER study. *Brain* 131:1069-1077.

Trompet S, de Craen AJ, Slagboom P, Shepherd J, Blauw GJ, Murphy MB, Bollen EL, Buckley BM, Ford I, Gaw A, Macfarlane PW, Packard CJ, Stott DJ, Westendorp RG, Jukema JW Lymphotoxin-alpha C804A polymorphism is a risk factor for stroke. The PROSPER study. *Exp Gerontol* 43:801-805.

Willems JM, Trompet S, Slagboom PE, de Craen AJ, Westendorp RG. Hematopoietic capacity and exceptional survival: the Leiden Longevity Study. *J Am Geriatr Soc* 56:2009-2013.

Wray NR, Middeldorp CM, Birley AJ, Gordon SD, Sullivan PF, Visscher PM, Nyholt DR, Willemsen G, de Geus EJ, Slagboom PE, Montgomery GW, Martin NG, Boomsma DI Genome-wide linkage analysis of multiple measures of neuroticism of 2 large cohorts from Australia and the Netherlands. *Arch Gen Psychiatry* 65:649-658.

2007

Ali S, Vollaard AM, Kremer D, de Visser AW, Martina CA, Widjaja S, Surjadi C, Slagboom E, van d, V, van Dissel JT Polymorphisms in proinflammatory genes and susceptibility to typhoid fever and paratyphoid fever. *J Interferon Cytokine Res* 27:271-279.

Alizadeh BZ, Njajou OT, Hazes JM, Hofman A, Slagboom PE, Pols HA, van Duijn CM The H63D variant in the HFE gene predisposes to arthralgia, chondrocalcinosis and osteoarthritis. *Ann Rheum Dis* 66:1436-1442.

Bakaysa SL, Mucci LA, Slagboom PE, Boomsma DI, McClearn GE, Johansson B, Pedersen NL Telomere length predicts survival independent of genetic influences. *Aging Cell* 6:769-774.

Botha-Scheepers SA, Watt I, Slagboom E, Meulenbelt I, Rosendaal FR, Breedveld FC, Kloppenburg M Influence of familial factors on radiologic disease progression over two years in siblings with osteoarthritis at multiple sites: a prospective longitudinal cohort study. *Arthritis Rheum* 57:626-632.

Finken MJ, Meulenbelt I, Dekker FW, Frolich M, Romijn JA, Slagboom PE, Wit JM The 23K variant of the R23K polymorphism in the glucocorticoid receptor gene protects against postnatal growth failure and insulin resistance after preterm birth. *J Clin Endocrinol Metab* 92:4777-4782.

Franceschi C, Bezrukov V, Blanche H, Bolund L, Christensen K, de Benedictis G, Deiana L, Gonos E, Hervonen A, Yang H, Jeune B, Kirkwood TB, Kristensen P, Leon A, Pelicci PG, Peltonen L, Poulain M, Rea IM, Remacle J, Robine JM, Schreiber S, Sikora E, Slagboom PE, Spazzafumo L, Stazi MA, Toussaint O, Vaupel JW Genetics of healthy aging in Europe: the EU-integrated project GEHA (Genetics of Healthy Aging). *Ann N Y Acad Sci* 1100:21-45.

Heijmans BT, Kremer D, Tobi EW, Boomsma DI, Slagboom PE Heritable rather than age-related environmental and stochastic factors dominate variation in DNA methylation of the human IGF2/H19 locus. *Hum Mol Genet* 16:547-554.

Kuningas M, Putters M, Westendorp RG, Slagboom PE, van Heemst D. SIRT1 gene, age-related diseases, and mortality: the Leiden 85-plus study. *J Gerontol A Biol Sci Med Sci* 62:960-965.

Kuningas M, de Rijk RH, Westendorp RG, Jolles J, Slagboom PE, van Heemst D. Mental performance in old age dependent on cortisol and genetic variance in the mineralocorticoid and glucocorticoid receptors. *Neuropsychopharmacology* 32:1295-1301.

Kuningas M, Magi R, Westendorp RG, Slagboom PE, Remm M, van Heemst D. Haplotypes in the human Foxo1a and Foxo3a genes; impact on disease and mortality at old age. *Eur J Hum Genet* 15:294-301.

