

Appendix

6.1 ACKNOWLEDGEMENTS

“The truth is rarely pure and never simple” - Oscar Wilde

Likewise, my quest for finding the truth was not simple (nor over), but was facilitated by the support of many people. With a big sense of accomplishment, gratitude and a bit of relief I am writing this chapter to thank all those people without whose help I would not be where I am today.

Firstly, I appreciate **Bojana Matejić** who introduced me to the scientific world by saying: „There is this program called SPSS“. Thank you for your help and understanding when I needed it the most. I feel like you enabled me to accomplish everything that followed and I am very grateful for this.

My promotor **prof. Cornelia van Duijn**, your critical thinking and power of deduction are very inspiring. I am thankful for getting the opportunity to work with you in the Genepi group. Thank you for embarking upon an unknown path of respiratory diseases with me and for pushing me to the limits.

My co-promotor **Najaf Amin**, thank you for being my supervisor and always having the patience to answer my questions when I come to your office. And for loving my cakes, it's always a pleasure to make them!

The reading committee, thank you for accepting to be a part of it and for reading my thesis. Dear **prof. Guy Brusselle**, your passion for science is very inspiring and I really appreciate your input and discussions over the years. Dear **prof. Marike Boezen**, thank you for many fruitful meetings, input, help and support. I have learned a lot from you. Dear **prof. Joyce van Meurs**, thank you for initiating useful scientific discussions at the department and for your passion for teaching. To the rest of the committee, thank you for accepting the role and making time for the defense day.

My “partners in crime”, moji sinovi **Desi** and **Jelena**, without you and our after-work brainstorming/complaining sessions (and caffetin) I would probably never survive the cold Dutch days, let alone finish the PhD. You are my “friends, but family”, the world cannot separate us! Thank you for paronymph-ing and always being there for me. Also, thanks to **Jovan** and **Ray** for making you happier. Looking forward for a lifetime together with you!

To **Ashley**, my favorite Duchie, we've been next to each other since day one, battling similar battles. Thank you for your patience, translations, explanations and answers to all my questions about the “Dutch ways”. Also a special thank you for being my paronymph! I hope to see you soon at this stage and for many more playdates in the neighborhood.

To the rest of the Genepi group – **Dina**, thank you for your help and patience over the years, you've been a true scientific role-model to me; **Dream**, my little Chinese sister, thank you for bringing joy and laughter to our office, I hope you will be very successful and satisfied with your thesis; **Adriana**, it has been a pleasure to hang out with you in and out of the office, I am hoping for many more garden chill-outs; **Shahzad**, thank you for fruitful discussions and for your patience with three loud girls in the office; **Hata**, you are very polite and diligent and great addition to the group; **Sven** we missed your unique ways since you left; **Ayse**, thank you for always being easy going and approachable, I hope you have a nice time in the UK; **Maaïke**, thank you for your help and kind approach; **Elisa**, I wish you and your family all the best; and last but not least, to the colleagues from the lab, **Andy**, **Jeannette**, **Andrea** and **Bernadette**, we all owe our thanks to you.

To the rest of the Groningen group – dear **Diana**, **Kim**, **Cleo**, **Maaïke**, **Judith**, **Ana Julia**, **prof. Dirkje Postma** thank you for nice collaboration, brainstorming and your input. Also, thank you for your company and support at the ERS congress.

Dear **Kate**, **Manuela**, **Gogo**, **Niko**, **Elena**, **Giorgia**, **Ruchika**, **Nemanja**, **Julijana**, I feel very lucky to have met you and consider you my friends. I miss you and hope to cross your path again soon.

To all other colleagues from the EMC Epidemiology department and all my co-authors - thank you – **Fjorda**, **Pooja**, **Eralda**, **Jinluan**, **Marten**, **Lies**, **Natalie**, **Emmely**, **Eliza**, **Mirjana**, **Gavro**, **Tamara**, **Nevena**, **Kozeta**, **Adela**, **Natalia**, **Kim**, **Leila**, **Martijn**, **Olivera**, **Rosa**, **Hieab**, **Mohsen**, **Peter**, **Tijana**, **Carolina**, **Vanja**, **Irma**, **Olja**, **Zorana**, **Milan T.**, **Milan S.**, **Strahinja**, **Ryan**, **Ana**, **Trudy**, **Jannine**, **Henning**, **Oscar**, **Arfan** – thank you for many discussions, meetings, collaborations, coffee breaks and chats at the department.

