

Curriculum Vitae

Personal information

Surname: Dehghan
First name: Abbas
Title: MD, PhD
Sex: Male
Date of Birth: July 19, 1973
Place of Birth: Shiraz, Iran
Nationalities: Dutch / Iranian

Department of Epidemiology and Biostatistics
School of Public Health
Imperial College London St Mary's campus
Faculty of Medicine Building
Norfolk Place
Paddington, LONDON W2 1PG
Phone: +44 (0) 20 7594 3347
Email: a.dehghan@imperial.ac.uk

Contact

Academic education and degrees

- 2010 PhD (*cum laude*), Department of Epidemiology, Erasmus MC, Rotterdam, The Netherlands
2006 Doctor of Science (DSc) in Epidemiology, Netherlands institute for health sciences (Nihes), Rotterdam, The Netherlands
2005 Master of Science (MSc) in Epidemiology, Netherlands institute for health sciences (Nihes), Rotterdam, The Netherlands
2000 Medical doctorate (MD), Kerman University of Medical Sciences, Kerman, Iran
1991 Diploma in mathematics, Tohid secondary school, Shiraz, Iran

Academic position

- 2019 to present Director of postgraduate research, school of public health, Imperial College London, UK
2016 to present Reader in Cardiometabolic Disease Epidemiology – Imperial College London, London, UK
2011 to 2016 Assistant professor – Erasmus University Medical Centre, Rotterdam, The Netherlands
2010 to 2011 Post doc researcher – Erasmus University Medical Centre, Rotterdam, The Netherlands

Honours and awards

- 2010 PhD with honours (*Cum Laude*), Department of Epidemiology, Erasmus Medical Centre
2009 PhD Student of the Year Award, Erasmus PhD Association Rotterdam (EPAR)
1992 Selected as top student in University entrance exam, Iranian ministry of health, Iran

Grants, Fellowships and Studentships

- 2019 Evaluating Microbiome Causality in the Gut-Liver Axis and its Impact on Insulin Resistance, Diabetes UK, (Co-PI, £397K)
2019 Newton International Fellowship, Newton fund (Angel Flores Mejía, Sponsor: Abbas Dehghan), £92K
2019 Dynamic longitudinal exposome trajectories in cardiovascular and metabolic Non-communicable diseases, EU (Co-PI, €800K)
2019 Non-Clinical PhD studentship, BHF (Milad Nazarzadeh Larzjan, Sponsor: Abbas Dehghan / Kazem Rahimi), £100K
2018 MRC Skills Development Fellowship (Dr K. Chechi, Sponsors: Abbas Dehghan / Marc Dumas), £200K
2018 PhD scholarship, Saudi ministry of science (Rami Al jafar, Sponsor: Abbas Dehghan)

- 2017 President's PhD Scholarships, (Rima Mustafa, Sponsors: Abbas Dehghan, Marina Evangelou)
- 2016 Applying GWAS to prioritize untargeted metabolomics data for Mendelian Randomization studies, Wellcome trust seed award (Main applicant, £96,890)
- 2016 Metabolomic Signatures of CAD Associated Genotypes (Co-applicant, \$320,000)
- 2015 Methylation, Nutrition and Cardiometabolic Health, Metagenics (Co applicant, €1,500,000)
- 2015 Which miRNAs catch the eye for eye disorders? Uitzicht (Co applicant, €75,000)
- 2012 EU FP7 COMBI BIO Project (Co applicant, €180,000)
- 2011 Veni grant, The Dutch Scientific Organization NWO (Main applicant, €230,000)
- 2010 Erasmus University Rotterdam EUR grant (Main applicant, €200,000)
- 2009 Travel grant for a working visit to the US, RIDE project, ZonMW, The Netherlands (Main applicant, €5,000)
- 2004 Four years PhD Fellowship, Iranian Ministry of Health, Iran (Main applicant, ~€60,000)

Mentorship

Imperial College London (Primary supervisor to 5 students)

1. Dipender Gill

Title: Applications of genetic data to identify cardiovascular disease mechanisms and therapeutic opportunities

Defended - November 20, 2019

2. Rima Mustafa

Title: Metabolomics signatures of microRNAs in complex disorders

Expected viva: May 31, 2022

3. Rami Al Jafar

Title: Effect of religious fasting in Ramadan on cardiometabolic health

Expected viva: September 3, 2022

4. Leila Abar

Title: Causal role of gut microbiome related metabolites in complex disorders

Expected viva: June 1, 2024

5. Daisy Bai

Title: Applying Mendelian Randomisation to investigate efficacy of antihypertensive medications

Expected viva: December 1, 2023

Imperial College London (Primary supervisor to 2 students)

1. Arinbjorn Kolbeinsson (primary supervisor: Joanna Tzoulaki)

Title: Using deep learning to predict health outcomes based on MR imaging and other high dimensional data

Expected viva: December 2020

2. Saredo Said (Primary supervisor: Joanna Tzoulaki)

Title: Molecular epidemiology approaches to study inflammatory mechanisms associated with chronic diseases.

