1. General information

Personal details

Name	Mohsen Ghanbari
Male/female	Male
Date of birth	5 May 1978
Address for correspondence	Department of Epidemiology (Na-2720) Erasmus MC University Medical Center 3000 CA Rotterdam, The Netherlands
Telephone	+31 107044228, +31 651617482
E-mail	m.ghanbari@erasmusmc.nl
Professional web profiles	https://www.erasmusmc.nl/en/research/researchers/ghanbari-mohsen https://scholar.google.com/citations?user=pwJpmOQAAAAJ&hl=nl https://www.linkedin.com/in/mohsen-ghanbari-7325bb5a/

Academic education and degrees
What, When and Where

- PhD in Genetic & Molecular Epidemiology (2012-2017), Erasmus MC, Rotterdam, the Netherlands
- MSc Public Health (2014-2015), Netherlands Institute for Health Sciences (NIHES), the Netherlands
- Doctor of Medicine (MD) (1997-2004), Mashhad University of Medical Sciences, Mashhad, Iran

Doctorate	
University	Erasmus University Rotterdam, the Netherlands
Date	5 July 2017
Supervisor(s)	Prof. dr. Oscar H. Franco
Title of thesis	The role of microRNAs in age-related disorders: from population-based studies to experimental validation

Work experience and appointments (dates, full or part-time (fte) and permanent or fixed-term position)

Nov 2022 - present	Associate Professor (1fte, permanent), Dept. of Epidemiology, Erasmus MC, the Netherlands
June 2019 - Oct 2022	Assistant Professor (1fte, permanent), Dept. of Epidemiology, Erasmus MC, the Netherlands
July 2017- May 2019	Postdoc researcher and group leader (1fte, fixed-term), Dept. of Epidemiology, Erasmus MC, the Netherlands
Dec 2012 - June 2017	PhD candidate (1fte, fixed-term), Dept. of Epidemiology, Erasmus MC, the Netherlands
Sep 2011 - Nov 2012	Researcher (1fte, fixed-term), Dept. of Hematology, Erasmus MC, the Netherlands
May 2008 - May 2010	CEO of Health and Medical Services company “Shamim Salamat Parsian” (part-time), Mashhad, Iran
Nov 2007 - Aug 2011	General practitioner (part-time), Emergency ward of Qaem Hospital, Mashhad University of Medical Sciences, Iran
June 2005 - Aug 2011	Academic staff and manager (1fte, fixed-term), Mashhad University of Medical Sciences, Mashhad, Iran

2. Three scientific achievements that you are most proud of (max 120 words)

- I developed a method to ascertain the role of microRNAs, tiny non-coding RNA molecules with a big impact in biology, in various diseases via integrating population-based omics data and functional experimental studies. My research using this method has resulted in the identification of >50 novel microRNAs involved in the molecular pathways underlying age-related diseases (e.g., Alzheimer’s disease, diabetes, and fatty liver). The results are published in well-respected journals in the field and disseminated at different international conferences as invited speaker. The method has been used in many studies so far and our papers have received numerous citations. A comprehensive atlas of genetic regulation and disease association of microRNAs has been published recently that summerize the results of my research in this field in the past 10 years.

- I established the Molecular & Systems Epidemiology research line for the fiest time to unravel underlying mechanisms and novel biomarkers for complex diseases through integrating large-scale omics data from epidemiological studies, applying advanced statistical methods, and conducting state-of-the-art cellular model validation studies. As example, my research on Alzheimer’s disease has demonstrated the role of non-coding transcriptome in metabolic pathways underlying this complex disease and identified several plasma biomarkers that help early detection and monitoring the disease course.

- I conducted large-scale multi-center epigenome-wide association studies on coffee and tea consumption in the CHARGE international consortium. We found several DNA methylation-sites (CpGs) associated with coffee intake that were causally involved in the pathways underlying cardio-metabolic diseases. Our results gained much attention from public media and professionals in the molecular epidemiology field.

3. Research

Brief summary of research over the last five years (max. 200 words)

In the last five years, I was working at the department of Epidemiology and my research has been focused on (epi)genetic determinants and novel biomarkers of age-related diseases. During PhD, I conducted a multi-faceted research by integrating population-based genetic data and functional laboratory studies to investigate the role of non-coding RNAs in cardiovascular and neurodegenerative diseases. During postdoc, I expanded my knowledge of epigenetics and performed several multi-centre projects about the impact of lifestyle factors on DNA methylation. In mid-2019, I was promoted to Principlae Investigaor and developed an interdisciplinary niche "Molecular & Systems Epidemiology" at the department of Epidemiology to continue my cutting-edge research and apply advanced analytical methods to decipher molecular mechanisms underlying age-related diseases (Alzheimer's, cardiovascular and metabolic idseases). The multidisciplinary nature of my work has allowed me to make a bridge between department of Epidemiology and several laboratories at Erasmus MC, establish a broad international network in my field, and able me to be involved in various (inter)national omics consortia. Currently, I am leading a research group of 15 people and intend to expand my research on genetic predispositions of complex diseases, precision medicine and public health using multi-omics data integration.

PhD thesis supervised

Co-promotor of 6 PhD thesis (finished):

1- Paula Bautista-Niño, Thesis: DNA Damage-related vascular dysfunction: Pathways and interventions. PhD obtained on 12 Dec. 2017
2- Michelle Mens, Thesis: Think Big, Epidemiological research on tiny molecules; microRNAs. PhD obtained on Oct. 13, 2021
3- Silvana Maas, Thesis: Epigenetic regulation, lifestyle inference, and health. PhD obtained on Feb 9, 2022
4- Xiaofang Zhang, Thesis: The metabolic disorders; epigenetic regulation and sex-differences. PhD Obtained on Sep 13, 2022
5- Irma Karabegovic, Epigenetic and metabolomics of lifestyle factors, PhD period: January 2021 – Dec 2022
6- Yasir Abozaid, Metabolomics and epigenetics of fatty liver disease, PhD period: July 2019 – Dec 2022

Co-promotor of 7 PhD thesis (still ongoing):

7- Amber Yaqub, MD MSc (The genetics and epidemiology of cognition and dementia), PhD period: July 2019 – June 2023
8- Ziyi Xiong, MSc (Novel methods for improving genome-wide association studies), PhD period: July 2020 – June 2023
9- Ibrahim Ayada, MD (The genetics of liver function and diseases), PhD period: Sep. 2020 – August 2023 (??)
10- Yu Shuai, MSc (The genetics and epigenetics of cancer), PhD period: May 2021 – April 2024
11- Mina Shahisavandi, PharmD MSc (Pharmaco-metabolomics of diseases), PhD period: August 2022 – December 2025
12- Sam Leonard, MSc (The genetics of immune response and diseases), PhD period: October 2022 – April 2025
13- Midas Kuilman, MSc (Non-coding RNAs, Metabolomics and Alzheimer's disease), PhD period: Feb 2023 – July 2026

Grant allocation

Period (from–to)	Funding source and project code	Own share of grant (€)	Total grant (€)	Project title	Role of PI*
2023-2027	ZonMW MODEM grant	?	5M	Molecular mechisnms of Alzheimer's disease	Co-investigator
2022-2023	Alzheimer Nederland	100K	100K	Role of microRNAs in metabolic pathways underlying Alzheimer's disease	Principal investigator
2022-2025	Erasmus MC fellowship	400K	400K	Genetic regulation & disease association of microRNAs (ADMIRE project)	Principal investigator
2021-2024	China Scholarship (Zunyi Huibiao Co)	4-year funded PhD	4-year funded PhD	(Epi)genetic regulation of cancer (for PhD salary Yu Shuai)	Principal investigator
2020-2024	SOPHIA grant	~50K	~10M	A multi-centric H2020 grant for Obesity (Running the analysis in Rotterdam Study)	Co-investigator
2020-2022	NIH grant	~60K	~500K	Gene-life style interaction in the CHARGE (Running the analysis in Rotterdam Study)	Co-investigator
2019-2023	China Scholarship Council (CSC)	4-year funded PhD	4-year funded PhD	Novel methods for GWA studies (for PhD salary Ziyi Xiong)	Co-investigator
2017-2021	China Scholarship Council (CSC)	4-year funded PhD	4-year funded PhD	Epigenetic regulation, metabolic disorders (for PhD salary Xiaofang Zhang)	Principal investigator
2018	European fellowship for study of diabetes	8,000	8,000	Epigenetic regulation of Type 2 diabetes (My research visit Imperial College, UK)	Principal investigator
2018	Alzheimer Nederland Fellowship	2,000	2,000	Casual Inference in Alzheimer's disease (My research visit, Imperial College, UK)	Principal investigator
2017-2019	Janssen Prevention Center Leiden	200k	~1.2M	Novel biomarkers of Dementia (My postdoc salary for 2y and biomarkers)	Co-investigator
2016	European Society of Human Genetics	1,250	1,250	Fellowship (Advanced courses and workshops of Human Genetics in Italy)	Principal investigator

** examples': principal investigator, project leader, project manager, coordinator, work package leader, etc.*

Active main (inter)national collaborations (collaborator, topic, institute)

2022- Memebr of Sandpit Multidisciplinaire Consortia Onderzoeksprogramma Dementie (MODEM)
2022- Active collaborator of Metabolomics for clinical advances in the Medical Delta consortium (MetaboDelta)
2015- Active collaborator in the International Consortium for Heart and Aging Research in Genomic Epidemiology (CHARGE)
2018- Active collaborator in the BBMRI-NL consortium and Biobank-based integrative omics study (BIOS) Consortium
2020- Member of the steering committee and active collaborator in the Consortium of Metabolomics Studies (COMETS)
2020- Active collaborator in the national X-Omics consortium

International research visits > 1 month (institute, dates)

- Department of Biostatistics and Epidemiology, Imperial College London, UK. Topic: Mendelian Randomization, July-Dec. 2018

❖ Due to the COVID-19 pandemic, my research visit of the Department of Epidemiology (Prof. Albert Hofman's group), Harvard School of Public Health, and the Framingham Heart Study (Prof. Daniel Levy's group) in Boston, USA were changed to remote collaborations. I am planning to visit these groups in future (2022-2023) after the COVID-19 pandemic.

4. Teaching

Brief summary of teaching over the last five years (max. 200 words)

In the last five years, I have been a lecturer in several courses provided by the Netherlands Institute for Health Sciences (NIHES) for MSc and PhD students. I was a teaching assistant in the course "Principles of Epidemiology" in Erasmus Summer Program 2016. Between 2017-2019, I was teaching in the course "Cardiovascular Epidemiology" as part of the Epidemiology Master program of NIHES. I was a also lecturer in the course "Genomics in Molecular Medicine" which extends to issue on omics data in epidemiological studies between 2017-2019. I was a lecture in the course "Molecular Epidemiology" provided by Imperial College London in 2020 and 2021. From the last year, I am coordinating the course "Principles of Genetic Epidemiology" provided by NIHES. Moreover, I am (Co-)coordinating two new courses provided by NIHES in 2022 that cover the theoretical and practical concepts of population-based omics data. In addition to teaching in courses, I have been a senior scientist in many conferences and seminars within the department of Epidemiology and (inter)national omics consortia. Finally, I have supervised research projects of dozens of MSc and PhD students through regular bi-weekly meetings, in which I have taught them the concepts and common methods of molecular and genetic epidemiology.

Managing/coordinating courses/programmes (course, target group, ECTS, dates)

- Co-coordinating the course "Introduction to the Analysis of Microbiome and Metabolomics Data", Netherlands Institute for Health Sciences (NIHES), Erasmus MC, ~30 MSc and PhD students, 0.7 ECTS, 2-5 May (Afternoons) 2022.
- Co-coordinating the course "Introduction to the Analysis of Transcriptomics and Epigenomics Data", Netherlands Institute for Health Sciences (NIHES), Erasmus MC, ~30 MSc and PhD students, 0.7 ECTS, 2-5 May (Mornings) 2022.
- Coordinating the course "Principles of Genetic Epidemiology", Netherlands Institute for Health Sciences (NIHES), Erasmus Summer Program [ESP43], ~160 MSc and PhD students, 0.7 ECTS, 9 -14 August 2021. Same course is planned for 2022.

Lecturing (course, target group, ECTS, dates). An overview of lectures or an IRIS printout may optionally be included in Annex 3.

- Principles of Molecular Epidemiology, Imperial College London, for ~50 MSc and PhD students, Dec 2020
- Advanced course in Genome-wide Association Studies (GE03), Netherlands Institute for Health Sciences (NIHES), Fall 2017
- Cardiovascular Epidemiology Course (EP20), Netherlands Institute for Health Sciences (NIHES), 2017 - 2019
- Genomics in Molecular Medicine (ESP57), Netherlands Institute for Health Sciences (NIHES), 2017 - 2019
- Teaching assistant, Principles of Epidemiology (ESP1), Netherlands Institute for Health Sciences (NIHES), Summer 2017

Basic teaching qualification (BKO)[1]

- I have obtained the University Teaching Qualification (BKO) in September 2022 for educational competencies in the following fields: Vision, Design, Delivery, Assessment, Evaluate and Reflect in Education.

Evaluation scores (received from students, coordinators, and/or program directors) on teaching and implemented improvements[2]

- 4-4.2 / 5 (Very good/Excellent).

[1] (Compulsory) basic qualification for didactic competencies for all lecturers at Erasmus MC ('basis kwalificatie onderwijs'). For more information contact bko@erasmusmc.nl, https://intranet.erasmusmc.nl/onderwijsbeleidenadvies/bko/.

[2] : Only required if you apply for UHD or professorship with an educational profile

5. Training

Courses (max. 200 words)

Selected training and courses:

2022	University Teaching Qualification (BKO certificate), Risbo and EUR, Rotterdam, the Netherlands
2021	BROK certificate (Regulation and Organization for clinical research), NFU, the Netherlands (ongoing)
2020	NIHES Teaching Platform course, NIHES, Erasmus MC, Rotterdam
2019	Mendelian Randomization studies, 1 day course, NIHES, Erasmus MC, Rotterdam
2017	Scientific Integrity, 1 day course, Erasmus MC, Rotterdam
2017	Ensembl workshop, MolMed, Erasmus MC, Rotterdam
2015	Molecular Diagnostic, MolMed, Erasmus MC, Rotterdam
2014	Introduction to R Software, NIHES, Erasmus MC, Rotterdam
2014	Principals of Research in Medicine, NIHES, Erasmus MC, Rotterdam
2014	Introduction to Writing Methods, NIHES, Erasmus MC, Rotterdam
2014	Ingenuity Pathway Analysis workshop, Nijmegen, the Netherlands
2013	Study Design, 3 weeks course, NIHES, Erasmus MC, Rotterdam
2013	Linux for Scientists, NIHES, Erasmus MC, Rotterdam
2013	Genetic-Epidemiology Research Methods, NIHES, Erasmus MC, Rotterdam
2012	Research Management for PhD-students, MolMed, Erasmus MC, Rotterdam
2012	Gene Expression Analyzing by R and Web tools, MolMed, Erasmus MC, Rotterdam
2012	Laboratory Animal Science (Article 9), 3 weeks course, MolMed, Erasmus MC, Rotterdam
2012	Basic Introduction Course on SPSS, MolMed, Erasmus MC, Rotterdam
2011	Biomedical Research Techniques, MolMed, Erasmus MC, Rotterdam
2010	Genetic Counselling for Medical Doctors, 2 month course, State Welfare Organization of Iran

6. Patient Care

Brief summary of patient care responsibilities over the last five years (max. 200 words)

N.A

7. Clinical Training

My clinical training as a medical student and then as a medical doctor (MD) has been in Mashhad University of Medical Sciences, Iran. This includes two years internship in various clinical departments as medical student between 2002 and 2004. After that, I worked (part-time) for 4 years as a general practitioner in the Qaem hospital of Mashhad University of Medical Sciences between 2007 and 2011, where I passed several clinical courses and clinical training. I also did clinical training for MDs to become Genetic Counsellor between 2010 and 2011 in Iran.

8. Management

Brief summary of management over the last five years (max. 200 words)

Between July 2017 and June 2019, I was a postdoc and group leader at the department of Epidemiology leading a group of 4 PhD and MSc students. In addition, I was involved in scientific planning and generating of omics data in the Rotterdam Study. After two years of intensive sharpening of my scientific profile and managerial skills, I was promoted to Assistant-Professor and formally became the Principal Investigator (PI) of Molecular & Systems Epidemiology group, a new interdisciplinary niche developed by me at Epidemiology department in 2019. Since then, in my role as the PI, I am responsible for the management and integrity of the design, conduct, and reporting of the research projects and for managing, monitoring, and ensuring the integrity of any collaborative relationships in this group. Besides, I am responsible for the direction and oversight of compliance, financial, personnel and other related aspects of the group and for coordination with the department and personnel & salary administration to assure our work is conducted in accordance with the university regulations and policies. Moreover, I am part of the management teams of Epidemiology department (EPI MT) and the Rotterdam Study cohort (ERGO MT) thereby involved in the overall management and directions of the department. I am also co-managing the Laboratorium Epidemiologie (ERGO lab).