Lambert JC, Ferreira S, Gussekloo J, Christiansen L, Brysbaert G, Slagboom E, Cattel D, Petit T, Hauw JJ, DeKosky ST, Richard F, Berr C, Lendon C, Kamboh MI, Mann D, Christensen K, Westendorp R, Amouyel P Evidence for the association of the S100beta gene with low cognitive performance and dementia in the elderly. *Mol Psychiatry* 12:870-880.

Loughlin J, Meulenbelt I, Min J, Mustafa Z, Sinsheimer JS, Carr A, Slagboom PE Genetic association analysis of RHOB and TXNDC3 in osteoarthritis. *Am J Hum Genet* 80:383-386.

Mayboroda OA, Neuss C, Pelzing M, Zurek G, Derks R, Meulenbelt I, Kloppenburg M, Slagboom EP, Deelder AM Amino acid profiling in urine by capillary zone electrophoresis - mass spectrometry. *J Chromatogr A* 1159:149-153.

Meulenbelt I, Kloppenburg M, Kroon HM, Houwing-Duistermaat JJ, Garnero P, Hellio-Le Graverand MP, DeGroot J, Slagboom PE Clusters of biochemical markers are associated with radiographic subtypes of osteoarthritis (OA) in subject with familial OA at multiple sites. *The GARP study. Osteoarthritis Cartilage* 15:379-385.

Middeldorp CM, de Geus EJ, Beem AL, Lakenberg N, Hottenga JJ, Slagboom PE, Boomsma DI Family based association analyses between the serotonin transporter gene polymorphism (5-HTTLPR) and neuroticism, anxiety and depression. *Behav Genet* 37:294-301.

Min JL, Meulenbelt I, Kloppenburg M, van Duijn CM, Slagboom PE Mutation analysis of candidate genes within the 2q33.3 linkage area for familial early-onset generalised osteoarthritis. *Eur J Hum Genet* 15:791-799.

Mooijaart SP, Kuningas M, Westendorp RG, Houwing-Duistermaat JJ, Slagboom PE, Rensen PC, van Heemst D. Liver X receptor alpha associates with human life span. *J Gerontol A Biol Sci Med Sci* 62:343-349.

Putter H, Meulenbelt I, van Houwelingen JC Relative efficiency of haplotype frequency estimation in sibships and nuclear families compared to unrelated individuals. *Hum Hered* 64:52-62.

Sahiratmadja E, Wieringa FT, van CR, de Visser AW, Adnan I, Alisjahbana B, Slagboom E, Marzuki S, Ottenhoff TH, van d, V, Marx JJ Iron deficiency and NRAMP1 polymorphisms (INT4, D543N and 3'UTR) do not contribute to severity of anaemia in tuberculosis in the Indonesian population. *Br J Nutr* 98:684-690.

Slagboom PE, Heijmans BT, Beekman M, Meulenbelt I Molecular epidemiology, candidate genes versus genome-wide scans. *Genes Nutr* 2:27-29.

Thabet MM, Wesoly J, Slagboom PE, Toes RE, Huizinga TW FCRL3 promoter 169 CC homozygosity is associated with susceptibility to rheumatoid arthritis in Dutch Caucasians. *Ann Rheum Dis* 66:803-806.

Trompet S, Pons D, de Craen AJ, Slagboom P, Shepherd J, Blauw GJ, Murphy MB, Cobbe SM, Bollen EL, Buckley BM, Ford I, Hyland M, Gaw A, Macfarlane PW, Packard CJ, Norrie J, Perry IJ, Stott DJ, Sweeney BJ, Twomey C, Westendorp RG, Jukema JW Genetic variation in the interleukin-10 gene promoter and risk of coronary and cerebrovascular events: the PROSPER study. *Ann N Y Acad Sci* 1100:189-198.

Whitfield JB, Dy V, McQuilty R, Zhu G, Montgomery GW, Ferreira MA, Duffy DL, Neale MC, Heijmans BT, Heath AC, Martin NG Evidence of genetic effects on blood lead concentration. *Environ Health Perspect* 115:1224-1230.

2006

Beekman M, Blauw GJ, Houwing-Duistermaat JJ, Brandt BW, Westendorp RG, Slagboom PE Chromosome 4q25, microsomal transfer protein gene, and human longevity: novel data and a meta-analysis of association studies. *J Gerontol A Biol Sci Med Sci* 61:355-362.