Expected viva: November 1, 2021

University of Oxford (Secondary supervisor to 1 student)

1. Milad Nazarzadeh Larzjan (Primary supervisor: Prof. Kazem Rahimi)

Title: The effect of blood pressure-lowering drugs and drug-drug interactions on the risk of type 2 diabetes: integrating epidemiologic and genetic data

Expected viva: October 6, 2023

Erasmus Medical Centre (10 PhD students)

1. Mandy van Hoek, MD PhD

Title: Genetics of type 2 diabetes Association, Interaction, and Prediction

Defended - June 16, 2011

2. Paul de Vries, PhD

Title: Haemostasis and Cardiovascular diseases: A molecular epidemiology approach

Defended - January 20, 2015

3. Sanaz Sedaghat, PhD

Title: Chronic kidney disease, cardiovascular disease and neurological disorders

Defended – September 19, 2015

4. Mohsen Ghanbari

Title: The Role of MicroRNAs in Age-related Disorders

Defended - July 5, 2017

5. Layal Chaker

Subject: Glandula Thyreoidea et senescens; Thyroid and Aging

Defended - October 3, 2017

6. Kim Braun

Title: Nutrition and cardiometabolic health; the role of DNA methylation

Defended - March 7, 2018

7. Adela Brahimaj

Title: Novel Risk Markers for Type 2 Diabetes; inflammation, body fat and sex hormones

Defended - April 25, 2018

8. Jana Nano

Title: Epidemiology of Diabetes, Risk Factors and Adverse Outcomes

Defended - November 23, 2018

9. Eliana Portilla Fernández

Title: The Aging Cardiovascular System: Genetic and epigenetic determinants of vascular outcomes and cardiometabolic risk

Defended - October 31, 2019

10. Symen Ligthart

Title: Molecular epidemiology of inflammation; link with type 2 diabetes and coronary heart disease

Expected date of defence: February 19, 2020

PhD examinations

- 2011 Mandy van Hoek, (Erasmus University Medical Centre) "Genetics of type 2 diabetes association, interaction and prediction"
- 2011 Daniella M, (Oosterveer. Erasmus University Medical Centre) "Clinical Genetics of Familial Hypercholesterolemia Aetiology of Xanthoma and Coronary Heart Disease"
- 2013 Javad Bagheri, (Erasmus University Medical Centre) "Application of Whole-body Vibration Technical and clinical studies in healthy persons and people with neurological disorders."
- 2015 Rene F.A.G. de Bruijn, (Erasmus University Medical Centre) "Emerging Determinants of Dementia"
- 2015 Sanaz Sedaghat, (Erasmus University Medical Centre) "The kidney and the brain Role of vascular dysfunction"
- 2015 Fernando Sempértegui, (Erasmus University Medical Centre) "Nutrition, Immunity, Infection and Metabolic Health in Ecuador"
- 2017 Darina Bassil, Imperial College London, "Is there an association between cancer and dementia in cohorts with and without T2DM?"
- 2019 Kawthar Al-Dabhan, Imperial College London, "Interplay between vitamin D and metabolic factors in colorectal cancer development: a molecular epidemiology approach"
- 2019 Nat Na-Ek, University College London, "Contributions of higher resolution observational evidence from electronic health records to understand the causal relevance of blood lipids to heart failure and atrial fibrillation"
- 2020 Jelena Bešević, Investigating markers of metabolic dysfunction involved in colorectal cancer development: a molecular epidemiology approach"