Size (fte) and composition of own research group

Scientific personnel	11 (Currently 2 Postdoc researchers, 7 PhD candidates, and 2 MSc students)
Other personnel	5 (secretariat of the group and 4 lab personnel for collecting and storage of the cohort's biological samples)

Supervision

Number of Master students	6 (Currently, 2 MSc students. In past, 4 MSc students finished their research projects under my supervision)
Number of PhD candidates	13 (Currently, 7 PhD candidates. In past, 6 PhD candidates finished their PhD theses under my supervision)
Number of Postdocs	6 (Currently, 2 Postdocs. In past, 4 postdoc were working in the group who have moved somewhere else)

9. Institutional responsibilities

- PI of the Molecular and Systems Epidemiology group at the department of Epidemiology, Erasmus MC
- (Co)coordinating of the omics data in the Rotterdam Study (~18000 participants), Epidemiology Dept., Erasmus MC, June 2019-present
- Coordinating the Erasmus Rucphen Family study (~3,500 participants), Epidemiology Dept., Erasmus MC, June 2019-present
- Co-managing of the Laboratorium Epidemiologie (ERGO lab), Epidemiology Dept., Erasmus MC, June 2019-present
- Several managerial and administrative responsivities during work in Mashhad University of Medical Sciences, Iran, between 2006-2011

10. Professional societies

Commissions of trust

Editorial board

- Part of the Editorial Board of Applied Genetic Epidemiology (Review Editor) in Frontiers in Genetic started Dec 2021
- Guest Editor in *Genes* journal for the Special Issue "Genetics of Cardiovascular Metabolism" started April 2021

Review board

- Reviewer of many scientific journals such as *Psychiatry Research, Frontiers in Endocrinology, Human Molecular Genetics*, *Nature Scientific Reports, Human Mutation, Epigenomics, European Journal of Epidemiology, European Journal of Clinical Investigation, International Journal of Neuroscience, Genes, Bioscience Report.*

Organisation of scientific meetings

- *Organization of the International Congress on Genetics and Genomics, 2022-2023, Dubai, UAE*
- *Organization of the annual Health Science Research Day, Erasmus MC, 2020 (postponed due to COVID19 pandemic)*

Memberships

- *2018-present, Member, International Genetic Epidemiology Society*
- *2015-present, Member, European Society of Human Genetics*
- *2014-present, Member, American Society of Human Genetics*
- *2020-present, Member, Erasmus Forensic BIomedicine*
- *2006-present, Member, Medical Council of the Islamic Republic of Iran*

11. Societal quality of own research[4] (max. three examples)

In the last five years, part of my research has been focused on the role of lifestyle factors in altering risk of age-related diseases by modifying epigenetic regulation of gene expression. I conducted several studies to show how lifestyle factors such as diet, smoking or alcohol consumption influence epigenetic mechanisms like DNA methylation and microRNA expression, which subsequently alter risk of diseases. An example of my own research with societal impact is a large-scale multi-center research that was conducted to examine the effect of coffee and tea consumption on DNA methylation levels of >450,000 CpGs across the genome in over 16,000 participants from 15 population-based studies around the world. This research showed that coffee consumption is associated with differential DNA methylation levels at multiple CpG sites. The study revealed that the coffee-associated CpGs are linked to expression levels of certain genes involved in metabolic diseases, implying that coffee-associated epigenetic alteration could be an underlying mechanism explaining the impact of coffee on liver and cardiovscaular health. The findings of this project were published in Nature Communications and got a broad media attention and coverage (e.g., Forbes magazine, Food&Wine, Health, NewScientist).

Another example of my research with societal impact is my work on identifying new blood biomarkers for early diagnosis and monitoring progression of Alzheimer's disease (AD). This research was conducted to study the association of plasma levels of four proteins (total-tau, NfL, amyloid-β40 and 42) with incident AD in >5,000 participants of the Rotterdam Study, and the rates of change over time of these proteins during ~14 years follow-up in participants who developed AD compare with their matched healthy controls. The results of this study that demonstrate plasma NfL and amyloid-β42 levels can be used to assess the risk of developing AD in a non-demented population almost 10 years before AD diagnosis and to monitor disease progression in AD patients, were published in Brain, a top journal in the field of Neurology.

12. Honours and awards

- 2020 Outstanding Contribution Tiger, The CHARGE Consortium
- 2018 Early Career Award, The CHARGE Consortium
- 2018 European Foundation for the Study of Diabetes – Albert Renold Fellowship
- 2015 Selected as one of the talented Iranian students in Europe, The Scientific Representative of IRAN in the Schengen Area
- 1998 Selected among the top students in the national University Entrance Exam, Iranian Ministry of Health and Medical Education

13. Side positions

N.A

14. Annex 1 Publications

H-index Web of Science[3]

H-index (all publications)	30 (120 published articles); 37 in Google Scholar
Average citations per item[4]	22
Person-years of research[5]	5 person-years of research since doctorate (July 2017) July 2017-May 2019: 0.8 fte research, 0.2 teaching and management June 2019-current: 0.6 fte research, 0.4 teaching and management
Main ISI subject category[6]	GENETICS & HEREDITY (median impact factor 2.5)

Publication list[7]

- # International full articles (any position)	120
- # International full articles (first position)	10
- # International full articles (second from the first/last)	10
- # International full articles (last position)	21
- Ranking of journals	>80% of articles in Q1 60/121 (55%) in the top 10%

[3] H-index: a scholar with an index of h has published h papers each of which has been cited by others at least h times. Thus, the h-index reflects both the number of publications and the number of citations per publication. Calculate the index on http://www.erasmusmc.nl/medbib/ quick link 'Web-of-Knowledge': select your publications and click on 'create citation report'. Specify the number of first and last authorships of publications within the h-index. For more information: https://www.erasmusmc.nl/medbib/Publiceren/

[4] Calculate the score on https://www.erasmusmc.nl/medbib/ quick link Web-of-Knowledge: select your publications and click on 'create citation report'.

[5] Person-years of research is the time you have been employed to do research since your doctorate minus the time you needed for care responsibilities, including parental, maternity and care leave. The person-years of research do not include the time you were appointed to perform management tasks, patient care or teaching.

[6] http://www.erasmusmc.nl/medbib/

[7] Include only manuscripts which have been accepted for publication. Indicate per publication: the ranking of the journal in the research field (quartile and top10%). If a journal fits into more than one research field, indicate only the highest quartile. Mark your own authorship per publication a. For more information: https://www.erasmusmc.nl/medbib/Publiceren/

Five most influential publications, including number of citations	1. de Wolf F*, **Ghanbari M***, Licher S, McRae-McKee K, Gras L, Weverling G, Wermeling P, Sedaghat S, Ikram M.K, Waziry R, Koudstaal W, Klap J, Kostense S, Hofman A, Anderson R, Goudsmit J, Ikram M.A (2020). *Plasma total-tau, NfL and amyloid-β levels measured over time and risk of dementia; a population-based cohort study.* Brain. 1;143(4):1220-1232.(IF=15.25, Q1 & top 10% in Clinical Neurology). Citations: in Web of Science >100, in Google scholar >130. *Shared first author. 2. Mens MMJ, **Ghanbari M**. *Cell Cycle Regulation of Stem Cells by MicroRNAs* (2018). *Stem Cell Review,* 14(3):309-32. (IF=6.692, Q1 in Medicine, Research &, Experimental). Citations: in Web of Science 92, in Google scholar 146. 3. Karabegović I, Portilla-Fernandez E, Li Y, Ma J, Maas SCE, Sun D, Hu EA, Kühnel B, Zhang Y, Ambatipudi S, Fiorito G, Huang J, Castillo-Fernandez JE, Wiggins KL, de Klein N, Grioni S, Swenson BR, Polidoro S, Treur JL, Cuenin C, Tsai PC, Costeira R, Chajes V, Braun K, Verweij N, Kretschmer A, Franke L, van Meurs JBJ, Uitterlinden AG, de Knegt RJ, Ikram MA, Dehghan A, Peters A, Schöttker B, Gharib SA, Sotoodehnia N, Bell JT, Elliott P, Vineis P, Relton C, Herceg Z, Brenner H, Waldenberger M, Rebholz CM, Voortman T, Pan Q, Fornage M, Levy D, Kayser M, **Ghanbari M** (2021). *Epigenome-wide association meta-analysis of DNA methylation with coffee and tea consumption.* Nature Communications. 14;12(1):2830. (IF=17.694, Q1 & top 10% in Multidisciplinary Sciences). Citations: in Web of Science 7, in Google scholar 13. 4. **Ghanbari M**, Franco OH, de Looper HW, Hofman A, Erkeland SJ, Dehghan A (2015). *Genetic variations in miRNA binding sites affect miRNA-mediated regulation of several genes associated with cardiometabolic phenotypes. Circulation Cardiovascular Genetics*, 8(3):473-86. (IF=4.534, Q2 in Genetics & Heredity). Citations: in Web of Science 49, in Google scholar 56. 5. **Ghanbari M**, de Vries PS, de Looper H, Peters MJ, Schurmann C, Yaghootkar H, Dörr M, Frayling TM, Uitterlinden AG, Hofman A, van Meurs JB, Erkeland SJ, Franco OH, Dehghan A (2014). *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*, 35(12):1524-31. (IF=4.7, Q1 in Genetics & Heredity). Citations: in Web of Science 35, in Google scholar 49.
National (refereed) full articles	-
Books	2
Contribution to books (e.g. chapters or editorships)	1
Other (proceedings, conference reports, abstracts, etc.)	>20 conference abstracts (including >10 first author)

15. Annex 2 Invited plenary lectures (meeting, dates)

1- International Congress on Genetics and Genomics, 9-11 October 2023 Dubai, UAE
2- The CHARGE webinar, April 2021, Virtual meeting with >100 international attendees
3- The CHARGE Meeting, April 2018, Rotterdam meeting with >100 international attendees
4- International Symposium on Biomedicine and Biomaterial, >150 attendees, August 28-30, 2019 Lanzhou, China
5- Third International and Fifteenth Iranian Genetics Congress, >300 attendees, May 13-15, 2018 Tehran, IRAN

16. Annex 3 Overview of educational lectures or an IRIS out-print, if available (optional, may also be listed in section 4 and provided in Dutch.) N.A

17. Annex 4 List of publications

List of 120 international full articles published online, including impact factor (IF) and ranking (Q1) in the field in year 2022:

1. Kanoni et al. *Implicating genes, pleiotropy, and sexual dimorphism at blood lipid loci through multi-ancestry meta-analysis.* Genome Biol 2022 Dec 27;23(1):268.

2. Xiong Z, Gao X, Chen Y, Feng Z, Pan S, Lu H, Uitterlinden AG, Nijsten T, Ikram A, Rivadeneira F, **Ghanbari M**, Wang Y, Kayser M, Liu F.*Combining genome-wide association studies highlight novel loci involved in human facial variation.* Nat Commun. 2022 Dec 20;13(1):7832.

3. Ayada I, van Kleef LA, Zhang H, Liu K, Li P, Abozaid YJ, Lavrijsen M, Janssen HLA, van der Laan LJW, **Ghanbari M**, Peppelenbosch MP, Zheng MH, de Knegt RJ, Pan Q. *Dissecting the multifaceted impact of statin use on fatty liver disease: a multidimensional study.* EBioMedicine 2023 Jan;87:104392.

4. Zhu F, Wolters FJ, Yaqub A, Leening MJG, **Ghanbari M**, Boersma E, Ikram MA, Kavousi M. *Plasma Amyloid-β in Relation to Cardiac Function and Risk of Heart Failure in General Population.* JACC Heart Fail 2023 Jan;11(1):93-102.

5. Dehghan A, Pinto RC, Karaman I, Huang J, Durainayagam BR, **Ghanbari M**, Nazeer A, Zhong Q, Liggi S, Whiley L, Mustafa R, Kivipelto M, Solomon A, Ngandu T, Kanekiyo T, Aikawa T, Radulescu CI, Barnes SJ, Graça G, Chekmeneva E, Camuzeaux S, Lewis MR, Kaluarachchi MR, Ikram MA, Holmes E, Tzoulaki I, Matthews PM, Griffin JL, Elliott P. *Metabolome-wide association study on ABCA7 indicates a role of ceramide metabolism in Alzheimer's disease. Proc* Natl Acad Sci USA 2022 Oct 25;119(43):e2206083119.

6. Abozaid YJ, Zhang X, Mens MMJ, Ahmadizar F, Limpens M, Ikram MA, Rivadeneira F, Voortman T, Kavousi M, **Ghanbari M**. *Plasma circulating microRNAs associated with obesity, body fat distribution, and fat mass: the Rotterdam Study.* Int J Obes (Lond). 2022 Dec;46(12):2137-2144.

7. Ralf A, Montiel González D, Zandstra D, van Wersch B, Kousouri N, de Knijff P, Adnan A, Claerhout S, **Ghanbari M**, Larmuseau MHD, Kayser M. *Large-scale pedigree analysis highlights rapidly mutating Y-chromosomal short tandem repeats for differentiating patrilineal relatives and predicting their degrees of consanguinity.* Hum Gene 2023 Jan;142(1):145-160.

8. Mishra et al. *Stroke genetics informs drug discovery and risk prediction across ancestries.* Nature. 2022 Nov;611(7934):115-123.

9. Buergel T, Steinfeldt J, Ruyoga G, Pietzner M, Bizzarri D, Vojinovic D, Upmeier Zu Belzen J, Loock L, Kittner P, Christmann L, Hollmann N, Strangalies H, Braunger JM, Wild B, Chiesa ST, Spranger J, Klostermann F, van den Akker EB, Trompet S, Mooijaart SP, Sattar N, Jukema JW, Lavrijssen B, Kavousi M, **Ghanbari M**, Ikram MA, Slagboom E, Kivimaki M, Langenberg C, Deanfield J, Eils R, Landmesser U. *Metabolomic profiles predict individual multidisease outcomes.Nat Med. 2022 Sep 22. doi: 10.1038/s41591-022-01980-3.*

10. Karabegović I, Abozaid Y, Maas SCE, Labrecque J, Bos D, De Knegt RJ, Ikram MA, Voortman T, **Ghanbari M**. *Plasma microRNA signature of alcohol consumption: the Rotterdam Study.* J Nutr. 2022 Sep 20. doi: 10.1093/jn/nxac216.

11. Yaqub A, Mens M, Klap J, Weverling G, Klatser P, Brakenhoff J, Roshchupkin G, Ikram M.K. **Ghanbari M***, Ikram A*. *Genome-wide profiling of circulatory microRNAs associated with cognition and dementia.* Alzheimer's & Dementia. 2022 Aug 10. doi: 10.1002/alz.12752. (IF=17.13, rank 3/204 (Q1, top 10%) in Clinical Neurology) *Shared last author.

12. Waziry R, Hofman A, **Ghanbari M**, Tiemeier H, Ikram MA, Viswanathan A, Klap J, Ikram MK, Goudsmit J. *Biological aging for risk prediction of first-ever intracerebral hemorrhage and cerebral infarction in advanced age*. J Stroke Cerebrovasc Dis. 2022 Jun 21;31(8):106568. (IF=2.7, rank 50/90 (Q3) in Peripheral Vascular disease)

13. Zhang X, Mou Y, Aribas E, Amiri M, Nano J, Bramer W, Kavousi M, de Knegt R, Asllanaj E, **Ghanbari M**. *Associations of Sex Steroids and Sex Hormone-Binding Globulin with Non-Alcoholic Fatty Liver Disease: A Population-Based Study and Meta-Analysis*. Genes 2022, 13(6), 966; doi.org/10.3390/genes13060966. (IF=4.14, rank 66/176 (Q2) in Genetics and Heredity)

14. Gorski M, Rasheed H, Teumer A, Thomas LF, Graham SE, Sveinbjornsson G, Winkler TW, Günther F, Stark KJ, Chai JF, Tayo BO, Wuttke M, Li Y, Tin A, Ahluwalia TS, Ärnlöv J, Åsvold BO, Bakker SJL, Banas B, Bansal N, Biggs ML, Biino G, Böhnke M, Boerwinkle E, Bottinger EP, Brenner H, Brumpton B, Carroll RJ, Chaker L, Chalmers J, Chee ML, Chee ML, Cheng CY, Chu AY, Ciullo M, Cocca M, Cook JP, Coresh J, Cusi D, de Borst MH, Degenhardt F, Eckardt KU, Endlich K, Evans MK, Feitosa MF, Franke A, Freitag-Wolf S, Fuchsberger C, Gampawar P, Gansevoort RT, **Ghanbari M**, Ghasemi S, Giedraitis V, Gieger C, Gudbjartsson DF, Hallan S, Hamet P, Hishida A, Ho K, Hofer E, Holleczek B, Holm H, Hoppmann A, Horn K, Hutri-Kähönen N, Hveem K, Hwang SJ, Ikram MA, Josyula NS, Jung B, Kähönen M, Karabegović I, Khor CC, Koenig W,

