

Curriculum vitae of xxxxxxxxxxxxxxxxxxxxxxx

Personal Information *Date of Birth:* xxxxxxxx
E-mail: xxxxxxxx

Research Interests Statistical genetics (Genetic association studies; Mendelian Randomization) - Biostatistics (Causal analysis; Linear mixed models; Missing data analyses; Bayesian analysis)

Position Statistician, Senior researcher - (from *January* 2009); obtained the Italian National Scientific Habilitation (ASN) as Associate Professor in Statistics (from *July* 2017) and in Medical Statistics (from *26 April* 2021)

Education **M.A. in Economics**, July 10, 2003

G. d'Annunzio University, Pescara (Italy)

- Thesis: "Relation between variables and the causal analysis" (in Italian)

Ph.D. in Statistics, April 4, 2007

G. d'Annunzio University, Pescara (Italy)

- Thesis: "Estimation problems for dependent data and convergence rates" (in English)

Publications

1. F Del Greco M, M Di Marzio, A Panzera: A new class of excited random walks on trees. *Statistics and Probability Letters*, 18 : 1981 - 1989, 2008
2. F Del Greco M: Applications of Large Deviations to Hidden Markov Chains estimation. *Advanced Statistical Methods for the Analysis of Large Data-Sets* - Springer, 2011
3. F Del Greco M, Pattaro C, Luchner A, et al.: Genome-wide association analysis and fine mapping of NT-proBNP level provide novel insight into the Role of the *MTHFR-CLCN6-NPPA-NPPB* gene cluster. *Human Molecular Genetics*, 20(8) : 1660 - 71, 2011
4. Wain L et al.: Genome-wide association study identifies six new loci influencing pulse pressure and mean arterial pressure. *Nature Genetics*, 43(10) : 1005 - 1011, 2011
5. F Del Greco M, C Pattaro, C Minelli, P Pramstaller, J Thompson: A multiple imputation procedure of censored values in family-based genetic association studies, ISBN 9788861298828, 46th scientific meeting of the Italian Statistical Society, 2012
6. Franceschini N, et al.: Discovery and Fine Mapping of Serum Protein Loci through Transethnic Meta-analysis. *The American Journal of Human Genetics*, 91(4) : 744 - 753, 2012
7. I Pichler, F Del Greco M, M Gögele, et al.: Serum iron levels and the risk of Parkinson's disease: a Mendelian randomization study. *PLoS Medicine*, 10(6) : e1001462, 2013 (joint first author)
8. F Del Greco M, E Jones, P Pramstaller, N Sheehan, J Thompson: Investigation of pleiotropy in Mendelian randomisation studies with continuous outcome using aggregate genetic data. *Electronic Book Advances in Latent Variables* - ISBN 9788834325568, 2013
9. Moayyeri A, et al.: Genetic determinants of heel bone properties: Genome-wide association meta-analysis and replication in the GEFOS/GENOMOS consortium. *Human Molecular Genetics*, 23(11) : 3054 - 68, 2014
10. Arking D, et al.: Genetic association study of QT interval highlights calcium signaling pathways in myocardial repolarization. *Nature Genetics*, 46(8) : 826 - 36, 2014