Summary of publications

Number of International publications 245

H index 81

Total number of citations 54,941

Source: Google scholar, January 2020

Publications as Last author

1. Portilla-Fernandez E, Ghanbari M, van Meurs JBJ, Danser AHJ, Franco OH, Muka T, et al. Dissecting the association of autophagy-related genes with cardiovascular diseases and intermediate vascular traits: A population-based approach. *PloS one*. 2019;14(3):e0214137-e.
2. Pazoki R, Evangelou E, Mosen-Ansorena D, Pinto RC, Karaman I, Blakeley P, et al. GWAS for urinary sodium and potassium excretion highlights pathways shared with cardiovascular traits. *Nature communications*. 2019;10(1):3653-.
3. Mazidi M, Mikhailidis DP, Banach M, Dehghan A. Impact of serum 25-hydroxyvitamin D 25(OH) on telomere attrition: A Mendelian Randomization study. *Clinical nutrition (Edinburgh, Scotland)*. 2019:S0261-5614(19)33177-2.
4. Gill D, Efthathiadou A, Cawood K, Tzoulaki I, Dehghan A. Education protects against coronary heart disease and stroke independently of cognitive function: evidence from Mendelian randomization. *International journal of epidemiology*. 2019;48(5):1468-77.
5. Gill D, Brewer CF, Monori G, Trégouët D-A, Franceschini N, Giambartolomei C, et al. Effects of Genetically Determined Iron Status on Risk of Venous Thromboembolism and Carotid Atherosclerotic Disease: A Mendelian Randomization Study. *Journal of the American Heart Association*. 2019;8(15):e012994-e.

6. Carter AR, Gill D, Davies NM, Taylor AE, Tillmann T, Vaucher J, et al. Understanding the consequences of education inequality on cardiovascular disease: mendelian randomisation study. *BMJ (Clinical research ed.)*. 2019;365:I1855-I.
7. Mustafa R, Ghanbari M, Evangelou M, Dehghan A. An Enrichment Analysis for Cardiometabolic Traits Suggests Non-Random Assignment of Genes to microRNAs. *International journal of molecular sciences*. 2018;19(11):3666.
8. Gill D, Monori G, Tzoulaki I, Dehghan A. Iron Status and Risk of Stroke. *Stroke*. 2018;49(12):2815-21.
9. Gill D, Georgakis MK, Laffan M, Sabater-Lleal M, Malik R, Tzoulaki I, et al. Genetically Determined FXI (Factor XI) Levels and Risk of Stroke. *Stroke*. 2018;49(11):2761-3.
10. Ghanbari M, Peters MJ, de Vries PS, Boer CG, van Rooij JGJ, Lee Y-C, et al. A systematic analysis highlights multiple long non-coding RNAs associated with cardiometabolic disorders. *Journal of human genetics*. 2018;63(4):431-46.
11. Dhana K, Braun KVE, Nano J, Voortman T, Demerath EW, Guan W, et al. An Epigenome-Wide Association Study of Obesity-Related Traits. *American journal of epidemiology*. 2018;187(8):1662-9.
12. van der Schaft N, Brahimaj A, Wen K-X, Franco OH, Dehghan A. The association between serum uric acid and the incidence of prediabetes and type 2 diabetes mellitus: The Rotterdam Study. *PloS one*. 2017;12(6):e0179482-e.
13. Nano J, Muka T, Ligthart S, Hofman A, Darwish Murad S, Janssen HLA, et al. Gamma-glutamyltransferase levels, prediabetes and type 2 diabetes: a Mendelian randomization study. *International journal of epidemiology*. 2017;46(5):1400-9.
14. Nano J, Ghanbari M, Wang W, de Vries PS, Dhana K, Muka T, et al. Epigenome-Wide Association Study Identifies Methylation Sites Associated With Liver Enzymes and Hepatic Steatosis. *Gastroenterology*. 2017;153(4):1096-106.e2.
15. de Vries PS, van Herpt TTW, Ligthart S, Hofman A, Ikram MA, van Hoek M, et al. ADAMTS13 activity as a novel risk factor for incident type 2 diabetes mellitus: a population-based cohort study. *Diabetologia*. 2017;60(2):280-6.
16. de Vries PS, Sabater-Lleal M, Chasman DI, Trompet S, Ahluwalia TS, Teumer A, et al. Comparison of HapMap and 1000 Genomes Reference Panels in a Large-Scale Genome-Wide Association Study. *PloS one*. 2017;12(1):e0167742-e.
17. Braun KVE, Dhana K, de Vries PS, Voortman T, van Meurs JBJ, Uitterlinden AG, et al. Epigenome-wide association study (EWAS) on lipids: the Rotterdam Study. *Clinical epigenetics*. 2017;9:15-.
18. Brahimaj A, Ligthart S, Ikram MA, Hofman A, Franco OH, Sijbrands EJG, et al. Serum Levels of Apolipoproteins and Incident Type 2 Diabetes: A Prospective Cohort Study. *Diabetes care*. 2017;40(3):346-51.
19. Brahimaj A, Ligthart S, Ghanbari M, Ikram MA, Hofman A, Franco OH, et al. Novel inflammatory markers for incident pre-diabetes and type 2 diabetes: the Rotterdam Study. *European journal of epidemiology*. 2017;32(3):217-26.
20. Sedaghat S, de Vries PS, Boender J, Sonneveld MAH, Hoorn EJ, Hofman A, et al. von Willebrand Factor, ADAMTS13 Activity, and Decline in Kidney Function: A Population-Based Cohort Study. *American journal of kidney diseases : the official journal of the National Kidney Foundation*. 2016;68(5):726-32.
21. Ligthart S, van Herpt TTW, Leening MJG, Kavousi M, Hofman A, Stricker BHC, et al. Lifetime risk of developing impaired glucose metabolism and eventual progression from prediabetes to type 2 diabetes: a prospective cohort study. *The lancet. Diabetes & endocrinology*. 2016;4(1):44-51.
22. Ligthart S, Vaez A, Hsu Y-H, Inflammation Working Group of the CC, Pmi Wg XCP, LifeLines Cohort S, et al. Bivariate genome-wide association study identifies novel pleiotropic loci for lipids and inflammation. *BMC genomics*. 2016;17:443-.