Kramer H, Krämer BK, Kühnel B, Kuusisto J, Laakso M, Lange LA, Lehtimäki T, Li M, Lieb W; Lifelines cohort study, Lind L, Lindgren CM, Loos RJF, Lukas MA, Lyytikäinen LP, Mahajan A, Matias-Garcia PR, Meisinger C, Meitinger T, Melander O, Milaneschi Y, Mishra PP, Mononen N, Morris AP, Mychaleckyj JC, Nadkarni GN, Naito M, Nakatochi M, Nalls MA, Nauck M, Nikus K, Ning B, Nolte IM, Nutile T, O'Donoghue ML, O'Connell J, Olafsson I, Orho-Melander M, Parsa A, Pendergrass SA, Penninx BWJH, Pirastu M, Preuss MH, Psaty BM, Raffield LM, Raitakari OT, Rheinberger M, Rice KM, Rizzi F, Rosenkranz AR, Rossing P, Rotter JI, Ruggiero D, Ryan KA, Sabanayagam C, Salvi E, Schmidt H, Schmidt R, Scholz M, Schöttker B, Schulz CA, Sedaghat S, Shaffer CM, Sieber KB, Sim X, Sims M, Snieder H, Stanzick KJ, Thorsteinsdottir U, Stocker H, Strauch K, Stringham HM, Sulem P, Szymczak S, Taylor KD, Thio CHL, Tremblay J, Vaccargiu S, van der Harst P, van der Most PJ, Verweij N, Völker U, Wakai K, Waldenberger M, Wallentin L, Wallner S, Wang J, Waterworth DM, White HD, Willer CJ, Wong TY, Woodward M, Yang Q, Yerges-Armstrong LM, Zimmermann M, Zonderman AB, Bergler T, Stefansson K, Böger CA, Pattaro C, Köttgen A, Kronenberg F, Heid IM. *Genetic loci and prioritization of genes for kidney function decline derived from a meta-analysis of 62 longitudinal genome-wide association studies.* Kidney Int. 2022 Jun 15:S0085-2538(22)00454-9. (IF=18.998, rank 3/90 (Q1, top 10%) in Urology & Nephrology)

15. Winkler TW, Rasheed H, Teumer A, Gorski M, Rowan BX, Stanzick KJ, Thomas LF, Tin A, Hoppmann A, Chu AY, Tayo B, Thio CHL, Cusi D, Chai JF, Sieber KB, Horn K, Li M, Scholz M, Cocca M, Wuttke M, van der Most PJ, Yang Q, Ghasemi S, Nutile T, Li Y, Pontali G, Günther F, Dehghan A, Correa A, Parsa A, Feresin A, de Vries APJ, Zonderman AB, Smith AV, Oldehinkel AJ, De Grandi A, Rosenkranz AR, Franke A, Teren A, Metspalu A, Hicks AA, Morris AP, Tönjes A, Morgan A, Podgornaia AI, Peters A, Körner A, Mahajan A, Campbell A, Freedman BI, Spedicati B, Ponte B, Schöttker B, Brumpton B, Banas B, Krämer BK, Jung B, Åsvold BO, Smith BH, Ning B, Penninx BWJH, Vanderwerff BR, Psaty BM, Kammerer CM, Langefeld CD, Hayward C, Spracklen CN, Robinson-Cohen C, Hartman CA, Lindgren CM, Wang C, Sabanayagam C, Heng CK, Lanzani C, Khor CC, Cheng CY, Fuchsberger C, Gieger C, Shaffer CM, Schulz CA, Willer CJ, Chasman DI, Gudbjartsson DF, Ruggiero D, Toniolo D, Czamara D, Porteous DJ, Waterworth DM, Mascalzoni D, Mook-Kanamori DO, Reilly DF, Daw EW, Hofer E, Boerwinkle E, Salvi E, Bottinger EP, Tai ES, Catamo E, Rizzi F, Guo F, Rivadeneira F, Guilianini F, Sveinbjornsson G, Ehret G, Waeber G, Biino G, Girotto G, Pistis G, Nadkarni GN, Delgado GE, Montgomery GW, Snieder H, Campbell H, White HD, Gao H, Stringham HM, Schmidt H, Li H, Brenner H, Holm H, Kirsten H, Kramer H, Rudan I, Nolte IM, Tzoulaki I, Olafsson I, Martins J, Cook JP, Wilson JF, Halbritter J, Felix JF, Divers J, Kooner JS, Lee JJ, O'Connell J, Rotter JI, Liu J, Xu J, Thiery J, Ärnlöv J, Kuusisto J, Jakobsdottir J, Tremblay J, Chambers JC, Whitfield JB, Gaziano JM, Marten J, Coresh J, Jonas JB, Mychaleckyj JC, Christensen K, Eckardt KU, Mohlke KL, Endlich K, Dittrich K, Ryan KA, Rice KM, Taylor KD, Ho K, Nikus K, Matsuda K, Strauch K, Miliku K, Hveem K, Lind L, Wallentin L, Yerges-Armstrong LM, Raffield LM, Phillips LS, Launer LJ, Lyytikäinen LP, Lange LA, Citterio L, Klaric L, Ikram MA, Ising M, Kleber ME, Francescatto M, Concas MP, Ciullo M, Piratsu M, Orho-Melander M, Laakso M, Loeffler M, Perola M, de Borst MH, Gögele M, Bianca M, Lukas MA, Feitosa MF, Biggs ML, Wojczynski MK, Kavousi M, Kanai M, Akiyama M, Yasuda M, Nauck M, Waldenberger M, Chee ML, Chee ML, Boehnke M, Preuss MH, Stumvoll M, Province MA, Evans MK, O'Donoghue ML, Kubo M, Kähönen M, Kastarinen M, Nalls MA, Kuokkanen M, **Ghanbari M**, Bochud M, Josyula NS, Martin NG, Tan NYQ, Palmer ND, Pirastu N, Schupf N, Verweij N, Hutri-Kähönen N, Mononen N, Bansal N, Devuyst O, Melander O, Raitakari OT, Polasek O, Manunta P, Gasparini P, Mishra PP, Sulem P, Magnusson PKE, Elliott P, Ridker PM, Hamet P, Svensson PO, Joshi PK, Kovacs P, Pramstaller PP, Rossing P, Vollenweider P, van der Harst P, Dorajoo R, Sim RZH, Burkhardt R, Tao R, Noordam R, Mägi R, Schmidt R, de Mutsert R, Rueedi R, van Dam RM, Carroll RJ, Gansevoort RT, Loos RJF, Felicita SC, Sedaghat S, Padmanabhan S, Freitag-Wolf S, Pendergrass SA, Graham SE, Gordon SD, Hwang SJ, Kerr SM, Vaccargiu S, Patil SB, Hallan S, Bakker SJL, Lim SC, Lucae S, Vogelezang S, Bergmann S, Corre T, Ahluwalia TS, Lehtimäki T, Boutin TS, Meitinger T, Wong TY, Bergler T, Rabelink TJ, Esko T, Haller T, Thorsteinsdottir U, Völker U, Foo VHX, Salomaa V, Vitart V, Giedraitis V, Gudnason V, Jaddoe VWV, Huang W, Zhang W, Wei WB, Kiess W, März W, Koenig W, Lieb W, Gao X, Sim X, Wang YX, Friedlander Y, Tham YC, Kamatani Y, Okada Y, Milaneschi Y, Yu Z; Lifelines cohort study; DiscovEHR/MyCode study; VA Million Veteran Program, Stark KJ, Stefansson K, Böger CA, Hung AM, Kronenberg F, Köttgen A, Pattaro C, Heid IM. *Differential and shared genetic effects on kidney function between diabetic and non-diabetic individuals.* Commun Biology. 2022 Jun 13;5(1):580. doi: 10.1038/s42003-022-03448-z. (IF=6.548, rank 7/113 (Q1, top 10%) in Biology)

16. Wielscher M, Mandaviya PR, Kuehnel B, Joehanes R, Mustafa R, Robinson O, Zhang Y, Bodinier B, Walton E, Mishra PP, Schlosser P, Wilson R, Tsai PC, Palaniswamy S, Marioni RE, Fiorito G, Cugliari G, Karhunen V, **Ghanbari M**, Psaty BM, Loh M, Bis JC, Lehne B, Sotoodehnia N, Deary IJ, Chadeau-Hyam M, Brody JA, Cardona A, Selvin E, Smith AK, Miller AH, Torres MA, Marouli E, Gào X, van Meurs JBJ, Graf-Schindler J, Rathmann W, Koenig W, Peters A, Weninger W, Farlik M, Zhang T, Chen W, Xia Y, Teumer A, Nauck M, Grabe HJ, Doerr M, Lehtimäki T, Guan W, Milani L, Tanaka T, Fisher K, Waite LL, Kasela S, Vineis P, Verweij N, van der Harst P, Iacoviello L, Sacerdote C, Panico S, Krogh V, Tumino R, Tzala E, Matullo G, Hurme MA, Raitakari OT, Colicino E, Baccarelli AA, Kähönen M, Herzig KH, Li S; BIOS consortium, Conneely KN, Kooner JS, Köttgen A, Heijmans BT, Deloukas P, Relton C, Ong KK, Bell JT, Boerwinkle E, Elliott P, Brenner H, Beekman M, Levy D, Waldenberger M, Chambers JC, Dehghan A, Järvelin MR. *DNA methylation signature of chronic low-grade inflammation and its role in cardio-respiratory diseases.* Nat Commun. 2022 May 3;13(1):2408. doi: 10.1038/s41467-022-29792-6. (IF=17.694, rank 6/71 (Q1, top 10%) in Multidisciplinary Sciences)

17. Barbu MC, Amador C, Kwong ASF, Shen X, Adams MJ, Howard DM, Walker RM, Morris SW, Min JL; Genetics of DNA Methylation Consortium, Liu C, van Dongen J, **Ghanbari M**, Relton C, Porteous DJ, Campbell A, Evans KL, Whalley HC, McIntosh AM. *Complex trait methylation scores in the prediction of major depressive disorder.* EBioMedicine. 2022 May;79:104000. doi: 10.1016/j.ebiom.2022.104000. (IF=11.205, rank 11/195 (Q1, top 10%) in Medicine, Research, & Experimental)

18. Sarnowski C*, **Ghanbari M***, Bis JC, Logue M, Fornage M, Mishra A, Ahmad S, Beiser AS, Boerwinkle E, Bouteloup V, Chouraki V, Cupples LA, Damotte V, DeCarli CS, DeStefano AL, Djoussé L, Fohner AE, Franz CE, Kautz TF, Lambert JC, Lyons MJ, Mosley TH, Mukamal KJ, Pase MP, Portilla Fernandez EC, Rissman RA, Satizabal CL, Vasan RS, Yaqub A, Debette S, Dufouil C, Launer LJ, Kremen WS, Longstreth WT, Ikram MA, Seshadri S. *Meta-analysis of genome-wide association studies identifies ancestry-specific associations underlying circulating total tau levels.* Commun Biol. 2022 Apr 8;5(1):336. doi: 10.1038/s42003-022-03287-y. (IF=6.548, rank 7/113 (Q1, top 10%) in Biology). *Shared first author.

19. Bellenguez C, Küçükali F, Jansen IE, Kleineidam L, Moreno-Grau S, Amin N, Naj AC, Campos-Martin R, Grenier-Boley B, Andrade V, Holmans PA, Boland A, Damotte V, van der Lee SJ, Costa MR, Kuulasmaa T, Yang Q, de Rojas I, Bis JC, Yaqub A, Prokic I, Chapuis J, Ahmad S, Giedraitis

V, …, **Ghanbari M**, Raj T, Sachdev P, Mather K, Jessen F, Ikram MA, de Mendonça A, Hort J, Tsolaki M, Pericak-Vance MA, Amouyel P, Williams J, Frikke-Schmidt R, Clarimon J, Deleuze JF, Rossi G, Seshadri S, Andreassen OA, Ingelsson M, Hiltunen M, Sleegers K, Schellenberg GD, van Duijn CM, Sims R, van der Flier WM, Ruiz A, Ramirez A, Lambert JC. *New insights into the genetic etiology of Alzheimer's disease and related dementias*. Nat Genet. 2022 Apr;54(4):412-436. doi: 10.1038/s41588-022-01024-z. (IF=41.444, rank 4/143 (Q1, top 10%) in Genetics)

20. Climaco Pinto R, Karaman I, Lewis MR, Hällqvist J, Kaluarachchi M, Graça G, Chekmeneva E, Durainayagam B, **Ghanbari M**, Ikram MA, Zetterberg H, Griffin J, Elliott P, Tzoulaki I, Dehghan A, Herrington D, Ebbels T. *Finding Correspondence between Metabolomic Features in Untargeted Liquid Chromatography-Mass Spectrometry Metabolomics Datasets.* Anal Chem. 2022 Apr 12;94(14):5493-5503. doi: 10.1021/acs.analchem.1c03592. (IF=8.008, rank 6/99 (Q1, top 10%) in Chemistry, Analytical)

21. Wloters F, Hilal S, Leening M, Kavousi M, **Ghanbari M**, Franco OH, Hofman A, Koudstaal P, Vernooij M, Ikram MK, Bos Daneil, Ikram MA. *Plasma amyloid-β40 in relation to subclinical atherosclerosis and cardiovascular disease: A population-based study.* Atherosclerosis 30 March 2022. doi.org/10.1016/j.atherosclerosis.2022.03.025. (IF=6.847, rank 13/90 (Q1) in Peripheral Vascular Disease)

22. Heshmatollah A, Fani L, Koudstaal PJ, **Ghanbari M**, Ikram MA, Ikram MK. *Plasma Amyloid Beta, Total-Tau and Neurofilament Light Chain Levels and the Risk of Stroke: A Prospective Population-Based Study.* Neurology 2022 Mar 1. doi:10.1212/WNL.0000000000200004. (IF=11.8, rank 12/208 (Q1, top 10%) in Clinical Neurology)

23. Portilla-Fernandez E, Klarin D, Hwang SJ, Biggs ML, Bis JC, Weiss S, Rospleszcz S, Natarajan P, Hoffmann U, Rogers IS, Truong QA, Völker U, Dörr M, Bülow R, Criqui MH, Allison M, Ganesh SK, Yao J, Waldenberger M, Bamberg F, Rice KM, Essers J, Kapteijn DMC, van der Laan SW, de Knegt RJ, **Ghanbari M**, Felix JF, Ikram MA, Kavousi M, Uitterlinden AG, Roks AJM, Danser AHJ, Tsao PS, Damrauer SM, Guo X, Rotter JI, Psaty BM, Kathiresan S, Völzke H, Peters A, Johnson C, Strauch K, Meitinger T, O'Donnell CJ, Dehghan A; VA Million Veteran Program. *Genetic and clinical determinants of abdominal aortic diameter: genome-wide association studies, exome array data and Mendelian randomization study.* Hum Mol Genet 2022 Mar 2:ddac051. doi: 10.1093/hmg/ddac051. (IF=5.121, rank 27/178 (Q1) in Genetics & Heredity)

24. Hautakangas H, Winsvold BS, Ruotsalainen SE, Bjornsdottir G, Harder AVE, Kogelman LJA, Thomas LF, Noordam R, Benner C, Gormley P, Artto V, Banasik K, Bjornsdottir A, Boomsma DI, Brumpton BM, Burgdorf KS, Buring JE, Chalmer MA, de Boer I, Dichgans M, Erikstrup C, Färkkilä M, Garbrielsen ME, **Ghanbari M**, Hagen K, Häppölä P, Hottenga JJ, Hrafnsdottir MG, Hveem K, Johnsen MB, Kähönen M, Kristoffersen ES, Kurth T, Lehtimäki T, Lighart L, Magnusson SH, Malik R, Pedersen OB, Pelzer N, Penninx BWJH, Ran C, Ridker PM, Rosendaal FR, Sigurdardottir GR, Skogholt AH, Sveinsson OA, Thorgeirsson TE, Ullum H, Vijfhuizen LS, Widén E, van Dijk KW; International Headache Genetics Consortium; HUNT All-in Headache; Danish Blood Donor Study Genomic Cohort, Aromaa A, Belin AC, Freilinger T, Ikram MA, Järvelin MR, Raitakari OT, Terwindt GM, Kallela M, Wessman M, Olesen J, Chasman DI, Nyholt DR, Stefánsson H, Stefansson K, van den Maagdenberg AMJM, Hansen TF, Ripatti S, Zwart JA, Palotie A, Pirinen M. *Genome-wide analysis of 102,084 migraine cases identifies 123 risk loci and subtype-specific risk alleles.* Nature Genetics 2022. (IF=41.444, rank 4/143 (Q1, top 10%) in Genetics)

25. de Haan A, Ahmadizar F, van der Most PJ, Thio CHL, Kamali Z, Ani A, **Ghanbari M**, Chaker L, van Meurs J, Ikram MK, van Goor H, Bakker SJL, van der Harst P, Snieder H, Kavousi M, Pasch A, Eijgelsheim M, de Borst MH. *Genetic Determinants of Serum Calcification Propensity and Cardiovascular Outcomes in the General Population.* Front Cardiovasc Med 2022. (IF=5.846, rank 30/142 (Q1) in Cardiovascular systems)

26. DiCorpo D, LeClair J, Cole JB, Sarnowski C, Ahmadizar F, Bielak LF, Blokstra A, Bottinger EP, Chaker L, Chen YI, Chen Y, de Vries PS, Faquih T, **Ghanbari M**, Gudmundsdottir V, Guo X, Hasbani NR, Ibi D, Ikram MA, Kavousi M, Leonard HL, Leong A, Mercader JM, Morrison AC, Nadkarni GN, Nalls MA, Noordam R, Preuss M, Smith JA, Trompet S, Vissink P, Yao J, Zhao W, Boerwinkle E, Goodarzi MO, Gudnason V, Jukema JW, Kardia SLR, Loos RJF, Liu CT, Manning AK, Mook-Kanamori D, Pankow JS, Picavet HSJ, Sattar N, Simonsick EM, Verschuren WMM, Willems van Dijk K, Florez JC, Rotter JI, Meigs JB, Dupuis J, Udler MS. *Type 2 Diabetes Partitioned Polygenic Scores Associate With Disease Outcomes in 454,193 individuals Across 13 Cohorts.* Diabetes Care. 2022 (IF=17.152, rank 4/143 (Q1, top 10%) in Endocrinology)

27. Geurts S, Mens MMJ, Bos MM, Ikram MA, **Ghanbari M***, Kavousi M*. *Circulatory MicroRNAs in Plasma and Atrial Fibrillation in the General Population: The Rotterdam Study.* Genes (Basel). 2021 (IF=4.14, rank 66/176 (Q2) in Genetics and Heredity). *Shared last author.