Nano, **Solange**, **Lennie**, **Astrid** and **Frank**, each of you played an important role in my PhD, thank you for your help.

To my Spanish family – **Jim**, **JM**, **Peter**, **Daniel**, **Josep**, **Effie** - thank you for the hospitality and for so much great food! I wish you good health, success and collaboration! ;) To **prof. Josep Roca**, thank you for the opportunity to join you at the department and for opening new opportunities for me.

To our group therapy squad throughout the faculty days and beyond - **Danka**, **Sanja**, **Sole**, **Boka**, **Goga**, **Nataša**, **Pavke**, **Sale**, **Stefi**, **Blazo** – thank you for your support, many visits in lonely days, for always being available and happy to meet for a coffee'n'update afternoons and for being able to share all our happy and sad news. **Danka**, thank you for our endless conversations over the phone and in person, for always having my back and supporting me and for my beautiful godson, Teo.

To **Mihailo, Goxy, Glišo, Marija, Čuka, Tina, Marijana, Marina and Bogdan** - some friendships cannot be broken by distance or time. Thank you for always making us feel like we never left. I hope to never lose you.

Kata and Doda, I am very pleased to have you in my life. You should know I will always be there for you!

Milisavi thank you for your love and support throughout my whole life.

To my **family in law**, thank you for accepting me as an equal member of the Prokić family.

To **my siblings**, thank you for enriching my life and for always being there for me, I am missing you every day. **Igor and Ana**, thank you for my beautiful nephew. **Joka**, you are my role-model and the voice in my head. I don't know a better person and I am proud to be your little sister. Thank you and **Marko** for being a great team and teaching us how to be great parents. **Makice**, it's so nice to have a little brother and see how he grows to be a good and strong person. You are my protection and sound mind, always giving the best advice. I wish you all the success in the world. **Boba**, thank you for making my brother a happier and better man. Also, thank you for the beautiful cover, one day you will be famous!

Petra, Jana and Luka thank you for being such wonderful, beautiful, smart kids, for the unconditional love and for making me a proud aunt.

To **my parents**, I can only say thank you and I love you. I know you are proud of what I have become, how I chose my path and what lays ahead for me. But, in truth, I can credit all this only to you, your rightful upbringing, unconditional love and selfless sacrifice. My wish is to always be there for you and never let you down.

To my husband, **Petar**, our Prokić team is the reason I feel I can do anything I set my mind to, knowing I have my rock and foundation to lean on. You've always been such a good influence and support throughout the years and I can't wait to share every next experience with you. Thank you for our beautiful daughter. I love you.

To my daughter, **Lenka**, you are such a calm and wonderful baby which allowed me to finish writing this book. So, thank you, this book would definitely not exist without you. Having you in my life gave me the final push I needed when it was the hardest. I hope to one day inspire you to never give up and push yourself to the limits for the things you care about. The immeasurable love and joy of having you shifted my perspectives and changed my life completely. I am excited about every new day and to experience every new milestone with you.

Ivana Prokić

Rotterdam

6.2 ABOUT THE AUTHOR



Ivana Prokić (born Nedeljković), was born in Belgrade, Serbia on 25th of June 1988, as a middle child of Anđelka and Miroslav Nedeljković. She completed her secondary education in the First Belgrade Gymnasium in 2007 and in the same year started her medical studies at the University of Belgrade, School of Medicine in Belgrade, Serbia. In 2013 she finished her medical studies and received the ERAWEB scholarship for continuing her studies towards the Master of Science degree. She came to Rotterdam in August 2013 and started the master in Genetic epidemiology at the Netherlands Institute for Health Sciences (NIHES), under the supervision of prof. Cornelia van

Duijn at the Genetic epidemiology unit of Erasmus Medical Center. In August 2014 she received a second ERAWEB scholarship to continue pursuing her PhD and for her thesis she also finished the Doctor of Science program at NIHES. During her PhD studies Ivana received the Marie Skłodowska-Curie scholarship (MCSA-RISE) and worked in LinkCare Health Services in Barcelona, Spain. Ivana will continue her work on respiratory diseases aiming to connect the research, clinical practice and industry. Since May 2017 she is wife of Petar Prokić and since September 2018 mother of Lenka Prokić.

