

List of publications – The PEAK-25 cohort

2007

McGuigan F, Larzenius E, Gerdhem P, Callreus M, Luthman H, Åkesson K. Variation in the BMP2 gene: bone mineral density and ultrasound in young adult and elderly women. *Calcif Tissue Int.* 2007;81:254-62

2012

Callréus M, McGuigan FM, Ringsberg K, Åkesson K. Self-reported recreational exercise combining regularity and impact is necessary to maximize bone mineral density in young adult women: A population-based study of 1,061 women 25 years of age. *Osteoporos Int.* 2012;23:2517-26

Gyllenberg A, Asad S, Piehl F, Swanberg M, Padyukov L, Van Yserloo B, Rutledge EA, McNeney B, Graham J, Orho-Melander M, Lindholm E, Graff C, Forsell C, Åkesson K, Landin-Olsson M, Carlsson A, Lindblad B, Forsander G, Ludvigsson J, Marcus C, Larsson H, Ivarsson SA, Lernmark Å, Alfredsson L, Åkesson K, Olsson T, Kockum I. Age-Dependent Variation of Genotypes in MHC II Transactivator gene (CIITA) in Controls and Association to Type 1 Diabetes. *Genes Immun.* 2012;13:632-40

2013

Callréus M, McGuigan F, Åkesson K. Birth Weight is More Important for Peak Bone Mineral Content than for Bone Density: The PEAK-25 Study of 1,061 Young Adult Women. *Osteoporos Int.* 2013 Apr;24(4):1347-55.

Koller DL, Zheng HF, Karasik D, Yerges-Armstrong L, Liu CT, McGuigan F, Kemp JP, Giroux S, Lai D, Edenberg HJ, Peacock M, Czerwinski SA, Choh AC, McMahon G, St Pourcain B, Timpson NJ, Lawlor DA, Evans DM, Towne B, Blangero J, Carless MA, Kammerer C, Goltzman D, Kovacs CS, Prior JC, Spector TD, Rousseau F, Tobias JH, Åkesson K, Econs MJ, Mitchell BD, Richards BJ, Kiel DP, and Foroud T. Meta-Analysis of Genome-Wide Studies Identifies Wnt16 and Esr1 Snps Associated with Bone Mineral Density in Premenopausal Women. *J Bone Miner Res.* 2013;28:547-58.

Callréus M, McGuigan F, Åkesson K. Adverse Effects of Smoking on Peak Bone Mass May Be Attenuated by Higher Body Mass Index in Young Female Smokers. *Calcif Tissue Int* 2013;93;517-25

2014

Callréus M, McGuigan F, Åkesson K. Country-specific young-adult DXA reference data are warranted for T-score calculations in women: Data from the PEAK-25 cohort. *J Clin Densitom.* 2014 Jan-Mar;17(1):129-35

2015

Herlin M, McGuigan FE, Luthman H, Åkesson K. Polymorphisms in inflammation associated genes ALOX15 and IL-6 are associated with bone properties in young women and fracture in elderly. *Bone.* 2015 Oct;79:105-9

Grauers A, Wang J, Einarsdottir E, Simony A, Danielsson A, Åkesson K, Ohlin A, Halldin K, Grabowski P, Tenne M, Laivuori H, Dahlman I, Andersen M, Christensen SB, Karlsson MK, Jiao H, Kere J, Gerdhem P. Candidate gene analysis and exome sequencing confirm LBX1 as a susceptibility gene for idiopathic scoliosis. *Spine J.* 2015 Oct 1;15(10):2239-46

Zheng HF, Forgetta V, Hsu YH, Estrada K, Rosello-Diez A, Leo PJ, Dahia CL, Park-Min KH, Tobias JH, Kooperberg C, Kleinman A, Styrkarsdottir U, Liu CT, Uggla C, Evans DS, Nielson CM, Walter K, Pettersson-Kymmer U, McCarthy S, Eriksson J, Kwan T, Jhamai M, Trajanoska K, Memari Y, Min J, Huang J, Danecek P, Wilmot B, Li R, Chou WC, Mokry LE, Moayyeri A, Claussnitzer M, Cheng CH, Cheung W, Medina-Gómez C, Ge B, Chen SH, Choi K, Oei L, Fraser J, Kraaij R, Hibbs MA, Gregson CL, Paquette D, Hofman A, Wibom C, Tranah GJ, Marshall M, Gardiner BB, Cremin K, Auer P, Hsu L, Ring S, Tung JY, Thorleifsson G, Enneman AW, van Schoor NM, de Groot LC, van der Velde N, Melin B, Kemp JP, Christiansen C, Sayers A, Zhou Y, Calderari S, van Rooij J, Carlson C, Peters U, Berlivet S, Dostie J, Uitterlinden AG, Williams SR, Farber C, Grinberg D, LaCroix AZ, Haessler J, Chasman DI, Giulianini F, Rose LM, Ridker PM, Eisman JA, Nguyen TV, Center JR, Nogue X, Garcia-Giralt N, Launer LL, Gudnason V, Mellström D, Vandenput L, Amin N, van Duijn CM, Karlsson MK, Ljunggren Ö, Svensson O, Hallmans G, Rousseau F, Giroux S, Bussièrè J, Arp PP, Koromani F, Prince RL, Lewis JR, Langdahl BL, Pernille Hermann A, Jensen JB, Kaptoge S, Khaw KT, Reeve J, Formosa MM, Xuereb-Anastasi A, Åkesson K, McGuigan FE, Garg G, Olmos JM, Zarrabeitia MT, Riancho JA, Ralston SH, Alonso N, Jiang X, Goltzman D, Pastinen T, Grundberg E, Gauguier D, Orwoll ES, Karasik D, Davey-Smith G; AOGC Consortium, Smith AV, Siggeirsdottir K, Harris TB, Carola Zillikens M, van Meurs JB, Thorsteinsdottir U, Maurano MT, Timpson NJ, Soranzo N, Durbin R, Wilson SG, Ntzani EE, Brown MA, Stefansson K, Hinds DA, Spector T, Adrienne Cupples L, Ohlsson C, Greenwood CM; UK10K Consortium, Jackson RD, Rowe DW, Loomis CA, Evans DM, Ackert-Bicknell CL, Joyner AL, Duncan EL, Kiel DP, Rivadeneira F, Richards JB for the GEFOS and UK10K Consortia. Whole-genome sequencing identifies EN1 as a determinant of bone density and fracture. *Nature*. 2015 Oct 1;526(7571):112-7

2016

Garg G*; McGuigan FE*; Kumar J; Luthman H; Lyssenko V; Åkesson K. Association between polymorphisms in glucose-dependent insulinotropic polypeptide (GIP) and GIP receptor (GIPR) genes and bone in young and elderly women. Submitted for publication. *Bone Reports* 2016 Vol 4, June 2016, 23–27

*Joint first authorship

Sandström L, McGuigan FE, Callréus M, Åkesson KE. Peak Bone Mass and Quantitative Ultrasound Bone Properties in Young Adulthood: A Study in the PEAK-25 Cohort of Women. *J Clin Densitom*. 2016;19(4):477-484. doi: 10.1016/j.jocd.2016.03.001.

Kiel D, Zillikens C, Harris T, Hsu Y-H, Stolk L, Karasik D, Ohlsson C, Loos R, Demissie S, Yerges L.... McGuigan FE, Åkesson K..... and collaborators from GEFOS, GENOMOS and CHARGE. Large Meta-Analysis of Genome Wide Association Studies Identifies Five Loci for Lean Body Mass (In press, *Nature Communications*)