28. Sliz E, Shin J, Ahmad S, Williams DM, Frenzel S, Gauß F, Harris SE, Henning AK, Valdes Hernandez MDC, Hu YH, Jiménez B, Sargurupremraj M, Sudre C, Wang R, Wittfeld K, Yang Q, Wardlaw JM, Völzke H, Vernooij MW, Schott JM, Richards M, Proitsi P, Nauck M, Lewis MR, Launer L, Hosten N, Grabe HJ, **Ghanbari M**, Deary IJ, Cox SR, Chaturvedi N, Barnes J, Rotter JI, Debette S, Ikram MA, Fornage M, Paus T, Seshadri S, Pausova Z; NeuroCHARGE Working Group. *Circulating Metabolome and White Matter Hyperintensities in Females and Males.* Circulation. 2022. (IF=39.918, rank 1/194 (Q1, top 10%) in Cardiac & Cardiovascular Systems)

29. raham SE, Clarke SL, Wu KH, Kanoni S, Zajac GJM, Ramdas S, Surakka I, Ntalla I, Vedantam S, Winkler TW, Locke AE, Marouli E, Hwang MY, Han S, Narita A, Choudhury A, Bentley AR, Ekoru K, Verma A, Trivedi B, Martin HC, Hunt KA, Hui Q, Klarin D, Zhu X, Thorleifsson G, Helgadottir A, …, **Ghanbari M**, Gordon-Larsen P, Huang W, Kim YJ, Tabara Y, Wareham NJ, Langenberg C, Zeggini E, Kuusisto J, Laakso M, Ingelsson E, Abecasis G, Chambers JC, Kooner JS, de Vries PS, Morrison AC, North KE, Daviglus M, Kraft P, Martin NG, Whitfield JB, Abbas S, Saleheen D, Walters RG, Holmes MV, Black C, Smith BH, Justice AE, Baras A, Buring JE, Ridker PM, Chasman DI, Kooperberg C, Wei WQ, Jarvik GP, Namjou B, Hayes MG, Ritchie MD, Jousilahti P, Salomaa V, Hveem K, Åsvold BO, Kubo M, Kamatani Y, Okada Y, Murakami Y, Thorsteinsdottir U, Stefansson K, Ho YL, Lynch JA, Rader DJ, Tsao PS, Chang KM, Cho K, O'Donnell CJ, Gaziano JM, Wilson P, Rotimi CN, Hazelhurst S, Ramsay M, Trembath RC, van Heel DA, Tamiya G, Yamamoto M, Kim BJ, Mohlke KL, Frayling TM, Hirschhorn JN, Kathiresan S; VA Million Veteran Program; Global Lipids Genetics Consortium*, Boehnke M, Natarajan P, Peloso GM, Brown CD, Morris AP, Assimes TL, Deloukas P, Sun YV, Willer CJ. *The power of genetic diversity in genome-wide association studies of lipids*. Nature 2021. (IF=69.504, rank 1/128 (Q1, top 10%) in Multidisciplinary Sciences)

30. Schlosser P, Tin A, Matias-Garcia PR, Thio CHL, Joehanes R, Liu H, Weihs A, Yu Z, Hoppmann A, Grundner-Culemann F, Min JL, Adeyemo AA, Agyemang C, Ärnlöv J, Aziz NA, Baccarelli A, Bochud M, Brenner H, Breteler MMB, Carmeli C, Chaker L, Chambers JC, Cole SA, Coresh J, Corre T, Correa A, Cox SR, de Klein N, Delgado GE, Domingo-Relloso A, Eckardt KU, Ekici AB, Endlich K, Evans KL, Floyd JS, Fornage M,

Franke L, Fraszczyk E, Gao X, Gào X, **Ghanbari M**, Ghasemi S, Gieger C, Greenland P, Grove ML, Harris SE, Hemani G, Henneman P, Herder C, Horvath S, Hou L, Hurme MA, Hwang SJ, Jarvelin MR, Kardia SLR, Kasela S, Kleber ME, Koenig W, Kooner JS, Kramer H, Kronenberg F, Kühnel B, Lehtimäki T, Lind L, Liu D, Liu Y, Lloyd-Jones DM, Lohman K, Lorkowski S, Lu AT, Marioni RE, März W, McCartney DL, Meeks KAC, Milani L, Mishra PP, Nauck M, Navas-Acien A, Nowak C, Peters A, Prokisch H, Psaty BM, Raitakari OT, Ratliff SM, Reiner AP, Rosas SE, Schöttker B, Schwartz J, Sedaghat S, Smith JA, Sotoodehnia N, Stocker HR, Stringhini S, Sundström J, Swenson BR, Tellez-Plaza M, van Meurs JBJ, van Vliet-Ostaptchouk JV, Venema A, Verweij N, Walker RM, Wielscher M, Winkelmann J, Wolffenbuttel BHR, Zhao W, Zheng Y; Estonian Biobank Research Team; Genetics of DNA Methylation Consortium, Loh M, Snieder H, Levy D, Waldenberger M, Susztak K, Köttgen A, Teumer A. *Meta-analyses identify DNA methylation associated with kidney function and damage.* Nat Commun. 2021 (IF=17.694, rank 6/71 (Q1, top 10%) in Multidisciplinary Sciences)

31. Tin A, Schlosser P, Matias-Garcia PR, Thio CHL, Joehanes R, Liu H, Yu Z, Weihs A, Hoppmann A, Grundner-Culemann F, Min JL, Kuhns VLH, Adeyemo AA, Agyemang C, Ärnlöv J, Aziz NA, Baccarelli A, Bochud M, Brenner H, Bressler J, Breteler MMB, Carmeli C, Chaker L, Coresh J, Corre T, Correa A, Cox SR, Delgado GE, Eckardt KU, Ekici AB, Endlich K, Floyd JS, Fraszczyk E, Gao X, Gào X, Gelber AC, **Ghanbari M**, Ghasemi S, Gieger C, Greenland P, Grove ML, Harris SE, Hemani G, Henneman P, Herder C, Horvath S, Hou L, Hurme MA, Hwang SJ, Kardia SLR, Kasela S, Kleber ME, Koenig W, Kooner JS, Kronenberg F, Kühnel B, Ladd-Acosta C, Lehtimäki T, Lind L, Liu D, Lloyd-Jones DM, Lorkowski S, Lu AT, Marioni RE, März W, McCartney DL, Meeks KAC, Milani L, Mishra PP, Nauck M, Nowak C, Peters A, Prokisch H, Psaty BM, Raitakari OT, Ratliff SM, Reiner AP, Schöttker B, Schwartz J, Sedaghat S, Smith JA, Sotoodehnia N, Stocker HR, Stringhini S, Sundström J, Swenson BR, van Meurs JBJ, van Vliet-Ostaptchouk JV, Venema A, Völker U, Winkelmann J, Wolffenbuttel BHR, Zhao W, Zheng Y; Estonian Biobank Research Team; Genetics of DNA Methylation Consortium, Loh M, Snieder H, Waldenberger M, Levy D, Akilesh S, Woodward OM, Susztak K, Teumer A, Köttgen A. *Epigenome-wide association study of serum urate reveals insights into urate co-regulation and the SLC2A9 locus.* Nat Commun. 2021 (IF=17.694, rank 6/71 (Q1, top 10%) in Multidisciplinary Sciences)

32. Liu WY, Zhang X, Li G, Tang LJ, Zhu PW, Rios RS, Zheng KI, Ma HL, Wang XD, Pan Q, de Knegt RJ, Valenti L, **Ghanbari M**, Zheng MH. *Protective association of Klotho rs495392 gene polymorphism against hepatic steatosis in non-alcoholic fatty liver disease patients*. Clin Mol Hepatol. 2021. (IF=8.337, rank 19/93 (Q1) in Gastroenterology and Hepatology)

33. Wu P, Moon JY, Daghlas I, Franco G, Porneala BC, Ahmadizar F, Richardson TG, Isaksen JL, Hindy G, Yao J, Sitlani CM, Raffield LM, Yanek LR, Feitosa MF, Cuadrat RRC, Qi Q, Arfan Ikram M, Ellervik C, Ericson U, Goodarzi MO, Brody JA, Lange L, Mercader JM, Vaidya D, An P, Schulze MB, Masana L, **Ghanbari M**, Olesen MS, Cai J, Guo X, Floyd JS, Jäger S, Province MA, Kalyani RR, Psaty BM, Orho-Melander M, Ridker PM, Kanters JK, Uitterlinden A, Davey Smith G, Gill D, Kaplan RC, Kavousi M, Raghavan S, Chasman DI, Rotter JI, Meigs JB, Florez JC, Dupuis J, Liu CT, Merino J. *Obesity partially mediates the diabetogenic effect of lowering low-density cholesterol*. Diabetes Care. 2021. (IF=17.152, rank 4/143 (Q1, top 10%) in Endocrinology)

34. van Vliet NA, Bos MM, Thesing CS, Chaker L, Pietzner M, Houtman E, Neville MJ, Li-Gao R, Trompet S, Mustafa R, Ahmadizar F, Beekman M, Bot M, Budde K, Christodoulides C, Dehghan A, Delles C, Elliott P, Evangelou M, Gao H, **Ghanbari M**, van Herwaarden AE, Ikram MA, Jaeger M, Jukema JW, Karaman I, Karpe F, Kloppenburg M, Meessen JMTA, Meulenbelt I, Milaneschi Y, Mooijaart SP, Mook-Kanamori DO, Netea MG, Netea-Maier RT, Peeters RP, Penninx BWJH, Sattar N, Slagboom PE, Suchiman HED, Völzke H, Willems van Dijk K, Noordam R, van Heemst D; BBMRI Metabolomics Consortium. *Higher thyrotropin leads to unfavorable lipid profile and somewhat higher cardiovascular disease risk: evidence from multi-cohort Mendelian randomization and metabolomic profiling.* BMC Med. 2021 Nov 3;19(1):266. PMID: 34727949. (IF=11.15, rank 15/165 (Q1, top 10%) in Medicine, General & Internal)

35. Maas SCE, Vidaki A, Teumer A, Costeira R, Wilson R, van Dongen J, Beekman M, Völker U, Grabe HJ, Kunze S, Ladwig KH, van Meurs JBJ, Uitterlinden AG, Voortman T, Boomsma DI, Slagboom PE, van Heemst D, van der Kallen CJH, van den Berg LH, Waldenberger M, Völzke H, Peters A, Bell JT, Ikram MA, **Ghanbari M***, Kayser M*. *Validating biomarkers and models for epigenetic inference of alcohol consumption from blood*. Clinical Epigenetics. 2021 (IF=7.258, rank 29/178 (Q1) in Genetics & Heredity). *Shared last author.

36. Nano J, Schöttker B, Lin JS, Huth C, **Ghanbari M**, Garcia PM, Maalmi H, Karrasch S, Koenig W, Rothenbacher D, Roden M, Meisinger C, Peters A, Brenner H, Herder C, Thorand B. *Novel biomarkers of inflammation, kidney function and chronic kidney disease in the general population*. Nephrol Dial Transplant. 2021 Oct 6:gfab294. doi: 10.1093/ndt/gfab294. (IF=7.186, rank 11/119 (Q1, top 10%) in Urology & Nephrology)

37. Roberts JD, Vittinghoff E, Lu AT, Alonso A, Wang B, Sitlani CM, Mohammadi-Shemirani P, Fornage M, Kornej J, Brody JA, Arking DE, Lin H, Heckbert SR, Prokic I, **Ghanbari M**, Skanes AC, Bartz TM, Perez MV, Taylor KD, Lubitz SA, Ellinor PT, Lunetta KL, Pankow JS, Paré G, Sotoodehnia N, Benjamin EJ, Horvath S, Marcus GM. *Epigenetic Age and the Risk of Incident Atrial Fibrillation.* Circulation. 2021 Sep 30. doi: 10.1161/CIRCULATIONAHA.121.056456. (IF=39.918, rank 1/194 (Q1, top 10%) in Cardiac & Cardiovascular Systems)

38. Wang K, Kavousi M, Voortman T, Ikram M.A, **Ghanbari M**, Ahmadizar F. *Cardiovascular health, genetic predisposition, and lifetime risk of type 2 diabetes.* Eur J Prev Cardiol. 2021 Sep 28:zwab141. doi: 10.1093/eurjpc/zwab141. (IF=8.526, rank 32/207 (Q1) in Cardiac & Cardiovascular Systems)

39. Lumbers RT, Shah S, Lin H, Czuba T, Henry A, Swerdlow DI, Mälarstig A, Andersson C, Verweij N, Holmes, …,Ellinor PT, Vasan RS, Smith JG. *The genomics of heart failure: design and rationale of the HERMES consortium.* ESC Heart Fail. 2021 Sep 3. doi: 10.1002/ehf2.13517. (IF=3.612, rank 68/207 (Q2) in Cardiac & Cardiovascular Systems)

40. Wu JW, Yaqub A, Ma Y, Koudstaal W, Hofman A, Ikram MA, **Ghanbari M***, Goudsmit J*. B*iological age in healthy elderly predicts aging-related diseases including dementia.* Sci Rep. 2021 Aug 5;11(1):15929. (IF=4.996, rank 17/71 (Q1) in Multidisciplinary Sciences). *Shared last author

41. Jhun M, Mendelson M, Wilson R, Gondalia R, Joehanes R, Salfati E, Zhao X, Braun K, Do A, Hedman A, Zhang T, Carnero-Montoro E, Shen J, Bartz T, Brody J, Montasser M, O'Connell J, Yao C, Xia R, Boerwinkle E, Grove M, Guan W, Pfeiffer L, Singmann P, Muller-Nurasyid M, Meitinger T, Gieger C, Peters A, Zhao W, Ware E, Smith J, Dhana K, van Meurs J, Uitterlinden A, Ikram M.A, **Ghanbari M**, Zhi D, Gustafsson S, Lind L, Li S, Sun D, Spector T, Chen Y, Damcott C, Shuldiner A, Absher D, Horvath S, Tsao P, Kardia S, Psaty B, Sotoodehnia N, Bell J, Ingelsson E, Chen

W, Dehghan A, Arnett D, Waldenberger M, Hou L, Whitsel E, Baccarelli A, Levy D, Fornage M, Irvin M. *A multi-ethnic epigenome-wide association study of leukocyte DNA methylation and blood lipids*. Nature Communications. 2021 Jul 6;12(1):4256. (IF=17.694, rank 6/71 (Q1, top 10%) in Multidisciplinary Sciences)

42. Portilla-Fernández E, Hwang S, Wilson R, Maddock J, Hill D, Teumer A, Mishra P, Brody J, Joehanes R, Ligthart S, **Ghanbari M**, Kavousi M, Roks A, Danser J, Levy D, Peters A, Ghasemi S, Schminke U, Dörr M, Grabe H, Lehtimäki T, Kähönen M, Hurme M, Bartz T, Sotoodehnia N, Bis J, Thiery J, Koenig W, Ong K, Bell J, Meisinger C, Wardlaw J, Starr J, Seissler J, Then C, Rathmann W, Ikram A, Psaty B, Raitakari O, Völzke H, Deary I, Wong A, Waldenberger M, O'Donnell C, Dehghan A. *Meta-analysis of epigenome-wide association studies on carotid intima media thickness*. Eur J Epidemiol. 2021 Jun 6 doi:10.1007/s10654-021-00759-z. (IF=12.434, rank 8/193 (Q1, top 10%) in Public, Environmental & Occupational Health)

43. Lu Y, Dimitrov L, Chen S, Bielak L, Bis J, Feitosa M, Lu L, Kavousi M, Raffield L, Smith A, Wang L, Weiss S, Yao J, Zhu J, Gudmundsson E, Gudmundsdottir V, Bos D, **Ghanbari M**, Ikram A, Hwang S, Taylor K, Budoff M, Gislason G, O'Donnell C, An P, Franceschini N, Freedman B, Fu Y, Guo F, Heiss G, Kardia S, Wilson J, Langefeld C, Schminke U, Uitterlinden A, Lange L, Peyser P, Gudnason V, Psaty B, Rotter J, Bowden D, Ng M. *Multiethnic genome-wide association study of subclinical atherosclerosis in individuals with type 2 diabetes*. Circ Genom Precis Med. 2021 Aug;14(4):e003258. (IF=4.534, rank 33/178 (Q2) in Genetics & Heredity)