Beem AL, Geus EJ, Hottenga JJ, Sullivan PF, Willemsen G, Slagboom PE, Boomsma DI Combined linkage and association analyses of the 124-bp allele of marker D2S2944 with anxiety, depression, neuroticism and major depression. *Behav Genet* 36:127-136.

Boomsma DI, Cacioppo JT, Slagboom PE, Posthuma D Genetic linkage and association analysis for loneliness in Dutch twin and sibling pairs points to a region on chromosome 12q23-24. *Behav Genet* 36:137-146.

Botha-Scheepers S, Riyazi N, Kroon HM, Scharloo M, Houwing-Duistermaat JJ, Slagboom E, Rosendaal FR, Breedveld FC, Kloppenburg M Activity limitations in the lower extremities in patients with osteoarthritis: the modifying effects of illness perceptions and mental health. *Osteoarthritis Cartilage* 14:1104-1110.

Heijmans BT, Beekman M, Houwing-Duistermaat JJ, Cobain MR, Powell J, Blauw GJ, van der OF, Westendorp RG, Slagboom PE Lipoprotein particle profiles mark familial and sporadic human longevity. *PLoS Med* 3:e495.

Kuningas M, Mooijaart SP, Slagboom PE, Westendorp RG, van Heemst D. Genetic variants in the glucocorticoid receptor gene (NR3C1) and cardiovascular disease risk. *The Leiden 85-plus Study. Biogerontology* 7:231-238.

Kuningas M, Slagboom PE, Westendorp RG, van Heemst D. Impact of genetic variations in the WRN gene on age related pathologies and mortality. *Mech Ageing Dev* 127:307-313.

Meulenbelt I, Kloppenburg M, Kroon HM, Houwing-Duistermaat JJ, Garnero P, Hellio Le Graverand MP, DeGroot J, Slagboom PE Urinary CTX-II levels are associated with radiographic subtypes of osteoarthritis in hip, knee, hand, and facet joints in subject with familial osteoarthritis at multiple sites: the GARP study. *Ann Rheum Dis* 65:360-365.

Meulenbelt I, Min JL, van Duijn CM, Kloppenburg M, Breedveld FC, Slagboom PE Strong linkage on 2q33.3 to familial early-onset generalized osteoarthritis and a consideration of two positional candidate genes. *Eur J Hum Genet* 14:1280-1287.

Min J, Meulenbelt I, Slagboom E Replication in genetic association studies: Comment on the editorial by Spector et al. *Arthritis Rheum* 54:3063-3064.

Min JL, Meulenbelt I, Riyazi N, Kloppenburg M, Houwing-Duistermaat JJ, Seymour AB, van Duijn CM, Slagboom PE Association of matrilin-3 polymorphisms with spinal disc degeneration and osteoarthritis of the first carpometacarpal joint of the hand. *Ann Rheum Dis* 65:1060-1066.

Min JL, Lakenberg N, Bakker-Verweij M, Suchiman HE, Boomsma DI, Slagboom PE, Meulenbelt I High microsatellite and SNP genotyping success rates established in a large number of genomic DNA samples extracted from mouth swabs and genotypes. *Twin Res Hum Genet* 9:501-506.

Mooijaart SP, Berbee JF, van Heemst D, Havekes LM, de Craen AJ, Slagboom PE, Rensen PC, Westendorp RG ApoE plasma levels and risk of cardiovascular mortality in old age. *PLoS Med* 3:e176.

Posthuma D, Visscher PM, Willemsen G, Zhu G, Martin NG, Slagboom PE, de Geus EJ, Boomsma DI Replicated linkage for eye color on 15q using comparative ratings of sibling pairs. *Behav Genet* 36:12-17.

Schoenmaker M, de Craen AJ, de Meijer PH, Beekman M, Blauw GJ, Slagboom PE, Westendorp RG Evidence of genetic enrichment for exceptional survival using a family approach: the Leiden Longevity Study. *Eur J Hum Genet* 14:79-84.