11. F Del Greco M, C Minelli, N Sheehan, J Thompson: Detecting pleiotropy in Mendelian randomisation studies with summary genetic data and a continuous outcome. *Statistics in Medicine* 34 : 2926 – 2940, 2015
12. Gorski M, et al.: Genome-wide association study of kidney function decline in individuals of European descent, *Kidney International*, 87(5) : 1017 – 29, 2015
13. J Thompson, C Minelli, F Del Greco M: Mendelian randomization using public data from genetic consortia. *International Journal of Biostatistics*, DOI 10.1515/ijb-2015-0074, 12(2): 2016
14. F Del Greco M, C Pattaro, C Minelli, J Thompson: Bayesian analysis of censored response data in family-based genetic association studies. *Biometrical Journal* - DOI: 10.1002/bimj.201400107, 58(5) : 1039 – 1053, 2016
15. F Del Greco M, L Foco, I Pichler, P Eller, K Eller, B Benyamin, J Whitfield, GIS Consortium, CKDGen Consortium, P Pramstaller, J Thompson, C Pattaro, C Minelli: Serum iron level and kidney function: a Mendelian randomization study. *Nephrology Dialysis Transplantation* - DOI: 10.1093/ndt/gfw215, 32(2) : 273 – 278, 2016
16. P Sekula, F Del Greco M, C Pattaro, A Köttgen: Mendelian Randomization: An approach to assess causality using observational data. *Journal of the American Society of Nephrology*, 27(11) : 3253 – 3265, 2016
17. J Bowden, F Del Greco M, C Minelli, G Davey Smith, N Sheehan, J Thompson: Assessing the suitability of summary data for Mendelian randomization analyses using MR-Egger regression: the role of the I^2 statistic. *International Journal of Epidemiology*, DOI: 10.1093/IJC/dyw220, 2016
18. Kilpeläinen TO, et al.: Genome-wide meta-analysis uncovers novel loci influencing circulating leptin levels. *Nature Communications*, 7 : 10494, 2016
19. Amin N, et al.: Genetic variants in RBFOX3 are associated with sleep latency. *European Journal of Human Genetics* - DOI: 10.1038/ejhg.2016.31, 24(10) : 1488 – 95, 2016
20. van der Harst P, et al.: 52 genetic loci influencing myocardial mass. *Journal of the American College of Cardiology*, 68(13) : 1435 – 48, 2016
21. Jones SE, et al.: Genome-wide association analyses in 128,266 individuals identifies new morningness and sleep duration loci. *PLoS Genetics*, 12(8) : e1006125, 2016
22. Teumer A, et al.: Genome-wide meta-analysis identifies loci associated with circulating levels of IGF-I and IGFBP-3 with impact on metabolic and age related traits. *Aging cell*, 15(5) : 811 – 824, 2016
23. J Bowden, F Del Greco M, C Minelli, G Davey Smith, N Sheehan, J Thompson: A framework for the investigation of pleiotropy in two-sample summary data Mendelian randomization. *Statistics in Medicine*, 36(11) : 1783 – 1802, 2017
24. H Warren, et al.: Genome-wide association analysis identifies novel blood pressure loci and offers biological insights into cardiovascular risk. *Nature Genetics*, DOI: 10.1038/ng.3768 49(3) : 403 – 415, 2017
25. P Wild, et al.: Large-scale genome-wide analysis identifies genetic variants associated with cardiac structure and function. *Journal of Clinical Investigation*, DOI: 10.1172/JCI84840, 2017
26. J Thompson, C Minelli, J Bowden, F Del Greco M, D Gill, E Jones, C Shapland, N Sheehan: Mendelian randomization incorporating uncertainty about pleiotropy. *Statistics in Medicine*, DOI: 10.1002/SIM.7442, 2017
27. D Gill, F Del Greco M, AP Walker, SKS Srari, MA Laffan, C Minelli: The effect of iron status on risk of coronary artery disease: a Mendelian randomization study. *Arteriosclerosis Thrombosis and Vascular Biology*, DOI: 10.1161/ATV.BAHA.117.309757, 2017

28. D Gill, F Del Greco M, TM Rawson, P Sivakumaran, A Brown, NA Sheehan, C Minelli: Age at menarche and time spent in education: a Mendelian randomization study. *Behavior Genetics*, 47(2) : 1 – 6, 2017
29. LV Wain, et al.: Novel Blood Pressure Locus and Gene Discovery Using Genome-Wide Association Study and Expression Data Sets From Blood and the Kidney. *Hypertension*, DOI: 10.1161/HYPERTENSIONAHA.117.09438, 2017
30. S Grover, F Del Greco M, CM Stein, A Ziegler: Mendelian Randomization. *Methods in Molecular Biology*, DOI: 10.1007/978.1.4939.7274.6.29, 581 – 628, 2017
31. D Gill, CF Brewer, F Del Greco M, P Sivakumaran, J Bowden, NA Sheehan, C Minelli: Age at menarche and adult body mass index: a Mendelian randomization study. *International Journal of Obesity*, 42(9) : 1574 – 1581, 2018
32. J Bowden, W Spiller, F Del Greco M, N Sheehan, J Thompson, C Minelli, G Davey Smith: Improving the visualisation, interpretation and analysis of two-sample summary data Mendelian randomization via the radial plot and radial regression. *International Journal of Epidemiology*, 47(4) : 1264 – 1278, 2018
33. E Evangelou, et al.: Genetic analysis of over 1 million people identifies 535 new loci associated with blood pressure traits. *Nature Genetics*, 50(10) : 1412 – 1425, 2018
34. S Grover, F Del Greco M, I König: Evaluating the current state of Mendelian randomization studies: A protocol for a systematic review on methodological and clinical aspects using neurodegenerative disorders as outcome. *Systematic Reviews*, 7 : 145 – 150, 2018
35. G Paglia, F Del Greco M, et al.: Influence of collection tubes during quantitative targeted metabolomics studies in human blood samples. *Clin Chim Acta*, 486 : 320 – 328, 2018
36. van Setten J, et al.: PR interval genome-wide association meta-analysis identifies 50 loci associated with atrial and atrioventricular electrical activity. *Nature Commun.*, 9(1) : 2904, 2018
37. I König, F Del Greco M: Mendelian Randomization: Progressing towards understanding causality. *Neurology*, DOI: 10.1002/ana.25293, 2018
38. Ligthart, et al. Genome analyses of > 200, 000 individuals identify 58 loci for chronic inflammation and highlight pathways that link inflammation and complex disorders. *The American Journal of Human Genetics*, 103, 691706, 2018
39. J Bowden, F Del Greco M, C Minelli, D Lawlor, N Sheehan, J Thompson, G Davey Smith: Improving the accuracy of two-sample summary data Mendelian randomization: moving beyond the NOME assumption. *International Journal of Epidemiology*, DOI: 10.1093/ije/dyy258, 2018
40. E Marouli E, F Del Greco M, et al.: Mendelian randomisation analyses find pulmonary factors mediate the effect of height on coronary artery disease. *Commun Biol.*, DOI: 10.1038/s42003-019-0361-2, 2019
41. S Grover, F Del Greco M, MS Kasten, C Klein, C Lill, and I König: Risky behaviors and Parkinsons disease: A Mendelian randomization study. *Neurology*, 93(15) : e1412-e1424, 2019
42. F Del Greco M, L Foco, et al.: Lipidomics, atrial conduction, and body mass index: evidence from association, mediation, and Mendelian randomization models. *Circulation: Genomic and Precision Medicine* 12(7) : e002384, 2019
43. I Ntalla et al.: Multi-ancestry GWAS of the electrocardiographic PR interval identifies 202 loci underlying cardiac conduction. *Nature Communications*, 11(1), 2020
44. A Kuś, E Marouli, F Del Greco M., et al.: Variation in normal range thyroid function affects serum cholesterol levels, blood pressure and type 2 diabetes risk: A Mendelian randomization study. *Thyroid*, [http : // doi.org/ 10.1089/ thy.2020.0393](http://doi.org/10.1089/thy.2020.0393), 2020