44. Haslam D, Peloso G, Guirette M, Imamura F, Bartz T, Pitsillides A, Wang C, Li-Gao R, Westra J, Pitkänen N, Young K, Graff M, Wood A, Braun K, Luan J, Kähönen M, Kiefte-de Jong J, **Ghanbari M**, Tintle N, Lemaitre R, Mook-Kanamori D, North K, Mikkilä V, Viikari J, Oddy W, Pennell C, Rosendall F, Ikram M.A, Uitterlinden A, Psaty B, Mozaffarian D, Rotter J, Taylor K, Lehtimäki T, Raitakari O, Livingston A, Forouhi N, Wareham N, de Mutsert R, Rich S, Mora S, Ridker P, Merino J, Meigs J, Dashti H, Chasman D, Lichtenstein A, Smith C, Dupuis J, Herman M, McKeown N. *Sugar-sweetened beverage consumption may modify associations between genetic variants in the CHREBP locus and HDL-C and TG concentrations*. Circ Genom Precis Med. May 2021 Aug;14(4):e003288. (IF=4.534, rank 33/178 (Q2) in Genetics & Heredity)

45. Karabegović I, Portilla-Fernandez E, Li Y, Ma J, Maas SCE, Sun D, Hu EA, Kühnel B, Zhang Y, Ambatipudi S, Fiorito G, Huang J, Castillo-Fernandez JE, Wiggins KL, de Klein N, Grioni S, Swenson BR, Polidoro S, Treur JL, Cuenin C, Tsai PC, Costeira R, Chajes V, Braun K, Verweij N, Kretschmer A, Franke L, van Meurs JBJ, Uitterlinden AG, de Knegt RJ, Ikram MA, Dehghan A, Peters A, Schöttker B, Gharib SA, Sotoodehnia N, Bell JT, Elliott P, Vineis P, Relton C, Herceg Z, Brenner H, Waldenberger M, Rebholz CM, Voortman T, Pan Q, Fornage M, Levy D, Kayser M, **Ghanbari M**. *Epigenome-wide association meta-analysis of DNA methylation with coffee and tea consumption*. Nature Communications. 2021 May 14;12(1):2830. PMID: 33990564. (IF=17.694, rank 6/71 (Q1, top 10%) in Multidisciplinary Sciences)

46. Pazoki R, Vujkovic M, Elliott J, Evangelou E, Gill D, **Ghanbari M**, van der Most PJ, Pinto RC, Wielscher M, Farlik M, Zuber V, de Knegt RJ, Snieder H, Uitterlinden AG; Lifelines Cohort Study, Lynch JA, Jiang X, Said S, Kaplan DE, Lee KM, Serper M, Carr RM, Tsao PS, Atkinson SR, Dehghan A, Tzoulaki I, Ikram MA, Herzig KH, Järvelin MR, Alizadeh BZ, O'Donnell CJ, Saleheen D, Voight BF, Chang KM, Thursz MR, Elliott P; VA Million Veteran Program. *Genetic analysis in European ancestry individuals identifies 517 loci associated with liver enzymes*. Nature Communications. 2021 May 10;12(1):2579. PMID: 33972514. (IF=17.694, rank 6/71 (Q1, top 10%) in Multidisciplinary Sciences)

47. Murphy MJ, Fani L, Ikram MK, **Ghanbari M***, Ikram MA*. *Herpes simplex virus 1 and the risk of dementia: a population-based study*. Sci Rep. 2021 Apr 22;11(1):8691. PMID: 33888766. (IF=4.996, rank 17/71 (Q1) in Multidisciplinary Sciences). *Shared last author

48. Bos MM, Goulding NJ, Lee MA, Hofman A, Bot M, Pool R, Vijfhuizen LS, Zhang X, Li C, Mustafa R, Neville MJ, Li-Gao R, Trompet S, Beekman M, Biermasz NR, Boomsma DI, de Boer I, Christodoulides C, Dehghan A, van Dijk KW, Ford I, **Ghanbari M**, Heijmans BT, Ikram MA, Jukema JW, Mook-Kanamori DO, Karpe F, Luik AI, Lumey LH, van den Maagdenberg AMJM, Mooijaart SP, de Mutsert R, Penninx BWJH, Rensen PCN, Richmond RC, Rosendaal FR, Sattar N, Schoevers RA, Slagboom PE, Terwindt GM, Thesing CS, Wade KH, Wijsman CA, Willemsen G, Zwinderman AH, van Heemst D, Noordam R, Lawlor DA. *Investigating the relationships between unfavourable habitual sleep and metabolomic traits: evidence from multi-cohort multivariable regression and Mendelian randomization analyses*. BMC Med. 2021 Mar 18;19(1):69. PMID: 33731105. (IF=11.15, rank 15/165 (Q1, top 10%) in Medicine, General & Internal)

49. Shakeri A, **Ghanbari M**, Tasbandi A, Sahebkar A. *Regulation of microRNA-21 expression by natural products in cancer*. Phytother Res. 2021 Mar 16. PMID: 33724576. (IF=6.388, rank 15/61 (Q1) in Chemistry, Medicinal)

50. Donkel SJ, Portilla Fernández E, Ahmad S, Rivadeneira F, van Rooij FJA, Ikram MA, Leebeek FWG, de Maat MPM, **Ghanbari M**. *Common and Rare Variants Genetic Association Analysis of Circulating Neutrophil Extracellular Traps*. Front Immunol. 2021 Feb 24;12:615527. PMID: 33717105. (IF=8.786, rank 33/161 (Q1) in Immunology)

51. Liu J, Ayada I, Zhang X, Wang L, Li Y, Wen T, Ma Z, Bruno MJ, de Knegt RJ, Cao W, Peppelenbosch MP, **Ghanbari M**, Li Z, Pan Q. *Estimating global prevalence of metabolic dysfunction-associated fatty liver disease in overweight or obese adults*. Clin Gastroenterol Hepatol. 2021 Feb 19:S1542-3565(21)00208-1. PMID: 33618024. (IF=13.576, rank 7/93 (Q1, top 10%) in Gastroenterology & Hepatology)

52. Zhang X, **Ghanbari M**. *Editorial: microRNAs for the diagnosis of fatty liver disease in the population-are we inching closer towards the target?* Authors' reply. Aliment Pharmacol Ther. 2021 Feb;53(4):559-560. PMID: 33616986. (IF=9.524, rank 17/279 (Q1, top 10%) in Pharmacology)

53. Zhang X, van Rooij JGJ, Wakabayashi Y, Hwang SJ, Yang Y, **Ghanbari M**, Bos D; BIOS Consortium, Levy D, Johnson AD, van Meurs JBJ, Kavousi M, Zhu J, O'Donnell CJ. *Genome-wide transcriptome study using deep RNA sequencing for myocardial infarction and coronary artery calcification*. BMC Med Genomics. 2021 Feb 10;14(1):45. PMID: 33568140. (IF=3.622, rank 101/178 (Q3) in Genetics & Heredity)

54. Mens MMJ, Heshmatollah A, Fani L, Ikram MA, Ikram MK, **Ghanbari M**. *Circulatory MicroRNAs as Potential Biomarkers for Stroke Risk: The Rotterdam Study*. Stroke. 2021 Mar;52(3):945-953PMID: 33563011. (IF=10.170, rank 14/212 (Q1, top 10%) in Clinical Neurology)

55. Hinman JD, Ngo KJ, Kim D, Chen C, Abraham CR, **Ghanbari M**, Ikram MA, Kushner SA, Kawaguchi R, Coppola G, Goth K, Bellusci S, Hernandez I, Kosik KS, Fogel BL. *MiR-142-3p regulates cortical oligodendrocyte gene co-expression networks associated with tauopathy*. Hum Mol Genet. 2021 Mar 25;30(1):103-118. PMID: 33555315. (IF=5.121, rank 27/178 (Q1) in Genetics & Heredity)

56. Gorabi AM, **Ghanbari M**, Sathyapalan T, Jamialahmadi T, Sahebkar A. *Implications of microRNAs in the pathogenesis of atherosclerosis and prospects for therapy*. Curr Drug Targets. 2021 Jan 20. PMID: 33494668. (IF=2.937, rank 183/279 (Q3) in Pharmacology)

57. Zhang X, Asllanaj E, Amiri M, Portilla-Fernandez E, Bramer WM, Nano J, Voortman T, Pan Q, **Ghanbari M**. *Deciphering the role of epigenetic modifications in fatty liver disease: A systematic review*. Eur J Clin Invest. 2021 May;51(5):e13479. PMID: 33350463. (IF=5.722, rank 39/172 (Q1) in Medicine, General & Internal)

58. Zhang X, Mens MMJ, Abozaid YJ, Bos D, Darwish Murad S, de Knegt RJ, Ikram MA, Pan Q, **Ghanbari M**. *Circulatory microRNAs as potential biomarkers for fatty liver disease: the Rotterdam study*. Aliment Pharmacol Ther. 2021 Feb;53(3):432-442. PMID: 33244812. (IF=9.524, rank 17/279 (Q1, top 10%) in Pharmacology)

59. Lysen TS, Ikram MA, **Ghanbari M**, Luik AI. *Sleep, 24-h activity rhythms, and plasma markers of neurodegenerative disease*. Sci Rep. 2020 Nov 26;10(1):20691. PMID: 33244083. (IF=4.996, rank 17/71 (Q1) in Multidisciplinary Sciences).

60. Fani L, Ahmad S, Ikram MK, **Ghanbari M**, Ikram MA. *Immunity and amyloid beta, total tau and neurofilament light chain: Findings from a community -based cohort study*. Alzheimers Dement. 2021 Mar;17(3):446-456. PMID: 33215849. (IF=17.13, rank 3/204 (Q1, top 10%) in Clinical Neurology)

61. Gorski M, Jung B, Li Y, Matias-Garcia PR, Wuttke M, Coassin S, Thio CHL, Kleber ME, Winkler TW, Wanner V, Chai JF, Chu AY, Cocca M, Feitosa MF, Ghasemi S, Hoppmann A, Horn K, Li M, Nutile T, Scholz M, Sieber KB, Teumer A, Tin A, Wang J, Tayo BO, Ahluwalia TS, Almgren P, Bakker SJL, Banas B, Bansal N, Biggs ML, Boerwinkle E, Bottinger EP, Brenner H, Carroll RJ, Chalmers J, Chee ML, Chee ML, Cheng CY, Coresh J, de Borst MH, Degenhardt F, Eckardt KU, Endlich K, Franke A, Freitag-Wolf S, Gampawar P, Gansevoort RT, **Ghanbari M**, Gieger C, Hamet P, Ho K, Hofer E, Holleczek B, Xian Foo VH, Hutri-Kähönen N, Hwang SJ, Ikram MA, Josyula NS, Kähönen M, Khor CC, Koenig W, Kramer H, Krämer BK, Kühnel B, Lange LA, Lehtimäki T, Lieb W; Lifelines Cohort Study; Regeneron Genetics Center, Loos RJF, Lukas MA, Lyytikäinen LP, Meisinger C, Meitinger T, Melander O, Milaneschi Y, Mishra PP, Mononen N, Mychaleckyj JC, Nadkarni GN, Nauck M, Nikus K, Ning B, Nolte IM, O'Donoghue ML, Orho-Melander M, Pendergrass SA, Penninx BWJH, Preuss MH, Psaty BM, Raffield LM, Raitakari OT, Rettig R, Rheinberger M, Rice KM, Rosenkranz AR, Rossing P, Rotter JI, Sabanayagam C, Schmidt H, Schmidt R, Schöttker B, Schulz CA, Sedaghat S, Shaffer CM, Strauch K, Szymczak S, Taylor KD, Tremblay J, Chaker L, van der Harst P, van der Most PJ, Verweij N, Völker U, Waldenberger M, Wallentin L, Waterworth DM, White HD, Wilson JG, Wong TY, Woodward M, Yang Q, Yasuda M, Yerges-Armstrong LM, Zhang Y, Snieder H, Wanner C, Böger CA, Köttgen A, Kronenberg F, Pattaro C, Heid IM. *Meta-analysis uncovers genome-wide significant variants for rapid kidney function decline*. Kidney Int. 2021 Apr;99(4):926-939. PMID: 33137338. (IF=18.998, rank 3/90 (Q1, top 10%) in Urology & Nephrology)

62. Maas SCE, Mens MMJ, Kühnel B, van Meurs JBJ, Uitterlinden AG, Peters A, Prokisch H, Herder C, Grallert H, Kunze S, Waldenberger M, Kavousi M, Kayser M, **Ghanbari M**. *Smoking-related changes in DNA methylation and gene expression are associated with cardio-metabolic traits*. Clin Epigenetics. 2020 Oct 22;12(1):157. PMID: 33092652. (IF=7.291, rank 19/175 (Q1) in Genetics & Heredity)

63. Vuckovic D, Bao EL, Akbari P, Lareau CA, Mousas A, Jiang T, Chen MH, Raffield LM, Tardaguila M, Huffman JE, Ritchie SC, Megy K, Ponstingl H, Penkett CJ, Albers PK, Wigdor EM, Sakaue S, Moscati A, Manansala R, Lo KS, Qian H, Akiyama M, Bartz TM, Ben-Shlomo Y, Beswick A, Bork-Jensen J, Bottinger EP, Brody JA, van Rooij FJA, Chitrala KN, Wilson PWF, Choquet H, Danesh J, Di Angelantonio E, Dimou N, Ding J, Elliott P, Esko T, Evans MK, Felix SB, Floyd JS, Broer L, Grarup N, Guo MH, Guo Q, Greinacher A, Haessler J, Hansen T, Howson JMM, Huang W, Jorgenson E, Kacprowski T, Kähönen M, Kamatani Y, Kanai M, Karthikeyan S, Koskeridis F, Lange LA, Lehtimäki T, Linneberg A, Liu Y, Lyytikäinen LP, Manichaikul A, Matsuda K, Mohlke KL, Mononen N, Murakami Y, Nadkarni GN, Nikus K, Pankratz N, Pedersen O, Preuss M, Psaty BM, Raitakari OT, Rich SS, Rodriguez BAT, Rosen JD, Rotter JI, Schubert P, Spracklen CN, Surendran P, Tang H, Tardif JC, **Ghanbari M**, Völker U, Völzke H, Watkins NA, Weiss S; VA Million Veteran Program, Cai N, Kundu K, Watt SB, Walter K, Zonderman AB, Cho K, Li Y, Loos RJF, Knight JC, Georges M, Stegle O, Evangelou E, Okada Y, Roberts DJ, Inouye M, Johnson AD, Auer PL, Astle WJ, Reiner AP, Butterworth AS, Ouwehand WH, Lettre G, Sankaran VG, Soranzo N. *The Polygenic and Monogenic Basis of Blood Traits and Diseases*. Cell. 2020 Sep 3;182(5):1214-1231.e11. PMID: 32888494. (IF=66.85, rank 1/297 (Q1, top 10%) in Biochemistry & Molecular Biology)

64. Chen MH, Raffield LM, Mousas A, Sakaue S, Huffman JE, Moscati A, Trivedi B, Jiang T, Akbari P, Vuckovic D, Bao EL, Zhong X, Manansala R, Laplante V, Chen M, Lo KS, Qian H, Lareau CA, Beaudoin M, Hunt KA, Akiyama M, Bartz TM, Ben-Shlomo Y, Beswick A, Bork-Jensen J, Bottinger EP, Brody JA, van Rooij FJA, Chitrala K, Cho K, Choquet H, Correa A, Danesh J, Di Angelantonio E, Dimou N, Ding J, Elliott P, Esko T, Evans MK, Floyd JS, Broer L, Grarup N, Guo MH, Greinacher A, Haessler J, Hansen T, Howson JMM, Huang QQ, Huang W, Jorgenson E, Kacprowski T, Kähönen M, Kamatani Y, Kanai M, Karthikeyan S, Koskeridis F, Lange LA, Lehtimäki T, Lerch MM, Linneberg A, Liu Y, Lyytikäinen LP, Manichaikul A, Martin HC, Matsuda K, Mohlke KL, Mononen N, Murakami Y, Nadkarni GN, Nauck M, Nikus K, Ouwehand WH, Pankratz N, Pedersen O, Preuss M, Psaty BM, Raitakari OT, Roberts DJ, Rich SS, Rodriguez BAT, Rosen JD, Rotter JI, Schubert P, Spracklen CN, Surendran P, Tang H, Tardif JC, Trembath RC, **Ghanbari M**, Völker U, Völzke H, Watkins NA, Zonderman AB; VA Million Veteran Program, Wilson PWF, Li Y, Butterworth AS, Gauchat JF, Chiang CWK, Li B, Loos RJF, Astle WJ, Evangelou E, van Heel DA, Sankaran VG, Okada Y, Soranzo N, Johnson AD, Reiner AP, Auer PL, Lettre G. *Trans-ethnic and Ancestry-Specific Blood-Cell Genetics in 746,667 Individuals from 5 Global Populations*. *Cell*. 2020 Sep 3;182(5):1198-1213.e14. PMID: 32888493. (IF=66.85, rank 1/297 (Q1, top 10%) in Biochemistry & Molecular Biology)

65. van der Willik KD, **Ghanbari M**, Fani L, Compter A, Ruiter R, Stricker BHC, Schagen SB, Ikram MA. *Higher Plasma Amyloid-β Levels Are Associated with a Higher Risk of Cancer: A Population-Based Prospective Cohort Study*. Cancer Epidemiol Biomarkers Prev. 2020 Oct;29(10):1993-2001. PMID: 32727725. (IF=4.090, rank 25/193 (Q1) in Public Health)