23. Ligthart S, Steenaard RV, Peters MJ, van Meurs JBJ, Sijbrands EJG, Uitterlinden AG, et al. Tobacco smoking is associated with DNA methylation of diabetes susceptibility genes. *Diabetologia*. 2016;59(5):998-1006.
24. Ligthart S, Marzi C, Aslibekyan S, Mendelson MM, Conneely KN, Tanaka T, et al. DNA methylation signatures of chronic low-grade inflammation are associated with complex diseases. *Genome biology*. 2016;17(1):255-.
25. Ghanbari M, Ikram MA, de Looper HWJ, Hofman A, Erkeland SJ, Franco OH, et al. Genome-wide identification of microRNA-related variants associated with risk of Alzheimer's disease. *Scientific reports*. 2016;6:28387-.
26. Ghanbari M, Darweesh SKL, de Looper HWJ, van Luijn MM, Hofman A, Ikram MA, et al. Genetic Variants in MicroRNAs and Their Binding Sites Are Associated with the Risk of Parkinson Disease. *Human mutation*. 2016;37(3):292-300.
27. de Vries PS, Chasman DI, Sabater-Lleal M, Chen M-H, Huffman JE, Steri M, et al. A meta-analysis of 120 246 individuals identifies 18 new loci for fibrinogen concentration. *Human molecular genetics*. 2016;25(2):358-70.
28. Chaker L, Ligthart S, Korevaar TIM, Hofman A, Franco OH, Peeters RP, et al. Thyroid function and risk of type 2 diabetes: a population-based prospective cohort study. *BMC medicine*. 2016;14(1):150-.
29. Steenaard RV, Ligthart S, Stolk L, Peters MJ, van Meurs JB, Uitterlinden AG, et al. Tobacco smoking is associated with methylation of genes related to coronary artery disease. *Clinical epigenetics*. 2015;7(1):54-.
30. Sedaghat S, Mattace-Raso FUS, Hoorn EJ, Uitterlinden AG, Hofman A, Ikram MA, et al. Arterial Stiffness and Decline in Kidney Function. *Clinical journal of the American Society of Nephrology : CJASN*. 2015;10(12):2190-7.
31. Ligthart S, de Vries PS, Uitterlinden AG, Hofman A, group Clw, Franco OH, et al. Pleiotropy among common genetic loci identified for cardiometabolic disorders and C-reactive protein. *PloS one*. 2015;10(3):e0118859-e.
32. Liefhaar MC, Ligthart S, Vitezova A, Hofman A, Uitterlinden AG, Kieft-de Jong JC, et al. Vitamin D and C-Reactive Protein: A Mendelian Randomization Study. *PloS one*. 2015;10(7):e0131740-e.
33. Ghanbari M, Sedaghat S, de Looper HWJ, Hofman A, Erkeland SJ, Franco OH, et al. The association of common polymorphisms in miR-196a2 with waist to hip ratio and miR-1908 with serum lipid and glucose. *Obesity (Silver Spring, Md.)*. 2015;23(2):495-503.
34. Ghanbari M, Franco OH, de Looper HWJ, Hofman A, Erkeland SJ, Dehghan A. Genetic Variations in MicroRNA-Binding Sites Affect MicroRNA-Mediated Regulation of Several Genes Associated With Cardio-metabolic Phenotypes. *Circulation. Cardiovascular genetics*. 2015;8(3):473-86.
35. de Vries PS, Kavousi M, Ligthart S, Uitterlinden AG, Hofman A, Franco OH, et al. Incremental predictive value of 152 single nucleotide polymorphisms in the 10-year risk prediction of incident coronary heart disease: the Rotterdam Study. *International journal of epidemiology*. 2015;44(2):682-8.
36. Sedaghat S, Pazoki R, Uitterlinden AG, Hofman A, Stricker BHC, Ikram MA, et al. Association of uric acid genetic risk score with blood pressure: the Rotterdam study. *Hypertension (Dallas, Tex. : 1979)*. 2014;64(5):1061-6.
37. Ligthart S, Sedaghat S, Ikram MA, Hofman A, Franco OH, Dehghan A. EN-RAGE: a novel inflammatory marker for incident coronary heart disease. *Arteriosclerosis, thrombosis, and vascular biology*. 2014;34(12):2695-9.
38. Ghanbari M, de Vries PS, de Looper H, Peters MJ, Schurmann C, Yaghootkar H, et al. A genetic variant in the seed region of miR-4513 shows pleiotropic effects on lipid and glucose homeostasis, blood pressure, and coronary artery disease. *Human mutation*. 2014;35(12):1524-31.