45. E Marouli, A Kuś, F Del Greco M., et al.: Thyroid Function affects the risk of stroke via Atrial Fibrillation: A Mendelian Randomization Study. *Journal of Clinical Endocrinology and Metabolism*, 105(8), 2020
46. F Fazzini, et al.: Association of mitochondrial DNA copy number with metabolic syndrome and type 2 diabetes in 14, 176 individuals, *Journal of Internal Medicine*, DOI : 10.1111/joim.13242, 2021
47. A Kuś, et al.: Thyroid function and mood disorders: a Mendelian Randomization study. *Thyroid*, DOI: 10.1089/thy.2020.0884, 2021
48. C Minelli, F Del Greco M, DA van der Plaats, J Bowden, NA Sheehan, J Thompson: The use of two-sample methods for Mendelian randomization analyses on single large datasets. *Intern Journ Epid*, <https://doi.org/10.1093/ije/dyab084>, 2021
49. G Paglia et al.: Longitudinal assessment of chlorpyrifos exposure in farmers and residents of an Italian Alpine region. *Under review Exposure and Health* 2021
50. C Wittenbecher et al. Dihydroceramide- and ceramide-profiling: Insights into human cardiometabolic disease etiology. *Under revision at Nat Commun* 2021
51. J Liu et al. A multi-omics study of circulating phospholipid markers of blood pressure. *Submitted International Journal of Molecular Sciences* 2021
52. S Grover et al.: A Mendelian randomization study of glycemic and anthropometric traits and Parkinsons disease. *Submitted to Movement Disorders Journal* 2021

Fellowship and Grants

- *PHD Fellowship*, P.O.R./Abruzzo/Fondo Sociale Europeo (2005 - 2006) EUR 9, 000
- *Tutor Fellowship*, G. d'Annunzio University (2005 - 2006) EUR 5, 000
- *Post-doc Fellowship*, P.O.R./Abruzzo/Fondo Sociale Europeo (2008) EUR 4, 500
- *Fellowship*, Fondo Sociale Europeo (2012) EUR 3, 000
- *Travel grant*, Royal society - International Exchanges Scheme - 2012/R2 (inc. CNRS cost share), project "Mendelianrandomization with family data", PIs: Prof. John Thompson (Department of Health Sciences, University of Leicester, Leicester, UK), Dr. Cosetta Minelli (Respiratory Epidemiology, Occupational Medicine and Public Health, Imperial College London, UK) GBP 12, 000
- *PI research grant*, German Research Foundation (DFG), project "Mendelian Randomization and Path Models to infer causality for genetic disease with reduce penetrance", co/PI Prof. Andreas Ziegler (University of Lübeck) within the Research Unit "Reduced Penetrance in hereditary movement disorders"(December 2016) EUR 207, 050
- *PI research grant*, German Research Foundation (DFG), project "Mendelian randomization and polygenic risk scores to understand reduced penetrance in movement disorders", co/PI Prof. Inke König (University of Lübeck) and co/PI Dr. Anke Caliebe (University of Kiel) within the "Research Unit Reduced Penetrance in hereditary movement disorders"(June 2020) EUR 138, 200

Referee and Committee activity

International Journal of Epidemiology; Electronic Journal of Applied Statistical Analysis; Nature (Scientific Reports); Annals of Neurology; The Open Statistics and Probability Journal; Circulation; Molecular Metabolism

REPRISE (Register of Scientific Experts set up at the MIUR) for: Statistics; Biostatistics; Epidemiology

Member of Student Conference Awards (StCA) Committee of the International Society of Clinical Biostatistics