6.3 PHD PORTFOLIO

Name PhD student: Ivana Prokić
 Erasmus MC department: Epidemiology
 Research school: Netherlands Institute of Health Sciences (NIHES)
 PhD period: August 2013 – December 2017
 Promotor: Prof. C.M.van Duijn
 Copromotor: Dr. N. Amin

Education	Year	ECTS*
Master of Science in Genetic epidemiology		
<i>Core Curriculum</i>		
Study Design	2013	4.3
Biostatistical Methods I: Basic Principles	2013	5.7
Biostatistical Methods II: Classical Regression Models	2013	4.3
Genetic-Epidemiologic Research Methods	2013	5.1
Linux for Scientists	2013	0.6
<i>Advanced Short Courses</i>		
Bayesian Statistics	2014	1.4
Women's Health	2014	0.9
Advances in Genome-Wide Association Studies	2014	1.4
Family-based Genetic Analysis	2014	1.4
Mendelian Randomization	2014	0.9
A first encounter with next-generation sequencing data	2014	1.4
<i>Skills Courses</i>		
English Language	2013	1.4
Introduction to Medical Writing	2014	1.1
Courses for the Quantitative Researcher	2014	1.4
<i>Erasmus Summer Programme</i>		
Principles of Research in Medicine	2013	0.7
Clinical Decision Analysis	2013	0.7
Methods of Public Health Research	2013	0.7
Health Economics	2013	0.7
Genome Wide Association Analysis	2014	1.4
Conceptual Foundation of Epidemiologic Study Design	2013	0.7
Principles of Genetic Epidemiology	2013	0.7
Genomics in Molecular Medicine	2014	1.4
Markers and Prognostic Research	2013	0.7
Advances in Genomics Research	2014	0.4
The Practice of Epidemiologic Analysis	2013	0.7

Education	Year	ECTS*
Doctor of Science in Genetic epidemiology		
Causal Inference	2015	0.7
History of Epidemiologic Ideas	2015	0.7
Advances in Epidemiologic Analysis	2015	0.4
Causal Mediation Analysis	2015	0.7
Psychopharmacology	2015	1.4
Missing Values in Clinical Research	2015	0.7
Principles of Epidemiologic Data Analysis	2015	0.7
Qualitative Research	2015	1.4
Advanced Genetic & Omics Data Analysis 2	2014	0.7
Course Biomedical Research Techniques XIII	2014	1.5
NGS in DNA Diagnostics Course	2014	1.0
Research Integrity	2016	0.3
Attended Seminars and Meetings		
Seminars at the department of Epidemiology, Erasmus MC	2013-2017	4.5
Genetic epidemiology working group meetings, Erasmus MC	2013-2017	4.5
PhD students of Epidemiology department seminars (2020 meetings), ErasmusMC	2015-2017	2
Longfonds consortium meetings	2014-2017	3
BBMRI-NL consortium meetings	2016-2017	2
CHARGE consortium meetings	2014-2017	4
GIANT consortium meetings	2013-2014	2
Presentations at Conferences and Meetings		
Epigenetics of common diseases conference (Cambridge, UK) – oral	2015	1
BIOS symposium (Amsterdam, the Netherlands) – oral	2016	0.5
European Respiratory Society Congress (Milan, Italy) – oral	2017	1
CHARGE consortium meeting (New York, USA) – poster	2017	0.8
ERS Satellites: Advances in precision medicine in COPD & ILD	2019	1
Awards and scholarships		
ERAWEB I – scholarship for Master of Science program	2013	
ERAWEB II– scholarship for PhD	2014	
Travel award Epigenetics of common diseases conference	2015	
Marie Skłodowska-Curie Research and Innovation Staff Exchange	2017	
Teaching		
Teaching assistant for Principles of Genetic Epidemiology course	2016	0.5
Other		
Peer review of articles for Epigenetics journal	2018	

*ECTS (European Credit Transfer System) equals a workload of 28 hours.