39. Sedaghat S, Hoorn EJ, van Rooij FJA, Hofman A, Franco OH, Witteman JCM, et al. Serum uric acid and chronic kidney disease: the role of hypertension. *PLoS One*. 2013;8(11):e76827-e.
40. Nanchen D, Leening MJG, Locatelli I, Cornuz J, Kors JA, Heeringa J, et al. Resting heart rate and the risk of heart failure in healthy adults: the Rotterdam Study. *Circulation. Heart Failure*. 2013;6(3):403-10.

Commentary

41. Dehghan A., Mass spectrometry in epidemiological studies: What are the key considerations? *Eur J Epidemiol*. 2016
42. Dehghan, A., Genome-Wide Association Studies. *Methods in molecular biology* (Clifton, N.J.), 2018. 1793: p. 37-49.

Publications as first author

43. Dehghan, A., J. C. Bis, C. C. White, et al. (2016). "Genome-Wide Association Study for Incident Myocardial Infarction and Coronary Heart Disease in Prospective Cohort Studies: The CHARGE Consortium." *PLoS One* 11(3): e0144997.
44. Dehghan, A., M. J. Leening, A. M. Solouki, et al. (2014). "Comparison of prognosis in unrecognized versus recognized myocardial infarction in men versus women >55 years of age (from the Rotterdam Study)." *Am J Cardiol* 113(1): 1-6.
45. Kraja, A. T., D. I. Chasman, K. E. North, et al. (2014). "Pleiotropic genes for metabolic syndrome and inflammation." *Mol Genet Metab* 112(4): 317-338.
46. Sabater-Lleal, M., J. Huang, D. Chasman, et al. (2013). "Multiethnic meta-analysis of genome-wide association studies in >100 000 subjects identifies 23 fibrinogen-associated Loci but no strong evidence of a causal association between circulating fibrinogen and cardiovascular disease." *Circulation* 128(12): 1310-1324.
47. Grallert, H., J. Dupuis, J. C. Bis, et al. (2012). "Eight genetic loci associated with variation in lipoprotein-associated phospholipase A2 mass and activity and coronary heart disease: meta-analysis of genome-wide association studies from five community-based studies." *Eur Heart J* 33(2): 238-251.
48. Dehghan, A., J. Dupuis, M. Barbalic, et al. (2011). "Meta-analysis of genome-wide association studies in >80 000 subjects identifies multiple loci for C-reactive protein levels." *Circulation* 123(7): 731-738.
49. Smith, N. L., J. E. Huffman, D. P. Strachan, et al. (2011). "Genetic predictors of fibrin D-dimer levels in healthy adults." *Circulation* 123(17): 1864-1872.
50. Barbalic, M., J. Dupuis, A. Dehghan, et al. (2010). "Large-scale genomic studies reveal central role of ABO in sP-selectin and sICAM-1 levels." *Hum Mol Genet* 19(9): 1863-1872.
51. Smith, N. L., M. H. Chen, A. Dehghan, et al. (2010). "Novel associations of multiple genetic loci with plasma levels of factor VII, factor VIII, and von Willebrand factor: The CHARGE (Cohorts for Heart and Aging Research in Genome Epidemiology) Consortium." *Circulation* 121(12): 1382-1392.
52. Yang, Q., A. Kottgen, A. Dehghan, et al. (2010). "Multiple genetic loci influence serum urate levels and their relationship with gout and cardiovascular disease risk factors." *Circ Cardiovasc Genet* 3(6): 523-530.
53. Dehghan, A., Q. Yang, A. Peters, et al. (2009). "Association of novel genetic Loci with circulating fibrinogen levels: a genome-wide association study in 6 population-based cohorts." *Circ Cardiovasc Genet* 2(2): 125-133.
54. Kottgen, A., N. L. Glazer, A. Dehghan, et al. (2009). "Multiple loci associated with indices of renal function and chronic kidney disease." *Nat Genet* 41(6): 712-717.
55. Dehghan, A., A. Kottgen, Q. Yang, et al. (2008). "Association of three genetic loci with uric acid concentration and risk of gout: a genome-wide association study." *Lancet* 372(9654): 1953-1961.