Valle A, O'Connor DT, Taylor P, Zhu G, Montgomery GW, Slagboom PE, Martin NG, Whitfield JB Butyrylcholinesterase: association with the metabolic syndrome and identification of 2 gene loci affecting activity. *Clin Chem* 52:1014-1020.

van Dunné FM, de Craen AJ, Heijmans BT, Helmerhorst FM, Westendorp RG Gender-specific association of the factor V Leiden mutation with fertility and fecundity in a historic cohort. The Leiden 85-Plus Study. *Hum Reprod* 21:967-971.

Vink JM, Posthuma D, Neale MC, Slagboom PE, Boomsma DI. Genome-wide linkage scan to identify Loci for age at first cigarette in Dutch sibling pairs. *Behav Genet* 36:100-111.

Wessels JA, de Vries-Bouwstra JK, Heijmans BT, Slagboom PE, Goekoop-Ruiterman YP, Allaart CF, Kerstens PJ, van Zeben D, Breedveld FC, Dijkmans BA, Huizinga TW, Guchelaar HJ Efficacy and toxicity of methotrexate in early rheumatoid arthritis are associated with single-nucleotide polymorphisms in genes coding for folate pathway enzymes. *Arthritis Rheum* 54:1087-1095.

2005

Alizadeh BZ, Njajou OT, Bijkerk C, Meulenbelt I, Wildt SC, Hofman A, Pols HA, Slagboom PE, Duijn CM Evidence for a role of the genomic region of the gene encoding for the alpha1 chain of type IX collagen (COL9A1) in hip osteoarthritis: A population-based study. *Arthritis Rheum* 52:1437-1442.

Brandt BW, Zwaan BJ, Beekman M, Westendorp RG, Slagboom PE Shuttling between species for pathways of lifespan regulation: a central role for the vitellogenin gene family? *Bioessays* 27:339-346.

Cornes BK, Medland SE, Ferreira MA, Morley KI, Duffy DL, Heijmans BT, Montgomery GW, Martin NG Sex-limited genome-wide linkage scan for body mass index in an unselected sample of 933 Australian twin families. *Twin Res Hum Genet* 8:616-632.

de Geus EJ, Posthuma D, Kupper N, van den Berg M, Willemsen G, Beem AL, Slagboom PE, Boomsma DI A whole-genome scan for 24-hour respiration rate: a major locus at 10q26 influences respiration during sleep. *Am J Hum Genet* 76:100-111.

Heijmans BT, Beekman M, Putter H, Lakenberg N, van der Wijk HJ, Whitfield JB, Posthuma D, Pedersen NL, Martin NG, Boomsma DI, Slagboom PE Meta-analysis of four new genome scans for lipid parameters and analysis of positional candidates in positive linkage regions. *Eur J Hum Genet* 13:1143-1153.

Leroi AM, Bartke A, de Benedictis G, Franceschi C, Gartner A, Gonos ES, Fedei ME, Kivisild T, Lee S, Kartaf-Ozer N, Schumacher M, Sikora E, Slagboom E, Tatar M, Yashin AI, Vijg J, Zwaan B What evidence is there for the existence of individual genes with antagonistic pleiotropic effects? *Mech Ageing Dev* 126:421-429.

Min JL, Meulenbelt I, Riyazi N, Kloppenburg M, Houwing-Duistermaat JJ, Seymour AB, Pols HA, van Duijn CM, Slagboom PE Association of the Frizzled-related protein gene with symptomatic osteoarthritis at multiple sites. *Arthritis Rheum* 52:1077-1080.

Mooijaart SP, Brandt BW, Baldal EA, Pijpe J, Kuningas M, Beekman M, Zwaan BJ, Slagboom PE, Westendorp RG, van Heemst D. *C. elegans* DAF-12, Nuclear Hormone Receptors and human longevity and disease at old age. *Ageing Res Rev* 4:351-371.

Posthuma D, Meulenbelt I, de Craen AJ, de Geus EJ, Slagboom PE, Boomsma DI, Westendorp RG Human cytokine response to ex vivo amyloid-beta stimulation is mediated by genetic factors. *Twin Res Hum Genet* 8:132-137.

Posthuma D, Luciano M, Geus EJ, Wright MJ, Slagboom PE, Montgomery GW, Boomsma DI, Martin NG A genomewide scan for intelligence identifies quantitative trait loci on 2q and 6p. *Am J Hum Genet* 77:318-326.