66. Baloch Z, Ma Z, Ji Y, **Ghanbari M**, Pan Q, Aljabr W. *Unique challenges to control the spread of COVID-19 in the Middle East*. J Infect Public Health. 2020 Sep;13(9):1247-1250. PMID: 32690454. (IF=2.45, rank 73/193 (Q2) in Public Health)

67. Prokić I, Lahousse L, de Vries M, Liu J, Kalaoja M, Vonk JM, van der Plaat DA, van Diemen CC, van der Spek A, Zhernakova A, Fu J, **Ghanbari M**, Ala-Korpela M, Kettunen J, Havulinna AS, Perola M, Salomaa V, Lind L, Ärnlöv J, Stricker BHC, Brusselle GG, Boezen HM, van Duijn CM, Amin N. *A cross-omics integrative study of metabolic signatures of chronic obstructive pulmonary disease*. BMC Pulm Med. 2020 Jul 16;20(1):193. PMID: 32677943. (IF=3.320, rank 37/65 (Q2) in Respiratory System)

68. Meddens SFW, de Vlaming R, Bowers P, Burik CAP, Linnér RK, Lee C, Okbay A, Turley P, Rietveld CA, Fontana MA, **Ghanbari M**, Imamura F, McMahon G, van der Most PJ, Voortman T, Wade KH, Anderson EL, Braun KVE, Emmett PM, Esko T, Gonzalez JR, Kiefte-de Jong JC, Langenberg C, Luan J, Muka T, Ring S, Rivadeneira F, Snieder H, van Rooij FJA, Wolffenbuttel BHR; 23andMe Research Team; EPIC- InterAct Consortium; Lifelines Cohort Study, Smith GD, Franco OH, Forouhi NG, Ikram MA, Uitterlinden AG, van Vliet-Ostaptchouk JV, Wareham NJ, Cesarini D, Harden KP, Lee JJ, Benjamin DJ, Chow CC, Koellinger PD. *Genomic analysis of diet composition finds novel loci and associations with health and lifestyle*. Mol Psychiatry. 2020 May 11:10.1038/s41380-020-0697-5. PMID: 32393786. (IF=13.437, rank 19/296 (Q1, top 10%) in Biochemistry & Molecular Biology)

69. Wu P, Rybin D, Bielak LF, Feitosa MF, Franceschini N, Li Y, Lu Y, Marten J, Musani SK, Noordam R, Raghavan S, Rose LM, Schwander K, Smith AV, Tajuddin SM, Vojinovic D, Amin N, Arnett DK, Bottinger EP, Demirkan A, Florez JC, **Ghanbari M**, Harris TB, Launer LJ, Liu J, Liu J, Mook-Kanamori DO, Murray AD, Nalls MA, Peyser PA, Uitterlinden AG, Voortman T, Bouchard C, Chasman D, Correa A, de Mutsert R, Evans MK, Gudnason V, Hayward C, Kao L, Kardia SLR, Kooperberg C, Loos RJF, Province MM, Rankinen T, Redline S, Ridker PM, Rotter JI, Siscovick D, Smith BH, van Duijn C, Zonderman AB, Rao DC, Wilson JG, Dupuis J, Meigs JB, Liu CT, Vassy JL. *Smoking-by-genotype interaction in type 2 diabetes risk and fasting glucose*. PLoS One. 2020 May 7;15(5):e0230815. PMID: 32379818. (IF=3.752, rank 29/73 (Q2) in Multidisciplinary Sciences)

70. Ikram MA, Brusselle G, **Ghanbari M**, Goedegebure A, Ikram MK, Kavousi M, Kieboom BCT, Klaver CCW, de Knegt RJ, Luik AI, Nijsten TEC, Peeters RP, van Rooij FJA, Stricker BH, Uitterlinden AG, Vernooij MW, Voortman T. *Objectives, design and main findings until 2020 from the Rotterdam Study*. Eur J Epidemiol. 2020 May;35(5):483-517. PMID: 32367290. (IF=12.434, rank 8/193 (Q1, top 10%) in Public, Environmental & Occupational Health).

71. Asllanaj E, Zhang X, Ochoa Rosales C, Nano J, Bramer WM, Portilla-Fernandez E, Braun KVE, Gonzalez-Jaramillo V, Ahrens W, Ikram A, **Ghanbari M**, Voortman T, Franco OH, Muka T, Glisic M. *Sexually dimorphic DNA-methylation in cardiometabolic health: A systematic review*. Maturitas. 2020 May;135:6-26. PMID: 32252966. (IF=5.11, rank 15/128 (Q1) in Obstetrics & Gynecology)

72. de Wolf F*, **Ghanbari M***, Licher S, McRae-McKee K, Gras L, Weverling GJ, Wermeling P, Sedaghat S, Ikram MK, Waziry R, Koudstaal W, Klap J, Kostense S, Hofman A, Anderson R, Goudsmit J, Ikram MA. *Plasma tau, neurofilament light chain and amyloid-β levels and risk of dementia; a population-based cohort study*. Brain. 2020 Apr 1;143(4):1220-1232. PMID: 32206776. (IF=15.255, rank 6/212 (Q1, top 10%) in Clinical Neurology). *Shared first author

73. Bautista-Niño PK, Portilla-Fernandez E, Rubio-Beltrán E, van der Linden JJ, de Vries R, van Veghel R, de Boer M, Durik M, Ridwan Y, Brandt R, Essers J, Menzies RI, Thomas R, de Bruin A, Duncker DJ, van Beusekom HMM, **Ghanbari M**, Hoeijmakers JHJ, Sedlacek R, Touyz RM, Montezano AC, van der Pluijm I, Danser AHJ, Haanes KA, Roks AJM. *Local endothelial DNA repair deficiency causes aging- resembling endothelial-specific dysfunction*. Clin Sci (Lond). 2020 Apr 17;134(7):727-746. PMID: 32202295. (IF=6.876, rank 32/139 (Q1) in Medicine)

74. Grasby KL, Jahanshad N, Painter JN, Colodro-Conde L, Bralten J, Hibar DP, Lind PA, Pizzagalli F, Ching CRK, McMahon MAB, Shatokhina N, Zsembik LCP, Thomopoulos SI, Zhu AH, Strike LT, Agartz I, Alhusaini S, Almeida MAA, Alnæs D, Amlien IK, Andersson M, Ard T, Armstrong NJ, Ashley-Koch A, Atkins JR, Bernard M, Brouwer RM, Buimer EEL, Bülow R, Bürger C, Cannon DM, Chakravarty M, Chen Q, Cheung JW, Couvy-Duchesne B, Dale AM, Dalvie S, de Araujo TK, de Zubicaray GI, de Zwarte SMC, den Braber A, Doan NT, Dohm K, Ehrlich S, Engelbrecht HR, Erk S, Fan CC, Fedko IO, Foley SF, Ford JM, Fukunaga M, Garrett ME, Ge T, Giddaluru S, Goldman AL, Green MJ, Groenewold NA, Grotegerd D, … et al. Enhancing NeuroImaging Genetics through Meta-Analysis Consortium (ENIGMA)—Genetics working group. *The genetic architecture of the human cerebral cortex*. Science. 2020 Mar 20;367(6484):eaay6690. PMID: 32193296. (IF=63.714, rank 2/71 (Q1, top 10%) in Multidisciplinary Medicine)

75. Mens MMJ, Maas SCE, Klap J, Weverling GJ, Klatser P, Brakenhoff JPJ, van Meurs JBJ, Uitterlinden AG, Ikram MA, Kavousi M, **Ghanbari M**. *Multi-Omics Analysis Reveals MicroRNAs Associated With Cardiometabolic Traits*. Front Genet. 2020 Feb 27;11:110. PMID: 32174972. (IF=4.772, rank 75/178 (Q2) in Genetics & Heridity)

76. Ochoa-Rosales C, Portilla-Fernandez E, Nano J, Wilson R, Lehne B, Mishra PP, Gao X, **Ghanbari M**, Rueda-Ochoa OL, Juvinao-Quintero D, Loh M, Zhang W, Kooner JS, Grabe HJ, Felix SB, Schöttker B, Zhang Y, Gieger C, Müller-Nurasyid M, Heier M, Peters A, Lehtimäki T, Teumer A, Brenner H, Waldenberger M, Ikram MA, van Meurs JBJ, Franco OH, Voortman T, Chambers J, Stricker BH, Muka T. *Epigenetic Link Between Statin Therapy and Type 2 Diabetes*. Diabetes Care. 2020 Apr;43(4):875-884. PMID: 32033992. (IF=17.152, rank 4/143 (Q1, top 10%) in Endocrinology)

77.

78. Shah S, Henry A, Roselli C, Lin H, Sveinbjörnsson G, Fatemifar G, Hedman ÅK, Wilk JB, Morley MP, Chaffin MD, Helgadottir A, Verweij N, Dehghan A, Almgren P, Andersson C, Aragam KG, Ärnlöv J, Backman JD, Biggs ML, Bloom HL, Brandimarto J, Brown MR, Buckbinder L, Carey DJ, Chasman DI, Chen X, Chen X, Chung J, Chutkow W, Cook JP, Delgado GE, Denaxas S, Doney AS, Dörr M, Dudley SC, Dunn ME, Engström G, Esko T, Felix SB, Finan C, Ford I, **Ghanbari M**, Ghasemi S, Giedraitis V, Giulianini F, Gottdiener JS, Gross S, Guðbjartsson DF, Gutmann R, Haggerty CM, van der Harst P, Hyde CL, Ingelsson E, Jukema JW, Kavousi M, Khaw KT, Kleber ME, Køber L, Koekemoer A, Langenberg C, Lind L, Lindgren CM, London B, Lotta LA, Lovering RC, Luan J, Magnusson P, Mahajan A, Margulies KB, März W, Melander O, Mordi IR, Morgan T, Morris AD, Morris AP, Morrison AC, Nagle MW, Nelson CP, Niessner A, Niiranen T, O'Donoghue ML, Owens AT, Palmer CNA, Parry HM, Perola M, Portilla-Fernandez E, Psaty BM; Regeneron Genetics Center, Rice KM, Ridker PM, Romaine SPR, Rotter JI, Salo P, Salomaa V, van Setten J, Shalaby AA, Smelser DT, Smith NL, Stender S, Stott DJ, Svensson P, Tammesoo ML, Taylor KD, Teder-Laving M, Teumer A, Thorgeirsson G, Thorsteinsdottir U, Torp-Pedersen C, Trompet S, Tyl B, Uitterlinden AG, Veluchamy A, Völker U, Voors AA, Wang X, Wareham NJ, Waterworth

D, Weeke PE, Weiss R, Wiggins KL, Xing H, Yerges-Armstrong LM, Yu B, Zannad F, Zhao JH, Hemingway H, Samani NJ, McMurray JJV, Yang J, Visscher PM, Newton-Cheh C, Malarstig A, Holm H, Lubitz SA, Sattar N, Holmes MV, Cappola TP, Asselbergs FW, Hingorani AD, Kuchenbaecker K, Ellinor PT, Lang CC, Stefansson K, Smith JG, Vasan RS, Swerdlow DI, Lumbers RT. *Genome-wide association and Mendelian randomisation analysis provide insights into the pathogenesis of heart failure*. Nature Communications. 2020 Jan 9;11(1):163. PMID: 31919418. (IF=17.694, rank 6/71 (Q1, top 10%) in Multidisciplinary Sciences)

79. Karimi L, Lahousse L, **Ghanbari M**, Terzikhan N, Uitterlinden AG, van der Lei J, Brusselle GG, Stricker BH, Verhamme KMC. *β2-Adrenergic Receptor (ADRB2) Gene Polymorphisms and Risk of COPD Exacerbations: The Rotterdam Study*. J Clin Med. 2019 Nov 1;8(11):1835. PMID: 31683975. (IF=4.964, rank 36/165 (Q1) in Medicine, General & Internal)

80. Maas SCE, Vidaki A, Wilson R, Teumer A, Liu F, van Meurs JBJ, Uitterlinden AG, Boomsma DI, de Geus EJC, Willemsen G, van Dongen J, van der Kallen CJH, Slagboom PE, Beekman M, van Heemst D, van den Berg LH; BIOS Consortium, Duijts L, Jaddoe VWV, Ladwig KH, Kunze S, Peters A, Ikram MA, Grabe HJ, Felix JF, Waldenberger M, Franco OH, **Ghanbari M***, Kayser M*. *Validated inference of smoking habits from blood with a finite DNA methylation marker set*. Eur J Epidemiol. 2019 Nov;34(11):1055-1074. PMID: 31494793. (IF=12.434, rank 8/193 (Q1, top 10%) in Public, Environmental & Occupational Health). *Shared last author

81. Deelen J, Kettunen J, Fischer K, van der Spek A, Trompet S, Kastenmüller G, Boyd A, Zierer J, van den Akker EB, Ala-Korpela M, Amin N, Demirkan A, **Ghanbari M**, van Heemst D, Ikram MA, van Klinken JB, Mooijaart SP, Peters A, Salomaa V, Sattar N, Spector TD, Tiemeier H, Verhoeven A, Waldenberger M, Würtz P, Davey Smith G, Metspalu A, Perola M, Menni C, Geleijnse JM, Drenos F, Beekman M, Jukema JW, van Duijn CM, Slagboom PE. *A metabolic profile of all-cause mortality risk identified in an observational study of 44,168 individuals*. Nature Communications. 2019 Aug 20;10(1):3346. PMID: 31431621. (IF=17.694, rank 6/71 (Q1, top 10%) in Multidisciplinary Sciences)

82. Wolters FJ, Yang Q, Biggs ML, Jakobsdottir J, Li S, Evans DS, Bis JC, Harris TB, Vasan RS, Zilhao NR, **Ghanbari M**, Ikram MA, Launer L, Psaty BM, Tranah GJ, Kulminski AM, Gudnason V, Seshadri S; E2-CHARGE investigators. The impact of APOE genotype on survival: Results of 38,537 participants from six population- based cohorts (E2-CHARGE). PLoS One. 2019 Jul 29;14(7):e0219668. PMID: 31356640. (IF=3.752, rank 29/73 (Q2) in Multidisciplinary Sciences)

83. **Ghanbari M**, Munshi ST, Ma B, Lendemeijer B, Bansal S, Adams HH, Wang W, Goth K, Slump DE, van den Hout MCGN, van IJcken WFJ, Bellusci S, Pan Q, Erkeland SJ, de Vrij FMS, Kushner SA, Ikram MA. *A functional variant in the miR-142 promoter modulating its expression and conferring risk of Alzheimer disease*. Human Mutation. 2019 Nov;40(11):2131-2145. PMID:31322790. (IF=4.7, rank 45/175 (Q2) in Genetics & Heredity)

84. Karimi L, Vijverberg SJH, Farzan N, **Ghanbari M**, Verhamme KMC, Maitland-van der Zee AH. *FCER2 T2206C variant associated with FENO levels in asthmatic children using inhaled corticosteroids: The PACMAN study*. Clin Exp Allergy. 2019 Nov;49(11):1429-1436. PMID: 31309641. (IF=5.401, rank 66/161 (Q2) in Immunology)

85. Gonzalez-Jaramillo V, Portilla-Fernandez E, Glisic M, Voortman T, **Ghanbari M**, Bramer W, Chowdhury R, Nijsten T, Dehghan A, Franco OH, Nano J. *Epigenetics and Inflammatory Markers: A Systematic Review of the Current Evidence*. Int J Inflam. 2019 May 8;2019:6273680. PMID: 31205673.

86. Waziry R, Gras L, Sedaghat S, Tiemeier H, Weverling GJ, **Ghanbari M**, Klap J, de Wolf F, Hofman A, Ikram MA, Goudsmit J. *Quantification of biological age as a determinant of age-related diseases in the Rotterdam Study: a structural equation modeling approach*. Eur J Epidemiol. 2019 Aug;34(8):793-799. PMID: 30993509. (IF=12.434, rank 8/193 (Q1, top 10%) in Public, Environmental & Occupational Health).