LIST OF PUBLICATIONS

1. **DNA Methylation Signatures of Depressive Symptoms in Middle-aged and Elderly Persons**, *JAMA Psychiatry*, vol. 75, no. 9, p. 949, Sep. 2018
O. Story Jovanova*, **I. Nedeljković***, D. Spieler*, R. M. Walker*, C. Liu*, M. Luciano, J. Bressler*, J. Brody, A. J. Drake, K. L. Evans, R. Gondalia, S. Kunze, B. Kuhnel, J. Lahti, R. N. Lemaitre, R. E. Marioni, B. Swenson, J. J. Himali, H. Wu, Y. Li, A. F. McRae, T. C. Russ, J. Stewart, Z. Wang, G. Zhang, K.-H. Ladwig, A. G. Uitterlinden, X. Guo, A. Peters, K. Räikkönen, J. M. Starr, M. Waldenberger, N. R. Wray, E. A. Whitsel, N. Sotoodehnia, S. Seshadri, D. J. Porteous, J. van Meurs, T. H. Mosley, A. M. McIntosh, M. M. Mendelson, D. Levy, L. Hou, J. G. Eriksson, M. Fornage, I. J. Deary, A. Baccarelli, H. Tiemeier, and N. Amin.
2. **From blood to lung tissue: effect of cigarette smoke on DNA methylation and lung function**, *Respir. Res.*, vol. 19, no. 1, p. 212, Dec. 2018
M. de Vries, D. A. van der Plaats, **I. Nedeljković**, R. N. Verkaik-Schakel, W. Kooistra, N. Amin, C. M. van Duijn, C.-A. Brandsma, C. C. van Diemen, J. M. Vonk, and H. Marike Boezen.
3. **A genome-wide linkage study for chronic obstructive pulmonary disease in a dutch genetic isolate identifies novel rare candidate variants**, *Front. Genet.*, vol. 9, no. APR 2018
I. Nedeljković, N. Terzikhan, J. M. Vonk, D. A. van der Plaats, L. Lahousse, C. C. van Diemen, B. D. Hobbs, D. Qiao, M. H. Cho, G. G. Brusselle, D. S. Postma, H. M. Boezen, C. M. van Duijn, and N. Amin.
4. **Life-Course Genome-wide Association Study Meta-analysis of Total Body BMD and Assessment of Age-Specific Effects**, *Am. J. Hum. Genet.*, vol. 102, no. 1, pp. 88–102, 2018
C. Medina-Gomez, J. P. Kemp, K. Trajanoska, J. Luan, A. Chesi, T. S. Ahluwalia, D. O. Mook-Kanamori, A. Ham, F. P. Hartwig, D. S. Evans, R. Joro, **I. Nedeljković**, H. F. Zheng, K. Zhu, M. Atalay, C. T. Liu, M. Nethander, L. Broer, G. Porleifsson, B. H. Mullin, S. K. Handelman, M. A. Nalls, L. E. Jessen, D. H. M. Heppel, J. B. Richards, C. Wang, B. Chawes, K. E. Schraut, N. Amin, N. Wareham, D. Karasik, N. Van der Velde, M. A. Ikram, B. S. Zemel, Y. Zhou, C. J. Carlsson, Y. Liu, F. E. McGuigan, C. G. Boer, K. Bønnelykke, S. H. Ralston, J. A. Robbins, J. P. Walsh, M. C. Zillikens, C. Langenberg, R. Li-Gao, F. M. K. Williams, T. B. Harris, K. Akesson, R. D. Jackson, G. Sigurdsson, M. den Heijer, B. C. J. van der Eerden, J. van de Peppel, T. D. Spector, C. Pennell, B. L. Horta, J. F. Felix, J. H. Zhao, S. G. Wilson, R. de Mutsert, H. Bisgaard, U. Styrkarsdóttir, V. W. Jaddoe, E. Orwoll, T. A. Lakka, R. Scott, S. F. A. Grant, M. Lorentzon, C. M. van Duijn, J. F. Wilson, K. Stefansson, B. M. Psaty, D. P. Kiel, C. Ohlsson, E. Ntzani, A. J. van Wijnen, V. Forgetta, M. Ghanbari, J. G. Logan, G. R. Williams, J. H. D. Bassett, P. I. Croucher, E. Evangelou, A. G. Uitterlinden, C. L. Ackert-Bicknell, J. H. Tobias, D. M. Evans, and F. Rivadeneira.
5. **Long-term Air Pollution Exposure, Genome-wide DNA Methylation and Lung Function in the LifeLines Cohort Study**, *Environ. Health Perspect.*, vol. 126, no. 02, Feb. 2018
A. J. de F.C. Lichtenfels, D. A. van der Plaats, K. de Jong, C. C. van Diemen, D. S. Postma, **I. Nedeljković**, C. M. van Duijn, N. Amin, S. la Bastide-van Gemert, M. de Vries, C. K. Ward-Caviness, K. Wolf, M. Waldenberger, A. Peters, R. P. Stolk, B. Brunekreef, H. M. Boezen, and J. M. Vonk.