Riyazi N, Meulenbelt I, Kroon HM, Runday KH, Hellio Le Graverand MP, Rosendaal FR, Breedveld FC, Slagboom PE, Kloppenburg M Evidence for familial aggregation of hand, hip, and spine but not knee osteoarthritis in siblings with multiple joint involvement: the GARP study. *Ann Rheum Dis* 64:438-443.

Riyazi N, Slagboom E, de Craen AJ, Meulenbelt I, Houwing-Duistermaat JJ, Kroon HM, van SD, Rosendaal FR, Breedveld FC, Huizinga TW, Kloppenburg M Association of the risk of osteoarthritis with high innate production of interleukin-1beta and low innate production of interleukin-10 ex vivo, upon lipopolysaccharide stimulation. *Arthritis Rheum* 52:1443-1450.

Slof-Op 't Landt MC, van Furth EF, Meulenbelt I, Slagboom PE, Bartels M, Boomsma DI, Bulik CM Eating disorders: from twin studies to candidate genes and beyond. *Twin Res Hum Genet* 8:467-482.

van Heemst D, Beekman M, Mooijaart SP, Heijmans BT, Brandt BW, Zwaan BJ, Slagboom PE, Westendorp RG Reduced insulin/IGF-1 signalling and human longevity. *Ageing Cell* 4:79-85.

van Heemst D, Mooijaart SP, Beekman M, Schreuder J, de Craen AJ, Brandt BW, Slagboom PE, Westendorp RG Variation in the human TP53 gene affects old age survival and cancer mortality. *Exp Gerontol* 40:11-15.

Wesoly J, Toes RE, Slagboom PE, Huizinga TW RUNX1 intronic SNP is not associated with rheumatoid arthritis susceptibility in Dutch Caucasians. *Rheumatology (Oxford)* 44:1196.

Basrak B, Klaassen CA, Beekman M, Martin NG, Boomsma DI Copulas in QTL mapping. *Behav Genet* 34:161-171.

2004

Beekman M, Posthuma D, Heijmans BT, Lakenberg N, Suchiman HE, Snieder H, de Knijff P, Frants RR, van Ommen GJ, Klufft C, Vogler GP, Slagboom PE, Boomsma DI Combined association and linkage analysis applied to the APOE locus. *Genet Epidemiol* 26:328-337.

Heijmans BT, Beem AL, Willemsen G, Posthuma D, Slagboom PE, Boomsma D Further evidence for a QTL influencing body mass index on chromosome 7p from a genome-wide scan in Dutch families. *Twin Res* 7:192-196.

Kurreeman FA, Schonkeren JJ, Heijmans BT, Toes RE, Huizinga TW Transcription of the IL10 gene reveals allele-specific regulation at the mRNA level. *Hum Mol Genet* 13:1755-1762.

Meulenbelt I, Seymour AB, Nieuwland M, Huizinga TW, van Duijn CM, Slagboom PE Association of the interleukin-1 gene cluster with radiographic signs of osteoarthritis of the hip. *Arthritis Rheum* 50:1179-1186.

Mooijaart SP, van Heemst D, Schreuder J, van GS, Beekman M, Brandt BW, Slagboom PE, Westendorp RG. Variation in the SHC1 gene and longevity in humans. *Exp Gerontol* 39:263-268.

van den Biggelaar AH, de Craen AJ, Gussekloo J, Huizinga TW, Heijmans BT, Frolich M, Kirkwood TB, Westendorp RG Inflammation underlying cardiovascular mortality is a late consequence of evolutionary programming. *FASEB J* 18:1022-1024.

van den Biggelaar AH, Huizinga TW, de Craen AJ, Gussekloo J, Heijmans BT, Frolich M, Westendorp RG Impaired innate immunity predicts frailty in old age. The Leiden 85-plus study. *Exp Gerontol* 39:1407-1414.

Vink JM, Beem AL, Posthuma D, Neale MC, Willemsen G, Kendler KS, Slagboom PE, Boomsma DI Linkage analysis of smoking initiation and quantity in Dutch sibling pairs. *Pharmacogenomics J* 4:274-282.

