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**Author:** Balliu, Brunilda

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# List of Publications

**Balliu B**, Tsonaka R, Boehringer S and Houwing-Duistermaat JJ (2015). "A Retrospective Likelihood Approach for Efficient Integration of Multiple Omics Factors in Case-Control Association Studies". *Genetic Epidemiology. Advance online publication*. DOI: 10.1002/gepi.21884.

Tissier R, **Balliu B**, Tsonaka R, Uh HW, Houwing-Duistermaat JJ (2015). "Impact of the Family Structure in Weighted Correlation Network Analysis for Gene-Expression Studies". *BMC Proceedings. In Press*.

**Balliu B** and Zaitlen N (2015). "Leveraging Family Trios To Remove Biases And Increase Power In Tests Of Epistatic Interaction". *Manuscript submitted for publication*.

**Balliu B** and Boehringer S (2015). "Powerful Testing via Hierarchical Linkage Disequilibrium in Haplotype Association Studies". *Manuscript submitted for publication*.

**Balliu B** Wortz D, Horsthemke B, Wieczorekand D and Boehringer S (2014). "Classification and visualization based on derived image features: application to genetic syndromes". *PLoS ONE 9(11): e109033. doi:10.1371/journal.pone.0109033*.

Huijts PE, Hollestelle A, **Balliu B**, Houwing-Duistermaat JJ et al. (2014). CHEK2 \* 1100delC homozygosity in the Netherlands-prevalence and risk of breast and lung cancer. *European Journal of Human Genetics 22: p.46-51*.

**Balliu B**, Uh H, Tsonaka R, Boehringer S, Helmer Q and Houwing-Duistermaat JJ (2014). "Combining Information from Linkage and Association Mapping for Next Generation Sequencing Longitudinal Family Data". *BMC Proceedings 8(Suppl 1):S34*.

Houwing-Duistermaat JJ, Helmer Q, **Balliu B**, van den Akker E, Tsonaka R, Uh, H.W. (2014). Gene Analysis for Longitudinal Family Data using Random-Effects Models. *BMC Proceedings 8(Suppl 1):S88*.

Chen H, Malzahn D , **Balliu B**, Li C, Bailey JN (2014) Testing Genetic Association with Rare and Common Variants in Family Data. *Genetic Epidemiology 38 (Suppl 1):S37-43*.

**B Balliu**, Tsonaka R, van der Woude D, Boehringer S and Houwing-Duistermaat J (2012). "Combining Family and Twin Data in Association Studies to Estimate the Noninherited Maternal Antigens Effect". *Genet Epidemiol. 36(8):811-819*.



# Curriculum Vitae

Brunilda was born on the 30th of September 1987, in Vlorë, Albania. She finished her secondary education in 2005 at the 19ο Γενικό Λύκειο Αθηνών in Athens, Greece, where she graduated first in her class. She studied Statistics at the Athens University of Economics and Business, where she graduated as B.Sc. in 2010, again first in her class.

In 2010 she started her PhD at the Department of Medical Statistics and Bioinformatics, Leiden University Medical Center, under the supervision of Prof.dr. Jeanine Houwing Duistermaat and dr. Stefan Boehringer. Her work focused on the development of novel statistical methodology and computational tools for the analysis of studies with response-selective sampling designs, such as case-control or family-based studies, with applications to genetic association studies. The results of this research are presented in this thesis. Chapter 2 and 5 of this thesis have been awarded with the Best Student Presentation Award at the 6th Eastern Mediterranean Region of the International Biometric Society Conference (2011) and 27th International Biometric Society Conference (2014).

Since 2015, she is working as a post-doctoral fellow at the Departments of Pathology and Genetics at the Stanford University School of Medicine developing statistical methods for understanding the effects of genome variation on gene expression and disease, identification of causal regulatory variation using both family and large population cohorts, and methods development for understanding the causal basis of rare diseases.