56. Dehghan, A., M. van Hoek, E. J. Sijbrands, A. Hofman and J. C. Witteman (2008). "High serum uric acid as a novel risk factor for type 2 diabetes." *Diabetes Care* 31(2): 361-362.
57. Dehghan, A., M. van Hoek, E. J. Sijbrands, et al. (2008). "Lack of association of two common polymorphisms on 9p21 with risk of coronary heart disease and myocardial infarction; results from a prospective cohort study." *BMC Med* 6: 30.
58. Dehghan, A., I. Kardys, M. P. de Maat, et al. (2007). "Genetic variation, C-reactive protein levels, and incidence of diabetes." *Diabetes* 56(3): 872-878.
59. Dehghan, A., M. van Hoek, E. J. Sijbrands, et al. (2007). "Risk of type 2 diabetes attributable to C-reactive protein and other risk factors." *Diabetes Care* 30(10): 2695-2699.

Publications as co-author

60. Shah, S., et al., Genome-wide association and Mendelian randomisation analysis provide insights into the pathogenesis of heart failure. *Nature communications*, 2020. 11(1): p. 163-163.
61. Yu, B., et al., The Consortium of Metabolomics Studies (COMETS): Metabolomics in 47 Prospective Cohort Studies. *American journal of epidemiology*, 2019. 188(6): p. 991-1012.
62. Wuttke, M., et al., A catalog of genetic loci associated with kidney function from analyses of a million individuals. *Nature genetics*, 2019. 51(6): p. 957-972.
63. Ward-Caviness, C.K., et al., Mendelian randomization evaluation of causal effects of fibrinogen on incident coronary heart disease. *PloS one*, 2019. 14(5): p. e0216222-e0216222.
64. Tzoulaki, I., et al., Serum metabolic signatures of coronary and carotid atherosclerosis and subsequent cardiovascular disease. *European heart journal*, 2019. 40(34): p. 2883-2896.
65. Suzuki, H., et al., Associations of Regional Brain Structural Differences With Aging, Modifiable Risk Factors for Dementia, and Cognitive Performance. *JAMA network open*, 2019. 2(12): p. e1917257-e1917257.
66. Schmidt, A.F., et al., Phenome-wide association analysis of LDL-cholesterol lowering genetic variants in PCSK9. *BMC cardiovascular disorders*, 2019. 19(1): p. 240-240.
67. Sabater-Lleal, M., et al., Genome-Wide Association Transetnic Meta-Analyses Identifies Novel Associations Regulating Coagulation Factor VIII and von Willebrand Factor Plasma Levels. *Circulation*, 2019. 139(5): p. 620-635.
68. Murphy, A.M., et al., Potential Interplay between Dietary Saturated Fats and Genetic Variants of the NLRP3 Inflammasome to Modulate Insulin Resistance and Diabetes Risk: Insights from a Meta-Analysis of 19 005 Individuals. *Molecular nutrition & food research*, 2019. 63(22): p. e1900226-e1900226.
69. Ma, J., et al., A Peripheral Blood DNA Methylation Signature of Hepatic Fat Reveals a Potential Causal Pathway for Nonalcoholic Fatty Liver Disease. *Diabetes*, 2019. 68(5): p. 1073-1083.
70. Liu, J., et al., An integrative cross-omics analysis of DNA methylation sites of glucose and insulin homeostasis. *Nature communications*, 2019. 10(1): p. 2581-2581.
71. Kraja, A.T., et al., Associations of Mitochondrial and Nuclear Mitochondrial Variants and Genes with Seven Metabolic Traits. *American journal of human genetics*, 2019. 104(1): p. 112-138.
72. Gonzalez-Jaramillo, V., et al., Epigenetics and Inflammatory Markers: A Systematic Review of the Current Evidence. *International journal of inflammation*, 2019. 2019: p. 6273680-6273680.
73. Gill, D., et al., Use of Genetic Variants Related to Antihypertensive Drugs to Inform on Efficacy and Side Effects. *Circulation*, 2019. 140(4): p. 270-279.
74. Gill, D., et al., Associations of genetically determined iron status across the phenome: A mendelian randomization study. *PLoS medicine*, 2019. 16(6): p. e1002833-e1002833.
75. de Vries, P.S., et al., A genome-wide association study identifies new loci for factor VII and implicates factor VII in ischemic stroke etiology. *Blood*, 2019. 133(9): p. 967-977.