87. Ma J, Nano J, Ding J, Zheng Y, Hennein R, Liu C, Speliotes EK, Huan T, Song C, Mendelson MM, Joehanes R, Long MT, Liang L, Smith JA, Reynolds LM, **Ghanbari M**, Muka T, van Meurs JBJ, Alferink LJM, Franco OH, Dehghan A, Ratliff S, Zhao W, Bielak L, Kardia SLR, Peyser PA, Ning H, VanWagner LB, Lloyd-Jones DM, Carr JJ, Greenland P, Lichtenstein AH, Hu FB, Liu Y, Hou L, Darwish Murad S, Levy D. *A Peripheral Blood DNA Methylation Signature of Hepatic Fat Reveals a Potential Causal Pathway for Nonalcoholic Fatty Liver Disease.* Diabetes. 2019 May;68(5):1073-1083. PMID: 30936141. (IF=9.337, rank 12/146 (Q1, top 10%) in Endocrinology & Metabolism)

88. Bentley AR, Sung YJ, Brown MR, Winkler TW, Kraja AT, Ntalla I, Schwander K, Chasman DI, Lim E, Deng X, Guo X, Liu J, Lu Y, Cheng CY, Sim X, Vojinovic D, Huffman JE, Musani SK, Li C, Feitosa MF, Richard MA, Noordam R, Baker J, Chen G, Aschard H, Bartz TM, Ding J, Dorajoo R, Manning AK, Rankinen T, Smith AV, Tajuddin SM, Zhao W, Graff M, Alver M, Boissel M, Chai JF, Chen X, Divers J, Evangelou E, Gao C, Goel A, …, **Ghanbari M**, Gharib SA, Gigante B, Giulianini F, Grabe HJ, Gu CC, Harris TB, Heikkinen S, Heng CK, Hirata M, Hixson JE, Ikram MA; EPIC-InterAct Consortium, Jia Y, Joehanes R, Johnson C, Jonas JB, Justice AE, Katsuya T, Khor CC, Kilpeläinen TO, Koh WP, Kolcic I, Kooperberg C, Krieger JE, Kritchevsky SB, Kubo M, Kuusisto J, Lakka TA, Langefeld CD, Langenberg C, Launer LJ, Lehne B, Lewis CE, Li Y, Liang J, Lin S, Liu CT, Liu J, Liu K, Loh M, Lohman KK, Louie T, Luzzi A, Mägi R, Mahajan A, Manichaikul AW, McKenzie CA, Meitinger T, Metspalu A, Milaneschi Y, Milani L, Mohlke KL, Momozawa Y, Morris AP, Murray AD, Nalls MA, Nauck M, Nelson CP, North KE, O'Connell JR, Palmer ND, Papanicolau GJ, Pedersen NL, Peters A, Peyser PA, Polasek O, Poulter N, Raitakari OT, Reiner AP, Renström F, Rice TK, Rich SS, Robinson JG, Rose LM, Rosendaal FR, Rudan I, Schmidt CO, Schreiner PJ, Scott WR, Sever P, Shi Y, Sidney S, Sims M, Smith JA, Snieder H, Starr JM, Strauch K, Stringham HM, Tan NYQ, Tang H, Taylor KD, Teo YY, Tham YC, Tiemeier H, Turner ST, Uitterlinden AG; Understanding Society Scientific Group, van Heemst D, Waldenberger M, Wang H, Wang L, Wang L, Wei WB, Williams CA, Wilson G Sr, Wojczynski MK, Yao J, Young K, Yu C, Yuan JM, Zhou J, Zonderman AB, Becker DM, Boehnke M, Bowden DW, Chambers JC, Cooper RS, de Faire U, Deary IJ, Elliott P, Esko T, Farrall M, Franks PW, Freedman BI, Froguel P, Gasparini P, Gieger C, Horta BL, Juang JJ, Kamatani Y, Kammerer CM, Kato N, Kooner JS, Laakso M, Laurie CC, Lee IT, Lehtimäki T; Lifelines Cohort, Magnusson PKE, Oldehinkel AJ, Penninx BWJH, Pereira AC, Rauramaa R, Redline S, Samani NJ, Scott J, Shu XO, van der Harst P, Wagenknecht LE, Wang JS, Wang YX, Wareham NJ, Watkins H, Weir DR, Wickremasinghe AR, Wu T, Zeggini E, Zheng W, Bouchard C, Evans MK, Gudnason V, Kardia SLR, Liu Y, Psaty BM, Ridker PM, van Dam RM, Mook-Kanamori DO, Fornage M, Province MA, Kelly TN, Fox ER, Hayward C, van Duijn CM, Tai ES, Wong TY, Loos RJF, Franceschini N, Rotter JI, Zhu X, Bierut LJ, Gauderman WJ, Rice K, Munroe PB, Morrison AC, Rao DC, Rotimi CN, Cupples LA. *Multi-ancestry genome-wide gene-*

smoking interaction study of 387,272 individuals identifies new loci associated with serum lipids. Nature Genetics. 2019 Apr;51(4):636-648. PMID: 30926973. (IF=41.444, rank 4/143 (Q1, top 10%) in Genetics)

89. Portilla-Fernandez E, **Ghanbari M**, van Meurs JBJ, Danser AHJ, Franco OH, Muka T, Roks A, Dehghan A. *Dissecting the association of autophagy-related genes with cardiovascular diseases and intermediate vascular traits: A population-based approach*. PLoS One. 2019 Mar 25;14(3): e0214137. PMID: 30908504. (IF=3.752, rank 29/73 (Q2) in Multidisciplinary Sciences)

90. de Vries PS, Brown MR, Bentley AR, Sung YJ, Winkler TW, Ntalla I, Schwander K, Kraja AT, Guo X, Franceschini N, Cheng CY, Sim X, Vojinovic D, Huffman JE, Musani SK, Li C, Feitosa MF, Richard MA, Noordam R, Aschard H, Bartz TM, Bielak LF, Deng X, Dorajoo R, Lohman KK, Manning AK, Rankinen T, Smith AV, Tajuddin SM, Evangelou E, Graff M, Alver M, Boissel M, Chai JF, Chen X, Divers J, Gandin I, Gao C, Goel A, Hagemeijer Y, Harris SE, Hartwig FP, He M, Horimoto ARVR, Hsu FC, Jackson AU, Kasturiratne A, Komulainen P, Kühnel B, Laguzzi F, Lee JH, Luan J, Lyytikäinen LP, Matoba N, Nolte IM, Pietzner M, Riaz M, Said MA, Scott RA, Sofer T, Stančáková A, Takeuchi F, Tayo BO, van der Most PJ, Varga TV, Wang Y, Ware EB, Wen W, Yanek LR, Zhang W, Zhao JH, Afaq S, Amin N, Amini M, Arking DE, Aung T, Ballantyne C, Boerwinkle E, Broeckel U, Campbell A, Canouil M, Charumathi S, Chen YI, Connell JM, de Faire U, de Las Fuentes L, de Mutsert R, de Silva HJ, Ding J, Dominiczak AF, Duan Q, Eaton CB, Eppinga RN, Faul JD, Fisher V, Forrester T, Franco OH, Friedlander Y, **Ghanbari M**, Giulianini F, Grabe HJ, Grove ML, Gu CC, Harris TB, Heikkinen S, Heng CK, Hirata M, Hixson JE, Howard BV, Ikram MA; InterAct Consortium, Jacobs DR, Johnson C, Jonas JB, Kammerer CM, Katsuya T, Khor CC, Kilpeläinen TO, Koh WP, Koistinen HA, Kolcic I, Kooperberg C, Krieger JE, Kritchevsky SB, Kubo M, Kuusisto J, Lakka TA, Langefeld CD, Langenberg C, Launer LJ, Lehne B, Lemaitre RN, Li Y, Liang J, Liu J, Liu K, Loh M, Louie T, Mägi R, Manichaikul AW, McKenzie CA, Meitinger T, Metspalu A, Milaneschi Y, Milani L, Mohlke KL, Mosley TH, Mukamal KJ, Nalls MA, Nauck M, Nelson CP, Sotoodehnia N, O'Connell JR, Palmer ND, Pazoki R, Pedersen NL, Peters A, Peyser PA, Polasek O, Poulter N, Raffel LJ, Raitakari OT, Reiner AP, Rice TK, Rich SS, Robino A, Robinson JG, Rose LM, Rudan I, Schmidt CO, Schreiner PJ, Scott WR, Sever P, Shi Y, Sidney S, Sims M, Smith BH, Smith JA, Snieder H, Starr JM, Strauch K, Tan N, Taylor KD, Teo YY, Tham YC, Uitterlinden AG, van Heemst D, Vuckovic D, Waldenberger M, Wang L, Wang Y, Wang Z, Wei WB, Williams C, Wilson G, Wojczynski MK, Yao J, Yu B, Yu C, Yuan JM, Zhao W, Zonderman AB, Becker DM, Boehnke M, Bowden DW, Chambers JC, Deary IJ, Esko T, Farrall M, Franks PW, Freedman BI, Froguel P, Gasparini P, Gieger C, Horta BL, Kamatani Y, Kato N, Kooner JS, Laakso M, Leander K, Lehtimäki T; Lifelines Cohort, Groningen, The Netherlands (Lifelines Cohort Study), Magnusson PKE, Penninx B, Pereira AC, Rauramaa R, Samani NJ, Scott J, Shu XO, van der Harst P, Wagenknecht LE, Wang YX, Wareham NJ, Watkins H, Weir DR, Wickremasinghe AR, Zheng W, Elliott P, North KE, Bouchard C, Evans MK, Gudnason V, Liu CT, Liu Y, Psaty BM, Ridker PM, van Dam RM, Kardia SLR, Zhu X, Rotimi CN, Mook-Kanamori DO, Fornage M, Kelly TN, Fox ER, Hayward C, van Duijn CM, Tai ES, Wong TY, Liu J, Rotter JI, Gauderman WJ, Province MA, Munroe PB, Rice K, Chasman DI, Cupples LA, Rao DC, Morrison AC. *Multiancestry Genome-Wide Association Study of Lipid Levels Incorporating Gene- Alcohol Interactions*. Am J Epidemiol. 2019 Jun 1;188(6):1033-1054. PMID: 30698716. (IF=5.363, rank 38/398 (Q1) in Public Health)

91. Kilpeläinen TO, Bentley AR, Noordam R, Sung YJ, Schwander K, Winkler TW, Jakupović H, Chasman DI, Manning A, Ntalla I, Aschard H, Brown MR, de Las Fuentes L, Franceschini N, Guo X, Vojinovic D, Aslibekyan S, Feitosa MF, Kho M, Musani SK, Richard M, Wang H, Wang Z, Bartz TM, …, **Ghanbari M**, Giulianini F, Gu CC, Gu D, Harris TB, He J, Heikkinen S, Heng CK, Hunt SC, Ikram MA, Jonas JB, Koh WP, Komulainen P, Krieger JE, Kritchevsky SB, Kutalik Z, Kuusisto J, Langefeld CD, Langenberg C, Launer LJ, Leander K, Lemaitre RN, Lewis CE, Liang J; Lifelines Cohort Study, Liu J, Mägi R, Manichaikul A, Meitinger T, Metspalu A, Milaneschi Y, Mohlke KL, Mosley TH Jr, Murray AD, Nalls MA, Nang EK, Nelson CP, Nona S, Norris JM, Nwuba CV, O'Connell J, Palmer ND, Papanicolau GJ, Pazoki R, Pedersen NL, Peters A, Peyser PA, Polasek O, Porteous DJ, Poveda A, Raitakari OT, Rich SS, Risch N, Robinson JG, Rose LM, Rudan I, Schreiner PJ, Scott RA, Sidney SS, Sims M, Smith JA, Snieder H, Sofer T, Starr JM, Sternfeld B, Strauch K, Tang H, Taylor KD, Tsai MY, Tuomilehto J, Uitterlinden AG, van der Ende MY, van Heemst D, Voortman T, Waldenberger M, Wennberg P, Wilson G, Xiang YB, Yao J, Yu C, Yuan JM, Zhao W, Zonderman AB, Becker DM, Boehnke M, Bowden DW, de Faire U, Deary IJ, Elliott P, Esko T, Freedman BI, Froguel P, Gasparini P, Gieger C, Kato N, Laakso M, Lakka TA, Lehtimäki T, Magnusson PKE, Oldehinkel AJ, Penninx BWJH, Samani NJ, Shu XO, van der Harst P, Van Vliet-Ostaptchouk JV, Vollenweider P, Wagenknecht LE, Wang YX, Wareham NJ, Weir DR, Wu T, Zheng W, Zhu X, Evans MK, Franks PW, Gudnason V, Hayward C, Horta BL, Kelly TN, Liu Y, North KE, Pereira AC, Ridker PM, Tai ES, van Dam RM, Fox ER, Kardia SLR, Liu CT, Mook- Kanamori DO, Province MA, Redline S, van Duijn CM, Rotter JI, Kooperberg CB, Gauderman WJ, Psaty BM, Rice K, Munroe PB, Fornage M, Cupples LA, Rotimi CN, Morrison AC, Rao DC, Loos RJF. *Multi-ancestry study of blood lipid levels identifies four loci interacting with physical activity.* Nature Communications. 2019 Jan 22;10(1):376. PMID: 30670697. (IF=17.694, rank 6/71 (Q1, top 10%) in Multidisciplinary Sciences)

92. Kraja AT, Liu C, Fetterman JL, Graff M, Have CT, Gu C, Yanek LR, Feitosa MF, Arking DE, Chasman DI, Young K, Ligthart S, Hill WD, Weiss S, Luan J, Giulianini F, Li-Gao R, Hartwig FP, Lin SJ, Wang L, Richardson TG, Yao J, Fernandez EP, **Ghanbari M**, Wojczynski MK, Lee WJ, Argos M, Armasu SM, Barve RA, Ryan KA, An P, Baranski TJ, Bielinski SJ, Bowden DW, Broeckel U, Christensen K, Chu AY, Corley J, Cox SR, Uitterlinden AG, Rivadeneira F, Cropp CD, Daw EW, van Heemst D, de Las Fuentes L, Gao H, Tzoulaki I, Ahluwalia TS, de Mutsert R, Emery LS, Erzurumluoglu AM, Perry JA, Fu M, Forouhi NG, Gu Z, Hai Y, Harris SE, Hemani G, Hunt SC, Irvin MR, Jonsson AE, Justice AE, Kerrison ND, Larson NB, Lin KH, Love- Gregory LD, Mathias RA, Lee JH, Nauck M, Noordam R, Ong KK, Pankow J, Patki A, Pattie A, Petersmann A, Qi Q, Ribel-Madsen R, Rohde R, Sandow K, Schnurr TM, Sofer T, Starr JM, Taylor AM, Teumer A, Timpson NJ, de Haan HG, Wang Y, Weeke PE, Williams C, Wu H, Yang W, Zeng D, Witte DR, Weir BS, Wareham NJ, Vestergaard H, Turner ST, Torp-Pedersen C, Stergiakouli E, Sheu WH, Rosendaal FR, Ikram MA, Franco OH, Ridker PM, Perls TT, Pedersen O, Nohr EA, Newman AB, Linneberg A, Langenberg C, Kilpeläinen TO, Kardia SLR, Jørgensen ME, Jørgensen T, Sørensen TIA, Homuth G, Hansen T, Goodarzi MO, Deary IJ, Christensen C, Chen YI, Chakravarti A, Brandslund I, Bonnelykke K, Taylor KD, Wilson JG, Rodriguez S, Davies G, Horta BL, Thyagarajan B, Rao DC, Grarup N, Davila-Roman VG, Hudson G, Guo X, Arnett DK, Hayward C, Vaidya D, Mook-Kanamori DO, Tiwari HK, Levy D, Loos RJF, Dehghan A, Elliott P, Malik AN, Scott RA, Becker DM, de Andrade M, Province MA, Meigs JB, Rotter JI, North KE. *Associations of Mitochondrial and Nuclear Mitochondrial Variants and Genes with Seven Metabolic Traits*. Am J Hum Genet. 2019 Jan 3;104(1):112-138. PMID: 30595373. (IF=11.043, rank 10/178 (Q1, top 10%) in Genetics & Heredity)

93. Mustafa R, **Ghanbari M**, Evangelou M, Dehghan A. *An Enrichment Analysis for Cardiometabolic Traits Suggests Non-Random Assignment of Genes to microRNAs.* Int J Mol Sci. 2018 Nov 20;19(11):3666. PMID: 30463316. (IF=6.208, rank 69/296 (Q1) in Biochemistry & Molecular Biology)

94. Vojinovic D, Kavousi M, **Ghanbari M**, Brouwer RWW, van Rooij JGJ, van den Hout MCGN, Kraaij R, van Ijcken WFJ, Uitterlinden AG, van Duijn CM, Amin N. *Whole-Genome Linkage Scan Combined With Exome Sequencing Identifies Novel Candidate Genes for Carotid Intima-Media Thickness*. Front Genet. 2018 Oct 9;9:420. PMID: 30356672. (IF=4.772, rank 43/175 (Q2) in Genetics & Heredity)

95. Ward-Caviness CK, Huffman JE, Everett K, Germain M, van Dongen J, Hill WD, Jhun MA, Brody JA, **Ghanbari M**, Du L, Roetker NS, de Vries PS, Waldenberger M, Gieger C, Wolf P, Prokisch H, Koenig W, O'Donnell CJ, Levy D, Liu C, Truong V, Wells PS, Trégouët DA, Tang W, Morrison AC, Boerwinkle E, Wiggins KL, McKnight B, Guo X, Psaty BM, Sotoodenia N, Boomsma DI, Willemsen G, Ligthart L, Deary IJ, Zhao W, Ware EB, Kardia SLR, Van Meurs JBJ, Uitterlinden AG, Franco OH, Eriksson P, Franco-Cereceda A, Pankow JS, Johnson AD, Gagnon F, Morange PE, de Geus EJC, Starr JM, Smith JA, Dehghan A, Björck HM, Smith NL, Peters A. *DNA methylation age is associated with an altered hemostatic profile in a multiethnic meta-analysis*. Blood. 2018 Oct 25;132(17):1842-1850. PMID: 30042098. (IF=25.476, rank 2/78 (Q1, top 10%) in Hematology)