Willemsen G, Boomsma DI, Beem AL, Vink JM, Slagboom PE, Posthuma D QTLs for height: results of a full genome scan in Dutch sibling pairs. *Eur J Hum Genet* 12:820-828.

Zhai G, Rivadeneira F, Houwing-Duistermaat JJ, Meulenbelt I, Bijkerk C, Hofman A, van Meurs JB, Uitterlinden AG, Pols HA, Slagboom PE, van Duijn CM Insulin-like growth factor I gene promoter polymorphism, collagen type II alpha1 (COL2A1) gene, and the prevalence of radiographic osteoarthritis: the Rotterdam Study. *Ann Rheum Dis* 63:544-548.

Beekman M, Heijmans BT, Martin NG, Whitfield JB, Pedersen NL, DeFaire U, Snieder H, Lakenberg N, Suchiman HE, de Knijff P, Frants RR, van Ommen GJ, Klufft C, Vogler GP, Boomsma DI, Slagboom PE Evidence for a QTL on chromosome 19 influencing LDL cholesterol levels in the general population. *Eur J Hum Genet* 11:845-850.

2003

Beekman M, Heijmans BT, Martin NG, Whitfield JB, Pedersen NL, DeFaire U, Snieder H, Lakenberg N, de Knijff P, Frants RR, van Ommen GJ, Klufft C, Vogler GP, Slagboom PE, Boomsma DI Two-locus linkage analysis applied to putative quantitative trait loci for lipoprotein(a) levels. *Twin Res* 6:322-324.

Heijmans BT, Boer JM, Suchiman HE, Cornelisse CJ, Westendorp RG, Kromhout D, Feskens EJ, Slagboom PE A common variant of the methylenetetrahydrofolate reductase gene (1p36) is associated with an increased risk of cancer. *Cancer Res* 63:1249-1253.

Houwing-Duistermaat JJ, Bijkerk C, Hsu L, Stijnen T, Slagboom EP, van Duijn CM A unified approach to modelling linkage to quantitative and qualitative traits. *Ann Hum Genet* 67:457-463.

2002

Beekman M, Heijmans BT, Martin NG, Pedersen NL, Whitfield JB, DeFaire U, van Baal GC, Snieder H, Vogler GP, Slagboom PE, Boomsma DI Heritabilities of apolipoprotein and lipid levels in three countries. *Twin Res* 5:87-97.

Hayes RB, Beekman ML Alpha CAM alarm set points in a salt dust environment. *Health Phys* 82:887-897.

Heijmans BT, Westendorp RG, Droog S, Klufft C, Knook DL, Slagboom PE Association of the tumour necrosis factor alpha -308G/A polymorphism with the risk of diabetes in an elderly population-based cohort. *Genes Immun* 3:225-228.

Heijmans BT, Slagboom PE, Gussekloo J, Droog S, Lagaay AM, Klufft C, Knook DL, Westendorp RG Association of APOE epsilon2/epsilon3/epsilon4 and promoter gene variants with dementia but not cardiovascular mortality in old age. *Am J Med Genet* 107:201-208.

Slagboom PE, Meulenbelt I Organisation of the human genome and our tools for identifying disease genes. *Biol Psychol* 61:11-31.

Van Aken MO, de Craen AJ, Gussekloo J, Moghaddam PH, Vandenbroucke JP, Heijmans BT, Slagboom PE, Westendorp RG No increase in mortality and morbidity among carriers of the C282Y mutation of the hereditary haemochromatosis gene in the oldest old: the Leiden 85-plus study. *Eur J Clin Invest* 32:750-754.

2001

Beekman M, Lakenberg N, Cherny SS, de Knijff P, Klufft CC, van Ommen GJ, Vogler GP, Frants RR, Boomsma DI, Slagboom PE A powerful and rapid approach to human genome scanning using small quantities of genomic DNA. *Genet Res* 77:129-134.

Duffy D, Montgomery G, Treloar S, Birley A, Kirk K, Boomsma D, Beem L, de GE, Slagboom E, Knighton J, Reed P, Martin N IBD sharing around the PPARG locus is not increased in dizygotic twins or their mothers. *Nat Genet* 28:315.