6. **Occupational exposure to pesticides is associated with differential DNA methylation**, *Occup. Environ. Med.*, p. oemed-2017-104787, Feb. 2018
D. A. van der Plaat, K. de Jong, M. de Vries, C. C. van Diemen, **I. Nedeljković**, N. Amin, H. Kromhout, R. Vermeulen, D. S. Postma, C. M. van Duijn, H. M. Boezen, and J. M. Vonk.
7. **Understanding the role of the chromosome 15q25.1 in COPD through epigenetics and transcriptomics**, *Eur. J. Hum. Genet.*, pp. 1–14, Feb. 2018
I. Nedeljković, E. Carnero-Montoro, L. Lahousse, D. A. van der Plaat, K. de Jong, J. M. Vonk, C. C. van Diemen, A. Faiz, M. van Den Berge, M. Obeidat, Y. Bossé, D. C. Nickle, B. Consortium, A. G. Uitterlinden, J. J. B. van Meurs, B. C. H. Stricker, G. G. Brusselle, D. S. Postma, H. M. Boezen, C. M. van Duijn, and N. Amin.
8. **COPD GWAS variant at 19q13.2 in relation with DNA methylation and gene expression**, *Hum. Mol. Genet.*, vol. 27, no. 2, pp. 396–405, Jan. 2017
I. Nedeljković, L. Lahousse, E. Carnero-Montoro, A. Faiz, J. M. Vonk, K. de Jong, D. A. van der Plaat, C. C. van Diemen, M. van den Berge, M. Obeidat, Y. Bossé, D. C. Nickle, B. I. O. S. Consortium, A. G. Uitterlinden, J. B. J. van Meurs, B. H. C. Stricker, G. G. Brusselle, D. S. Postma, H. M. Boezen, C. M. van Duijn, and N. Amin.
9. **Genome-wide association study on the FEV₁/FVC ratio in never-smokers identifies HHIP and FAM13A**, *J. Allergy Clin. Immunol.*, vol. 139, no. 2, pp. 533–540, Feb. 2017
D. A. van der Plaat, K. de Jong, L. Lahousse, A. Faiz, J. M. Vonk, C. C. van Diemen, **I. Nedeljković**, N. Amin, G. G. Brusselle, A. Hofman, C. A. Brandsma, Y. Bossé, D. D. Sin, D. C. Nickle, C. M. van Duijn, D. S. Postma, and H. M. Boezen.
10. **The well-known gene HHIP and novel gene MECR are implicated in small airway obstruction**, *Am. J. Respir. Crit. Care Med.*, vol. 194, no. 10, pp. 1299–1302, Nov. 2016
D. A. Van Der Plaat, K. De Jong, L. Lahousse, A. Faiz, J. M. Vonk, C. C. Van Diemen, **I. Nedeljković**, N. Amin, M. Obeidat, C. M. Van Duijn, H. Marika Boezen, and D. S. Postma.
11. **Novel Genetic Susceptibility Loci for FEV₁ in the Context of Occupational Exposure in Never-Smokers**, *Am. J. Respir. Crit. Care Med.*, vol. 194, no. 6, pp. 769–772, Sep. 2016
K. de Jong, J. M. Vonk, A. Faiz, D. A. van der Plaat, W. Timens, Y. Bossé, H. Kromhout, **I. Nedeljković**, D. S. Postma, and H. M. Boezen.
12. **Novel DNA methylation sites of glucose and insulin homeostasis: an integrative cross-omics analysis**. *bioRxiv*. October 2018:432070. doi:10.1101/432070
J. Liu, E. Carnero-Montoro, J. van Dongen, S. Lent, **I. Nedeljković**, S. Ligthart, P. C. Tsai, T. C. Martin, P. R. Mandaviya, R. Jansen, M. J. Peters, L. Duijts, V. W. V. Jaddoe, H. Tiemeier, J. F. Felix, A. Y. Chu, D. Levy, S. J. Hwang, J. Bressler, R. Gondalia, E. L. Salfati, C. Herder, B. A. Hidalgo, T. Tanaka, A. Zenobia Moore, R. N. Lemaitre, M. A. Jhun, J. A. Smith, N. Sotoodehnia, S. Bandinelli, L. Ferrucci, D. K. Arnett, H. Grallert, T. L. Assimes, L. Hou, A. Baccarelli, E. A. Whitsel, K. Willems van Dijk, N. Amin, A. G. Uitterlinden, E. J. G. Sijbrands, O. H. Franco, A. Dehghan, T. D. Spector, J. Dupuis, M. F. Hivert, J. I. Rotter, J. B. Meigs, J. S. Pankow, J. B. J. van Meurs, A. Isaacs, D. I. Boomsma, J. T. Bell, A. Demirkan, C. M. van Duijn.