76. Davies, G., et al., Author Correction: Study of 300,486 individuals identifies 148 independent genetic loci influencing general cognitive function. *Nature communications*, 2019. 10(1): p. 2068-2068.
77. Brahimaj, A., et al., Novel metabolic indices and incident type 2 diabetes among women and men: the Rotterdam Study. *Diabetologia*, 2019. 62(9): p. 1581-1590.
78. Agha, G., et al., Blood Leukocyte DNA Methylation Predicts Risk of Future Myocardial Infarction and Coronary Heart Disease. *Circulation*, 2019. 140(8): p. 645-657.
79. Ward-Caviness, C.K., et al., DNA methylation age is associated with an altered hemostatic profile in a multiethnic meta-analysis. *Blood*, 2018. 132(17): p. 1842-1850.
80. Tylee, D.S., et al., Genetic correlations among psychiatric and immune-related phenotypes based on genome-wide association data. *American journal of medical genetics. Part B, Neuropsychiatric genetics : the official publication of the International Society of Psychiatric Genetics*, 2018. 177(7): p. 641-657.
81. Tin, A., et al., Large-scale whole-exome sequencing association studies identify rare functional variants influencing serum urate levels. *Nature communications*, 2018. 9(1): p. 4228-4228.
82. t Hart, L.M., et al., Blood Metabolomic Measures Associate With Present and Future Glycemic Control in Type 2 Diabetes. *The Journal of clinical endocrinology and metabolism*, 2018. 103(12): p. 4569-4579.
83. Sedaghat, S., et al., Kidney function, gait pattern and fall in the general population: a cohort study. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*, 2018. 33(12): p. 2165-2172.
84. Pazoki, R., et al., Genetic Predisposition to High Blood Pressure and Lifestyle Factors: Associations With Midlife Blood Pressure Levels and Cardiovascular Events. *Circulation*, 2018. 137(7): p. 653-661.
85. Mahajan, A., et al., Refining the accuracy of validated target identification through coding variant fine-mapping in type 2 diabetes. *Nature genetics*, 2018. 50(4): p. 559-571.
86. Mahajan, A., et al., Fine-mapping type 2 diabetes loci to single-variant resolution using high-density imputation and islet-specific epigenome maps. *Nature genetics*, 2018. 50(11): p. 1505-1513.
87. Iotchkova, V., et al., Author Correction: Discovery and refinement of genetic loci associated with cardiometabolic risk using dense imputation maps. *Nature genetics*, 2018. 50(12): p. 1752-1752.
88. Franceschini, N., et al., GWAS and colocalization analyses implicate carotid intima-media thickness and carotid plaque loci in cardiovascular outcomes. *Nature communications*, 2018. 9(1): p. 5141-5141.
89. Davies, G., et al., Study of 300,486 individuals identifies 148 independent genetic loci influencing general cognitive function. *Nature communications*, 2018. 9(1): p. 2098-2098.
90. Chaker, L., et al., Age-dependent association of thyroid function with brain morphology and microstructural organization: evidence from brain imaging. *Neurobiology of aging*, 2018. 61: p. 44-51.
91. Aslibekyan, S., et al., Association of Methylation Signals With Incident Coronary Heart Disease in an Epigenome-Wide Assessment of Circulating Tumor Necrosis Factor α . *JAMA cardiology*, 2018. 3(6): p. 463-472.
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Books

Abbas Dehghan. Novel risk factors for type II diabetes and coronary heart disease. PhD thesis, Erasmus University, Rotterdam, 2010

International activities

Long visits

June to July 2014	Imperial College London, London, UK
July to August 2013	Wellcome Trust Sanger Institute, Cambridge, UK
March to April 2009	Research visit, Framingham Heart Study, Boston MA, USA