2000

Wijsman GW, Iglesias GA, de Wolf WH, Beekman MC, Bickelhaupt F, Kooijman H, Spek AL X-ray crystal structures and conformational analysis of bicyclo[5.3.1]undec-1(11)-enes: twisting versus pyradidalization in anti-bredt olefins. *J Org Chem* 66:1216-1227.

Boomsma DI, Beem AL, van den BM, Dolan CV, Koopmans JR, Vink JM, de Geus EJ, Slagboom PE Netherlands twin family study of anxious depression (NETSAD). *Twin Res* 3:323-334.

Gasior M, Ungard JT, Beekman M, Carter RB, Witkin JM Acute and chronic effects of the synthetic neuroactive steroid, ganaxolone, against the convulsive and lethal effects of pentylenetetrazol in seizure-kindled mice: comparison with diazepam and valproate. *Neuropharmacology* 39:1184-1196.

Heijmans BT, Westendorp RG, Lagaay AM, Knook DL, Klufft C, Slagboom PE Common paraoxonase gene variants, mortality risk and fatal cardiovascular events in elderly subjects. *Atherosclerosis* 149:91-97.

Heijmans BT, Westendorp RG, Slagboom PE Common gene variants, mortality and extreme longevity in humans. *Exp Gerontol* 35:865-877.

Rietveld MJ, van der Valk JC, Bongers IL, Stroet TM, Slagboom PE, Boomsma DI Zygosity diagnosis in young twins by parental report. *Twin Res* 3:134-141.

Slagboom PE, Heijmans BT, Beekman M, Westendorp RG, Meulenbelt I Genetics of human aging. The search for genes contributing to human longevity and diseases of the old. *Ann N Y Acad Sci* 908:50-63.

Ungard JT, Beekman M, Gasior M, Carter RB, Dijkstra D, Witkin JM Modification of behavioral effects of drugs in mice by neuroactive steroids. *Psychopharmacology (Berl)* 148:336-343.

van Ittersum FJ, de Man AM, Thijssen S, de Knijff P, Slagboom E, Smulders Y, Tarnow L, Donker AJ, Bilo HJ, Stehouwer CD Genetic polymorphisms of the renin-angiotensin system and complications of insulin-dependent diabetes mellitus. *Nephrol Dial Transplant* 15:1000-1007.

van Meurs JB, Arp PP, Fang Y, Slagboom PE, Meulenbelt I, van Leeuwen JP, Pols HA, Uitterlinden AG Detection of sequence variability of the collagen type IIalpha 1 3' variable number of tandem repeat. *Electrophoresis* 21:3571-3577.

1999

Bijkerk C, Houwing-Duistermaat JJ, Valkenburg HA, Meulenbelt I, Hofman A, Breedveld FC, Pols HA, van Duijn CM, Slagboom PE Heritabilities of radiologic osteoarthritis in peripheral joints and of disc degeneration of the spine. *Arthritis Rheum* 42:1729-1735.

de Maat MP, Jukema JW, Ye S, Zwinderman AH, Moghaddam PH, Beekman M, Kastelein JJ, van Boven AJ, Brusckhe AV, Humphries SE, Klufft C, Henney AM Effect of the stromelysin-1 promoter on efficacy of pravastatin in coronary atherosclerosis and restenosis. *Am J Cardiol* 83:852-856.

Gussekloo J, Heijmans BT, Slagboom PE, Lagaay AM, Knook DL, Westendorp RG. Thermolabile methylenetetrahydrofolate reductase gene and the risk of cognitive impairment in those over 85. *J Neurol Neurosurg Psychiatry* 67:535-538.

Heijmans BT, Westendorp RG, Knook DL, Kluit C, Slagboom PE Angiotensin I-converting enzyme and plasminogen activator inhibitor-1 gene variants: risk of mortality and fatal cardiovascular disease in an elderly population-based cohort. *J Am Coll Cardiol* 34:1176-1183.

Heijmans BT, Gussekloo J, Kluit C, Droog S, Lagaay AM, Knook DL, Westendorp RG, Slagboom EP Mortality risk in men is associated with a common mutation in the methylene-tetrahydrofolate reductase gene (MTHFR). *Eur J Hum Genet* 7:197-204.