13. **Newborn DNA-methylation, childhood lung function, and the risks of asthma and COPD across the life course.** *Eur Respir J.* February 2019;1801795. doi:10.1183/13993003.01795-2018
H. T. den Dekker*, K. Burrows*, J. F. Felix*, L. A. Salas, **I. Nedeljković**, J. Yao, S. L. Rifas-Shiman, C. Ruiz-Arenas, N. Amin, M. Bustamante, D. L. DeMeo, A. John Henderson, C. G. Howe, M. F. Hivert, M. A. Ikram, J. C. de Jongste, L. Lahousse, P. R. Mandaviya, J. B. van Meurs, M. Pinart, G. C. Sharp, L. Stolk, A. G. Uitterlinden, J. M. A., Augusto A. Litonjua, C. V. Breton, G. G. Brusselle, J. Sunyer, G. Davey Smith, C. L. Relton[#], V. W.V. Jaddoe^{**}, L. Duijts.^{**}

14. **A cross-omics integrative study of metabolomic signatures of Chronic obstructive pulmonary disease.** *Submitted for publication.*
I. Nedeljković, L. Lahousse, M. de Vries, J. Liu, M. Kalaoja, J. M. Vonk, D. A. van der Plaat, C. C. van Diemen, A. van der Spek, A. Zhernakova, J. Fu, M. Ghanbari, M. Ala-Korpela, J. Kettunen, A. S. Havulinna, M. Perola, V. Salomaa, L. Lind, J. Ärnlöv, B. H.C. Stricker, G. G. Brusselle, H. M. Boezen, C. M. van Duijn*, N. Amin*.