Participation in international collaborative studies

2009 to Present	Member of the CHARGE Steering Committee
2011 to Present	Member of the COMBI BIO Consortium
2011 to Present	Member of the Cross Consortia Pleiotropy XC Pleiotropy Consortium
2009 to Present	Participant, Emerging Risk Factors Collaboration ERCF, University of Cambridge, Cambridge, UK
2009 to 2013	Principal investigator, Netherlands Consortium for Healthy Aging
2008 to Present	Member of the Meta-Analyses of Glucose and Insulin related traits Consortium MAGIC
2007 to Present	Member of the European Network for Genetic and Genomic Epidemiology ENGAGE Consortium
2007 to Present	Active member of several GWA consortia Diabetes, Inflammation, Cardiovascular disease, Renal disease, and Homeostasis

Teaching experience

Undergraduate Teaching

2002 - 2003	History taking and physical examination for midwifery students
2003	Research methodology workshop for public health experts, Bushehr University of Medical Sciences, Bushehr, Iran
2002	Research methodology workshop for UNFPA project, Bushehr University of Medical Sciences, Bushehr, Iran
1997-2002	Research methodology workshops for medical students, Kerman University of medical sciences, Kerman, Iran

Postgraduate Teaching

2019 - Now	Omics Technologies and their Application to Genomic Medicine, MSc Genomic Medicine, Imperial College London Role: Developed curricula, course materials, and practicums and gave lectures.
2019 - Now	Introduction to the statistical analysis of genome-wide association studies (short course), Imperial College London Role: Developed curricula, course materials, and practicums and gave lectures.
2016 - Now	Molecular and genetic epidemiology module, Imperial College London Role: Developed curricula, course materials, and practicums, gave lectures, made exams and marked them.
2019 - Now	Mendelian Randomisation (course organiser and lecturer, short course), Imperial College London Role: Design the course, selected and invite lecturers, course materials and practicums, gave lectures.

- 2008 - 2015 Study design (course coordinator and lecturer), The Netherlands Institute for Health Science (NIHES), Rotterdam, The Netherlands
- 2008 - 2015 Methodologic topics (course coordinator and lecturer), The Netherlands Institute for Health Science (NIHES), Rotterdam, The Netherlands
Role: Developed curricula, coordinated, administered and co-lectured full course.

Oral and Poster Presentations

- 2019 Invited speaker, MRC Centre seminar, Imperial College London, UK. "The role of Mendelian Randomization in Exposome research"
- 2019 Invited speaker, KIRCNET, Stockholm, Sweden. "Mendelian Randomization analysis: from associations to causality assessment"
- 2017 Invited speaker, MRC-IEU, Bristol. "Genetics of low-grade inflammation"
- 2016 Invited speaker, CHARGE investigator meeting, "UK biobank and the prospective on precision medicine"
- 2015 Poster presentation, EDEG, Paris, France. "Life time risks for type 2 diabetes mellitus the Rotterdam Study"
- 2013 Oral Presentation, European Society of Cardiology, Amsterdam, The Netherlands. "Do Genetic Risk Scores Predict Cardiovascular Disease?"
- 2012 Moderated Poster presentation, European Society of Cardiology, Munchen, Germany. "Prognosis of unrecognized myocardial infarction in elderly men and women; The Rotterdam Study"
- 2009 Oral presentation, 4th Investigator meeting of the Cohorts for Heart and Aging Research in Genomic Epidemiology CHARGE Consortium, Washington DC, USA. "Meta-analysis of C reactive protein levels"
- 2009 Oral presentation, 3rd Investigator meeting of the Cohorts for Heart and Aging Research in Genomic Epidemiology CHARGE Consortium, Rotterdam, The Netherlands. "Meta-analysis of fibrinogen levels"
- 2009 Poster presentation, American Heart Association AHA Joint Conference 49th Cardiovascular Disease Epidemiology and Prevention –and Nutrition, Physical Activity and Metabolism, Palm Harbour, Florida, US. "Meta-analysis of genome wide association study in 26,967 subjects of six population based studies identifies six loci for C reactive protein serum levels the CHARGE consortium"
- 2007 Oral presentation, 42nd Annual Meeting of the European Diabetes Epidemiology Group of EASD, Robinson College, Cambridge, UK. "Genetic variation, C reactive protein, and incidence of type 2 diabetes"
- 2006 Oral presentation, National Epidemiology Congress, Kerman, Iran. "Serum C reactive protein and risk of Diabetes"