Meulenbelt I, Bijkerk C, De Wildt SC, Miedema HS, Breedveld FC, Pols HA, Hofman A, van Duijn CM, Slagboom PE Haplotype analysis of three polymorphisms of the COL2A1 gene and associations with generalised radiological osteoarthritis. *Ann Hum Genet* 63:393-400.

van Schothorst EM, Prins DE, Baysal BE, Beekman M, Licht JD, Waxman S, Zelent A, Cornelisse CJ, van Ommen GJ, Richard CW, III, Devilee P Genomic structure of the human PLZF gene. *Gene* 236:21-24.

Westendorp RG, Hottenga JJ, Slagboom PE Variation in plasminogen-activator-inhibitor-1 gene and risk of meningococcal septic shock. *Lancet* 354:561-563.

1998

Bots ML, van KF, Breteler MM, Slagboom PE, Hofman A, Haverkate F, Meijer P, Koudstaal PJ, Grobbee DE, Kluit C Response to activated protein C in subjects with and without dementia. The Dutch Vascular Factors in Dementia Study. *Haemostasis* 28:209-215.

Heijmans BT, Westendorp RG, Knook DL, Kluit C, Slagboom PE The risk of mortality and the factor V Leiden mutation in a population-based cohort. *Thromb Haemost* 80:607-609.

Meulenbelt I, Bijkerk C, Miedema HS, Breedveld FC, Hofman A, Valkenburg HA, Pols HA, Slagboom PE, van Duijn CM A genetic association study of the IGF-1 gene and radiological osteoarthritis in a population-based cohort study (the Rotterdam Study). *Ann Rheum Dis* 57:371-374.

van Schothorst EM, Beekman M, Torremans P, Kuipers-Dijkshoorn NJ, Wessels HW, Bardeol AF, van der Mey AG, van D, V, van Ommen GJ, Devilee P, Cornelisse CJ Paragangliomas of the head and neck region show complete loss of heterozygosity at 11q22-q23 in chief cells and the flow-sorted DNA aneuploid fraction. *Hum Pathol* 29:1045-1049.

1997

Meulenbelt I, Bijkerk C, De Wildt SC, Miedema HS, Valkenburg HA, Breedveld FC, Pols HA, Te Koppele JM, Sloos VF, Hofman A, Slagboom PE, van Duijn CM Investigation of the association of the CRTM and CRTL1 genes with radiographically evident osteoarthritis in subjects from the Rotterdam study. *Arthritis Rheum* 40:1760-1765.

Meulenbelt I, Bijkerk C, Breedveld FC, Slagboom PE Genetic linkage analysis of 14 candidate gene loci in a family with autosomal dominant osteoarthritis without dysplasia. *J Med Genet* 34:1024-1027.

Stott WT, Beekman MJ, Johnson KA, Spencer PJ Evaluation of a novel assay of potential toxicity/neurotoxicity of carpet emissions (VOCs) in mice. *Food Chem Toxicol* 35:241-254.

Verheggen PW, Heymans BT, Slagboom PE, Haverkate F, Cats VM Normal prevalence of factor V Leiden gene mutation in patients with severe unstable angina. *Thromb Haemost* 77:1218.

Vogler GP, McClearn GE, Snieder H, Boomsma DI, Palmer R, de Knijff P, Slagboom PE Genetics and behavioral medicine: risk factors for cardiovascular disease. *Behav Med* 22:141-149.

1996

Meulenbelt I, Williams CJ, Te Koppele JM, Van de Giessen GC, Slagboom PE Population haplotype analysis and evolutionary relations of the COL2A1 gene. *Ann Hum Genet* 60:189-199.

van der Bom JG, Bots ML, Haverkate F, Slagboom PE, Meijer P, de Jong PT, Hofman A, Grobbee DE, Kluit C Reduced response to activated protein C is associated with increased risk for cerebrovascular disease. *Ann Intern Med* 125:265-269.

1995

Meulenbelt I, Droog S, Trommelen GJ, Boomsma DI, Slagboom PE High-yield noninvasive human genomic DNA isolation method for genetic studies in geographically dispersed families and populations. *Am J Hum Genet* 57:1252-1254.

1994

Slagboom PE, Droog S, Boomsma DI Genetic determination of telomere size in humans: a twin study of three age groups. *Am J Hum Genet* 55:876-882.