15. **DNA methylation is associated with lung function in never-smokers.** *Submitted for publication.*
M. de Vries, **I. Nedeljković**, D. van der Plaat, A. Zhernakova, L. Lahousse, G. G. Brusselle, BIOS Consortium, N. Amin, C. M. van Duijn, J. M. Vonk, H. M. Boezen.

16. **Limited overlap in significant hits between genome-wide association studies on two airflow obstruction definitions in the same population.** *Submitted for publication.*
D. A. van der Plaat, J. M. Vonk, L. Lahousse, K. de Jong, A. Faiz, **I. Nedeljković**, N. Amin, C. C. van Diemen, G. G. Brusselle, Y. Bossé, CA, K. Hao, P. D. Paré, C. M. van Duijn, D. S. Postma, H. M. Boezen.

17. **Occupational exposure to gases/fumes and mineral dust affect DNA methylation levels of genes regulating expression.** *Submitted for publication.*
D. A. van der Plaat; J. M. Vonk†; N. Terzikhan†; K. de Jong; M. de Vries; S. La Bastide-van Gemert; C. C. van Diemen; L. Lahousse; G. G. Brusselle; **I. Nedeljković**; N. Amin; BIOS consortium; H. Kromhout; R. C. H. Vermeulen; D. S. Postma; C. M. van Duijn; H. M. Boezen.

18. **Genetic correlation of Chronic Obstructive Pulmonary Disease and non-pulmonary comorbidity.** *In preparation.*
I. Nedeljković, M. de Vries, J. M. Vonk, L. Lahousse, B. H.C. Stricker, G. G. Brusselle, N. Amin, M. Boezen, C. M. van Duijn

19. **Novel adiponectin-associated variants implicate new obesity and lipid biology.** *Submitted for publication.*
C. N. Spracklen*, T. Karaderi*, H. Yaghootkar, C. Schurmann, R. S. Fine, Z. Kutalik, M. H. Preuss, Y. Lu, L. B.L. Wittemans, L. S. Adair, M. Allison, N. Amin, P. L. Auer, T. M. Bartz, M. Blüher, M. Boehnke, J. B. Borja, J. Bork-Jensen, L. Broer, D. I. Chasman, Y.-Der Ida Chen, P. Chirstofidou, A. Demirkan, K. W. van Dijk, C. M. van Duijn, M. F. Feitosa, M. E. Garcia, M. Graff, H. Grallert, N. Grarup, X. Guo, J. Haesser, T. Hansen, T. B. Harris, H. M. Highland, J. Hong, M. A. Ikram, E. Ingelsson, R. Jackson, P. Jousilahti, M. Kähönen, J. R. Kizer, P. Kovacs, J. Kriebel, M. Laakso, L. A. Lange, T. Lehtimäki, J. Li, R. Li-Gao, L. Lind, J. Luan, L.-Pekka Lyytikäinen, S.

MacGregor, D. Mackey, A. Mahajan, M. Mangino, S. Männistö, M. McCarthy, B. McKnight, C. Medina-Gomez, J. B. Meigs, S. Molnos, D. Mook-Kanamori, A. P. Morris, R. de Mutsert, M. A. Nalls, **I. Nedeljković**, K. E. North, C. E. Pennell, A. D. Pradhan, M. A. Province, O. T. Raitakari, C. K. Raulerson, A. P. Reiner, P. M. Ridker, S. Ripatti, N. Robertson, J. I. Rotter, V. Salomaa, A. A. Sandoval-Zárate, C. M. Sitlani, T. D. Spector, K. Strauch, M. Stumvoll, K. D. Taylor, B. Thuesen, A. Tönjes, A. G. Uitterlinden, C. Venturini, M. Walker, C. A. Wang, S. Wang, N. J. Wareham, S. M. Willems, J. G. Wilson, Y. Wu, J. Yao, K. L. Young, C. Langenberg, T. M. Frayling, T. O. Kilpeläinen, C. M. Lindgren**, R. J.F. Loos**, K. L. Mohlke**