96. Feitosa MF, Kraja AT, Chasman DI, Sung YJ, Winkler TW, Ntalla I, Guo X, Franceschini N, Cheng CY, Sim X, Vojinovic D, Marten J, Musani SK, Li C, Bentley AR, Brown MR, Schwander K, Richard MA, Noordam R, Aschard H, Bartz TM, Bielak LF, Dorajoo R, Fisher V, Hartwig FP, Horimoto ARVR, Lohman KK, Manning AK, Rankinen T, Smith AV, Tajuddin SM, Wojczynski MK, Alver M, Boissel M, Cai Q, Campbell A, Chai JF, Chen X, …, **Ghanbari M**, Gigante B, Gu CC, Gu D, Hagenaars SP, Hallmans G, Harris TB, He J, Heikkinen S, Heng CK, Hirata M, Howard BV, Ikram MA; InterAct Consortium, John U, Katsuya T, Khor CC, Kilpeläinen TO, Koh WP, Krieger JE, Kritchevsky SB, Kubo M, Kuusisto J, Lakka TA, Langefeld CD, Langenberg C, Launer LJ, Lehne B, Lewis CE, Li Y, Lin S, Liu J, Liu J, Loh M, Louie T, Mägi R, McKenzie CA, Meitinger T, Metspalu A, Milaneschi Y, Milani L, Mohlke KL, Momozawa Y, Nalls MA, Nelson CP, Sotoodehnia N, Norris JM, O'Connell JR, Palmer ND, Perls T, Pedersen NL, Peters A, Peyser PA, Poulter N, Raffel LJ, Raitakari OT, Roll K, Rose LM, Rosendaal FR, Rotter JI, Schmidt CO, Schreiner PJ, Schupf N, Scott WR, Sever PS, Shi Y, Sidney S, Sims M, Sitlani CM, Smith JA, Snieder H, Starr JM, Strauch K, Stringham HM, Tan NYQ, Tang H, Taylor KD, Teo YY, Tham YC, Turner ST, Uitterlinden AG, Vollenweider P, Waldenberger M, Wang L, Wang YX, Wei WB, Williams C, Yao J, Yu C, Yuan JM, Zhao W, Zonderman AB, Becker DM, Boehnke M, Bowden DW, Chambers JC, Deary IJ, Esko T, Farrall M, Franks PW, Freedman BI, Froguel P, Gasparini P, Gieger C, Jonas JB, Kamatani Y, Kato N, Kooner JS, Kutalik Z, Laakso M, Laurie CC, Leander K, Lehtimäki T, Study LC, Magnusson PKE, Oldehinkel AJ, Penninx BWJH, Polasek O, Porteous DJ, Rauramaa R, Samani NJ, Scott J, Shu XO, van der Harst P, Wagenknecht LE, Wareham NJ, Watkins H, Weir DR, Wickremasinghe AR, Wu T, Zheng W, Bouchard C, Christensen K, Evans MK, Gudnason V, Horta BL, Kardia SLR, Liu Y, Pereira AC, Psaty BM, Ridker PM, van Dam RM, Gauderman WJ, Zhu X, Mook-Kanamori DO, Fornage M, Rotimi CN, Cupples LA, Kelly TN, Fox ER, Hayward C, van Duijn CM, Tai ES, Wong TY, Kooperberg C, Palmas W, Rice K, Morrison AC, Elliott P, Caulfield MJ, Munroe PB, Rao DC, Province MA, Levy D. *Novel genetic associations for blood pressure identified via gene-alcohol interaction in up to 570K individuals across multiple ancestries.* PLoS One. 2018 Jun 18;13(6):e0198166. PMID: 29912962. (IF=3.752, rank 29/73 (Q2) in Multidisciplinary Sciences)

97. Mens MMJ, **Ghanbari M**. *Cell Cycle Regulation of Stem Cells by MicroRNAs*. Stem Cell Rev Rep. 2018 Jun;14(3):309-322. PMID: 29541978. (IF=6.692, rank 44/195 (Q1) in Medicine, Research &, Experimental)

98. **Ghanbari M**, Peters MJ, de Vries PS, Boer CG, van Rooij JGJ, Lee YC, Kumar V, Uitterlinden AG, Ikram MA, Wijmenga C, Ordovas JM, Smith CE, van Meurs JBJ, Erkeland SJ, Franco OH, Dehghan A. *A systematic analysis highlights multiple long non-coding RNAs associated with cardiometabolic disorders*. J Hum Genet. 2018 Apr;63(4):431-446. PMID: 29382920. (IF=3.773, rank 80/175 (Q2) in Genetics & Heredity)

99. Medina-Gomez C, Kemp JP, Trajanoska K, Luan J, Chesi A, Ahluwalia TS, Mook- Kanamori DO, Ham A, Hartwig FP, Evans DS, Joro R, Nedeljkovic I, Zheng HF, Zhu K, Atalay M, Liu CT, Nethander M, Broer L, Porleifsson G, Mullin BH, Handelman SK, Nalls MA, Jessen LE, Heppe DHM, Richards JB, Wang C, Chawes B, Schraut KE, Amin N, Wareham N, Karasik D, Van der Velde N, Ikram MA, Zemel BS, Zhou Y, Carlsson CJ, Liu Y, McGuigan FE, Boer CG, Bønnelykke K, Ralston SH, Robbins JA, Walsh JP, Zillikens MC, Langenberg C, Li-Gao R, Williams FMK, Harris TB, Akesson K, Jackson RD, Sigurdsson G, den Heijer M, van der Eerden BCJ, van de Peppel J, Spector TD, Pennell C, Horta BL, Felix JF, Zhao JH, Wilson SG, de Mutsert R, Bisgaard H, Styrkársdóttir U, Jaddoe VW, Orwoll E, Lakka TA, Scott R, Grant SFA, Lorentzon M, van Duijn CM, Wilson JF, Stefansson K, Psaty BM, Kiel DP, Ohlsson C, Ntzani E, van Wijnen AJ, Forgetta V, **Ghanbari M**, Logan JG, Williams GR, Bassett JHD, Croucher PI, Evangelou E, Uitterlinden AG, Ackert-Bicknell CL, Tobias JH, Evans DM, Rivadeneira F. *Life-Course Genome-wide Association Study Meta-analysis of Total Body BMD and Assessment of Age-Specific Effects*. Am J Hum Genet. 2018 Jan 4;102(1):88-102. PMID: 29304378. (IF=11.043, rank 10/178 (Q1, top 10%) in Genetics & Heredity)

100. Karabegović I, Maas S, Medina-Gomez C, Zrimšek M, Reppe S, Gautvik KM, Uitterlinden AG, Rivadeneira F, **Ghanbari M**. Genetic Polymorphism of miR-196a-2 is Associated with Bone Mineral Density (BMD). Int J Mol Sci. 2017 Nov 25;18(12):2529. PMID: 29186852. (IF=6.208, rank 69/296 (Q1) in Biochemistry & Molecular Biology.

101. **Ghanbari M**, Iglesias AI, Springelkamp H, van Duijn CM, Ikram MA, Dehghan A, Erkeland SJ, Klaver CCW, Meester-Smoor MA; International Glaucoma Genetics Consortium (IGGC). *A Genome-Wide Scan for MicroRNA-Related Genetic Variants Associated With Primary Open-Angle Glaucoma*. Invest Ophthalmol Vis Sci. 2017 Oct 1;58(12):5368-5377. PMID: 29049738. (IF=4.925, rank 10/60 (Q1) in Ophthalmology)

102. Medina-Gomez C, Kemp JP, Dimou NL, Kreiner E, Chesi A, Zemel BS, Bønnelykke K, Boer CG, Ahluwalia TS, Bisgaard H, Evangelou E, Heppe DHM, Bonewald LF, Gorski JP, **Ghanbari M**, Demissie S, Duque G, Maurano MT, Kiel DP, Hsu YH, C J van der Eerden B, Ackert-Bicknell C, Reppe S, Gautvik KM, Raastad T, Karasik D, van de Peppel J, Jaddoe VWV, Uitterlinden AG, Tobias JH, Grant SFA, Bagos PG, Evans DM, Rivadeneira F. *Bivariate genome-wide association meta-analysis of pediatric musculoskeletal traits reveals pleiotropic effects at the SREBF1 /TOM1L2 locus*. Nature Communications. 2017 Jul 25;8(1):121. PMID: 28743860. (IF=17.694, rank 6/71 (Q1, top 10%) in Multidisciplinary Sciences).

103. Nano J, **Ghanbari M**, Wang W, de Vries PS, Dhana K, Muka T, Uitterlinden AG, van Meurs JBJ, Hofman A; BIOS consortium, Franco OH, Pan Q, Murad SD, Dehghan A. *Epigenome-Wide Association Study Identifies Methylation Sites Associated With Liver Enzymes and Hepatic Steatosis*. Gastroenterology. 2017 Oct;153(4):1096-1106.e2. PMID: 28624579. (IF=33.883, rank 3/93 (Q1, top 10%) in Gastroenterology & Hepatology)

104. **Ghanbari M**, Erkeland SJ, Xu L, Colijn JM, Franco OH, Dehghan A, Klaver CCW, Meester-Smoor MA. *Genetic variants in microRNAs and their binding sites within gene 3'UTRs associate with susceptibility to age-related macular degeneration*. Human Mutation. 2017 Jul;38(7):827-838. PMID: 28397307. (IF=4.7, rank 34/191 (Q1) in Genetics & Heredity)

105. Brahimaj A, Ligthart S, **Ghanbari M**, Ikram MA, Hofman A, Franco OH, Kavousi M, Dehghan A. *Novel inflammatory markers for incident pre-diabetes and type 2 diabetes: the Rotterdam Study*. Eur J Epidemiol. 2017 Mar;32(3):217-226. PMID: 28258520. (IF=12.434, rank 8/193 (Q1, top 10%) in Public, Environmental & Occupational Health).

106. van Rooij FJA, 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, Zon LI, 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. PMID: 28017375. IF=11.043, rank 10/178 (Q1, top 10%) in Genetics & Heredity)

107. M Rahimi, **M Ghanbari**, Z Fazeli, M Rouzrokh, S Omrani, R Mirfakhraie, M.D Omrani. *Association of SRD5A2 gene mutations with risk of hypospadias in the Iranian population*. J Endocrinol Invest. 2017 Apr;40(4):391-396. PMID: 27848231. (IF=5.476, rank 40/146 (Q2) in Endocrinology & Metabolism)

108. **Ghanbari M**, Ikram MA, de Looper HWJ, Hofman A, Erkeland SJ, Franco OH, Dehghan A. *Genome-wide identification of microRNA-related variants associated with risk of Alzheimer's disease*. Sci Rep. 2016 Jun 22;6:28387. PMID: 27328823. (IF=4.996, rank 17/71 (Q1) in Multidisciplinary Sciences).

109. **Ghanbari M**, Darweesh SK, de Looper HW, van Luijn MM, Hofman A, Ikram MA, Franco OH, Erkeland SJ, Dehghan A. *Genetic Variants in MicroRNAs and Their Binding Sites Are Associated with the Risk of Parkinson Disease*. Human Mutation. 2016 Mar;37(3):292-300. PMID: 26670097. (IF=4.7, rank 34/191 (Q1) in Genetics & Heredity)

110. 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, Räikkönen 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. 2016 Jan 15;25(2):358-70. PMID: 26561523. (IF=5.121, rank 27/178 (Q1) in Genetics & Heredity)

111. Bautista Niño PK, Durik M, Danser AH, de Vries R, Musterd-Bhaggoe UM, Meima ME, Kavousi M, **Ghanbari M**, Hoeijmakers JH, O'Donnell CJ, Franceschini N, Janssen GM, De Mey JG, Liu Y, Shanahan CM, Franco OH, Dehghan A, Roks AJ. *Phosphodiesterase 1 regulation is a key mechanism in vascular aging.* Clin Sci (Lond). 2015 Dec;129(12):1061-75. PMID: 26464516. (IF=6.876, rank 32/139 (Q1) in Medicine)

112. **Ghanbari M**, Franco OH, de Looper HW, Hofman A, Erkeland SJ, Dehghan A. *Genetic Variations in MicroRNA-Binding Sites Affect MicroRNA-Mediated Regulation of Several Genes Associated With Cardio-metabolic Phenotypes.* Circ Cardiovasc Genet. 2015 Jun;8(3):473-86. PMID: 25814643. (IF=4.534, rank 47/178 (Q2) in Genetics & Heredity)

113. **Ghanbari M**, Sedaghat S, de Looper HW, Hofman A, Erkeland SJ, Franco OH, Dehghan A. *The association of common polymorphisms in miR-196a2 with waist to hip ratio and miR-1908 with serum lipid and glucose.* Obesity (Silver Spring). 2015 Feb;23(2):495-503. PMID: 25557604. (IF=9.289, rank 14/146 (Q1, top 10%) in Endocrinology and metabolism)

114. **Ghanbari M**, de Vries PS, de Looper H, Peters MJ, Schurmann C, Yaghootkar H, Dörr M, Frayling TM, Uitterlinden AG, Hofman A, van Meurs JB, Erkeland SJ, Franco OH, Dehghan A. *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 Dec;35(12):1524-31. PMID: 25256095. (IF=4.7, rank 34/191 (Q1) in Genetics & Heredity)

115. Shirdel A, Azarpazhooh MR, Sahebari M, **Ghanbari M**, Mirfeizi SZ, Hutchinson I, Ziaee A, Rafatpanah H. *Association of IL-10 Gene Polymorphisms and Human T Lymphotropic Virus Type I-Associated Myelopathy/tropical Spastic Paraparesis in North-East of Iran (Mashhad)*. Iran J Basic Med Sci. 2013 Mar;16(3):258-63. PMID: 24470873. (IF=2.15, rank 95/139 (Q3) in Medicine, Research & Experimental)

116. Haber M, Platt DE, Ashrafian Bonab M, Youhanna SC, Soria-Hernanz DF, Martínez-Cruz B, Douaihy B, Ghassibe-Sabbagh M, Rafatpanah H, **Ghanbari M**, Whale J, Balanovsky O, Wells RS, Comas D, Tyler-Smith C, Zalloua PA; Genographic Consortium. *Afghanistan's ethnic groups share a Y-chromosomal heritage structured by historical events.* PLoS One. 2012;7(3):e34288. PMID: 22470552. (IF=2.74, rank 27/71 (Q2) in Multidisciplinary Sciences)

117. Azarpazhooh MR, Hasanpour K, **Ghanbari M**, Rezaee SA, Mashkani B, Hedayati-Moghaddam MR, Valizadeh N, Farid Hosseini R, Foroghipoor M, Soltanifar A, Sahebari M, Azadmanesh K, Hassanshahi G, Rafatpanah H. *Human T-lymphotropic virus type 1 prevalence in northeastern Iran, Sabzevar: an epidemiologic-based study and phylogenetic analysis.* AIDS Res Hum Retroviruses. 2012 Sep;28(9):1095-1101. PMID: 22229796. (IF=2.532, rank 113/195 (Q3) in Medicine)
118. Mohammadnejad Z, **Ghanbari M**, Ganjali R, Afshari JT, Heydarpour M, Taghavi SM, Fatemi S, Rafatpanah H. *Association between vitamin D receptor gene polymorphisms and type 1 diabetes mellitus in Iranian population*. Mol Biol Rep. 2012 Feb;39(2):831-7. PMID: 21584699. (IF=2.742, rank 237/296 (Q4) in Biochemistry & Molecular Biology)
119. Ahmadnia H, **Ghanbari M**, Moradi MR, Khaje-Dalouee M. *Effect of cigarette smoke on spermatogenesis in rats*. Urol J. 2007 Summer;4(3):159-63. PMID: 17987579. (IF=1.555, rank 82/112 (Q4) in Urology)
120. MH Nazarabadi, A Arghami, **M Ghanbari**. *The relation between consanguineous marriage and mental retardation of the offspring*. Medical Journal of The Islamic Republic of Iran (MJIRI). 2008 22 (3), 156-158. (IF=1.1, rank (Q4) in Medicine miscellaneous)

Books and book chapters

1. **Mohsen Ghanbari**. PhD thesis. *The Role of MicroRNAs in Age-Related Disorders: From population-based genetic studies to experimental validation*. 295 pages. Publisher Optima Grafische Communicatie, fall 2017. [ISBN: 978-94-92863-49-6]
2. **Mohsen Ghanbari**, Hossein Fattahi Massoum, Mohammad Taghi Rajabi. *A glance of different view point about Euthanasia*. 170 pages. Publisher Mashhad University of Medical Sciences (MUMS), fall 2007. [ISBN:964-5627-99-0]
3. Jana Nano, Eliana Portilla Fernandez, Jenna Troup, **Mohsen Ghanbari**, Oscar H. Franco, Taulant Muka. *Epigenetics in Human Disease*. Chapter 16: *Epigenetics of Diabetes in Humans*. Publisher ELSEVIER 2018.

International Conferences and Meetings (10 selected as first author presenter):

1. International Symposium on Biomedicine and Biomaterial 2019, Lanzhou, China (Oral presentation)
2. Third International and Fifteenth Iranian Genetics Congress 2019, Tehran, IRAN (Oral presentation)
3. The CHARGE Annual Meeting 2018, Rotterdam, the Netherlands (Oral presentation)
4. European Society of Human Genetics Annual Meeting 2017, Copenhagen, Denmark (Poster presentation)
5. European Society of Human Genetics Annual Meeting 2016, Barcelona, Spain (Poster presentation)
6. Mutation in the Genome Conference 2015, Leiden, the Netherlands (Oral presentation)
7. American Society of Human Genetics Annual Meeting 2015, Baltimore, USA (Poster presentation)
8. International Society of Genetic Epidemiology Meeting 2015, Baltimore, USA (Poster presentation)
9. European Society of Human Genetics Annual Meeting 2014, Millan, Italy (Poster presentation)
10. European microRNA Meeting 2013, Cambridge, UK (Poster presentation)