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Abstracts

1. Identification of novel rare genetic variants associated with COPD in the general population

M. de Vries, D. A. van der Plaat, **I. Nedeljković**, K. Joeri van der Velde, N. Amin, C. van Duijn, J. M. Vonk, H. Marika Boezen, C. C. van Diemen. *European Respiratory Journal* 52 (suppl 62) OA2193; DOI: 10.1183/13993003.congress-2018.OA2193 Published 19 November 2018

2. A genome-wide SNP-by-NO2 interaction study on lung function in the LifeLines study

A. Julia De Faria Coimbra Lichtenfels, D. van der Plaat, K. de Jong, C. C. van Diemen, **I. Nedeljković**, C. M. van Duijn, N. Amin, R. P. Stolk, B. Brunekreef, M. Boezen, J. M. Vonk. *European Respiratory Journal* 50 (suppl 61) PA4475; DOI: 10.1183/1393003.congress-2017.PA4475 Published 6 December 2017

3. DNA methylation mediates the association between occupational exposures and lung function

D. van der Plaat, M. de Vries, S. Bastide-van Gemert, K. de Jong, C. van Diemen, **I. Nedeljković**, N. Amin, H. Kromhout, R. Vermeulen, D. Postma, C. van Duijn, J. Vonk, M. Boezen. *European Respiratory Journal* 50 (suppl 61) OA2946; DOI: 10.1183/1393003.congress-2017.OA2946 Published 6 December 2017

4. A genome-wide linkage study for COPD in a Dutch genetic isolate

I. Nedeljković, N. Terzikhan, J. M. Vonk, D. A. van der Plaat, L. Lahousse, C. C. van Diemen, G. G. Brusselle, H. Marika Boezen, C. M. van Duijn, N. Amin. *European Respiratory Journal* 50 (suppl 61) OA1789; DOI: 10.1183/1393003.congress-2017.OA1789 Published 6 December 2017

5. LATE-BREAKING ABSTRACT: Occupational exposure to pesticides is associated with differential DNA methylation

D. van der Plaat, K. de Jong, J. Vonk, C. van Diemen, **I. Nedeljković**, N. Amin, H. Kromhout, R. Vermeulen, C. van Duijn, D. Postma, M. Boezen. *European Respiratory Journal* 48 (suppl 60) PA1211; DOI: 10.1183/13993003.congress-2016.PA1211 Published 8 November 2016

6. **Identification of Novel Genes Related to Two Definitions of Airway Obstruction in Never-Smokers**
K. de Jong, A. Faiz, J. M. Vonk, C. C. van Diemen, **I. Nedeljković**, N. Amin, C. Anke Brandsma, Y. Bosse, D. D. Sin, D. C. Nickle, C. M. van Duijn, Dirkje S. Postma, H. Marike Boezen. MAY 2016 B105. COPD: EPIDEMIOLOGY AND GENETICS
7. **Identification of Novel Genes Related to Obstruction of the Small Airways in Adult Never-Smokers**
K. de Jong, A. Faiz, J. M. Vonk, C. C. van Diemen, **I. Nedeljković**, N. Amin, C. Anke Brandsma, Y. Bosse, D. D. Sin, D. C. Nickle, C. M. van Duijn, H. Marike Boezen, D. S. Postma. MAY 2016 B105. COPD: EPIDEMIOLOGY AND GENETICS
8. **Variants in the Nicotine Acetylcholine Receptor (CHRNA 3/5) Locus May Play a Role in COPD Development Via Smoking Status**
K. de Jong, J. M. Vonk, C. C. van Diemen, **I. Nedeljković**, N. Amin, C. M. van Duijn, D. S. Postma, H. Marike Boezen. MAY 2016 B105. COPD: EPIDEMIOLOGY AND GENETICS
9. **DNA Methylation Mediates the Effect of Cigarette Smoke Exposure on Lung Function Levels**
D. A. van Der Plaats, A. J.F.C. Lichtenfels, **I. Nedeljković**, N. Amin, C. M. van Duijn, D. S. Postma, C. C. van Diemen, J. M. Vonk, H. M. Boezen. MAY 2017 D28. THE WEB OF OMICS: DNA, RNA, AND PROTEIN MODIFICATIONS