

# Analyzing spatial transcriptomics and neuroimaging data in neurodegenerative diseases

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#### Citation

Keo, D. (2020, December 3). *Analyzing spatial transcriptomics and neuroimaging data in neurodegenerative diseases*. Retrieved from https://hdl.handle.net/1887/138480

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Author: Keo, D.

Title: Analyzing spatial transcriptomics and neuroimaging data in neurodegenerative

diseases

**Issue Date:** 2020-12-03

### **PUBLICATIONS**

- **A. Keo**, O. Dzyubachyk, J. van der Grond, J. J. van Hilten, M. J. T. Reinders, and A. Mahfouz, "Transcriptomic signatures associated with regional thickness changes in Parkinson's disease," *bioRxiv* (2020).
- M. Meijer, **A. Keo**, J. M. C. van Leeuwen, O. Dzyubachyk, O. C. Meijer, C. H. Vinkers, and A. Mahfouz, "Molecular characterization of the stress network in the human brain," *bioRxiv* (2020).
- **A. Keo**, A. Mahfouz, A. M. T. Ingrassia, J. P. Meneboo, C. Villenet, E. Mutez, T. Comptdaer, B. P. F. Lelieveldt, M. Figeac, et al., "Transcriptomic signatures of brain regional vulnerability to Parkinson's disease," *Commun. Biol.* 3, 1–12 (2020).
- C. Anyansi, **A. Keo**, B. J. Walker, T. J. Straub, A. L. Manson, A. M. Earl, and T. Abeel, "QuantTB- A method to classify mixed Mycobacterium tuberculosis infections within whole genome sequencing data," *BMC Genomics* 21, 1–16 (2020).
- **A. Keo**, O. Dzyubachyk, J. van der Grond, A. Hafkemeijer, W. D. J. van de Berg, J. J. van Hilten, M. J. T. Reinders, and A. Mahfouz, "Cholinergic circuit genes in the healthy brain are differentially expressed in regions that exhibit gray matter loss in Parkinson's disease," *bioRxiv* (2019).
- **A. Keo**, N. A. Aziz, O. Dzyubachyk, J. van der Grond, W. M. C. van Roon-Mom, B. P. F. Lelieveldt, M. J. T. Reinders, and A. Mahfouz, "Co-expression Patterns between *ATN1* and *ATXN2* Coincide with Brain Regions Affected in Huntington's Disease," *Front. Mol. Neurosci.* 10, 1–13 (2017).

### **ACKNOWLEDGEMENTS**

The PhD time has been a great journey, where family, friends, and colleagues have stood by my side and have supported me all the way. Your support and encouraging words have lifted me and helped me to push my own boundaries. Getting to the place where I am now as a person and as a scientist would have not been possible without you.

First, I want to thank the promoters and supervisors for giving me the opportunity to pursue my interest in Bioinformatics. Ahmed, you have been a great supervisor and I also appreciate you as a friend. Although I have been stubborn sometimes, your valuable ideas helped me grow and improve. Marcel, thank you for your trust and the chance to pursue a PhD. I enjoyed working with you and that is because I appreciate your honesty but also the teasing jokes. Boudewijn, I am honored to have been part of your team. Your enthusiasm for research is great to see and is uplifting to everyone. To my dear colleagues at the Division of Image Processing (Oleh, Baldur, Denis, Michèle, Leo, Els, Anna-Carien, Thomas, Marius, Mohamed, Niels, Jeroen, Antonis, Zhiwei), Leiden Computational Biology Center (Erik, Daniele, Indu, Thies, Thomas, Lieke, Martijn), Delft Bioinformatics Lab (Amin, Sjoerd, Jasper, Alexey, Christian, Soufiane, Alex, Tom, Stavros, Christine, Aysun, Joana, Ramin, Tamim, Meng, Mostafa, Mohammed, Mark, Sven, Henne, Thomas, Niccolo, Lucas), and the Pattern Recognition group (Gorkum, Seyran, Silvia, Taygun, Saskia, Bart, Ruud, Tom, Laura, Ekin, Wouter, Stephanie, Yancong, Alex, Marco, David, Chirag, Ziqi, Jose, Jan, Hamdi, Yunqiang, Yeswanth, Osman), thank you for the fun times, your helpfulness, and for accepting me weird as I am. I enjoyed the talks, conferences, social sport events, lab days, retreats, concerts, drinks, and cakes and I am happy to have shared this experience with you. To my friends and family, thank you for patiently listening to me when I talked about my work and for the good times that I needed in between.

To my parents, thank you for the unconditional love and pride. អាគុណម៉ែងអោយខ្ញុំមិនឃ្លាតឆ្ងាយពីឈាមខ្មែរ Cheerkim, I know you always have my back. Cheerted, thank you for using your talent to create this awesome cover and I am proud that we have put this together as brother and sister. Niels, my rebellious husband, I'm very lucky to have you by my side. Your humor, creativity, intelligence, and unlimited skills inspire me in every aspect of life. You keep me grounded and down to earth.

## **CURRICULUM VITÆ**

Arlin Keo was born on November 8<sup>th</sup>, 1988 in Oss, the Netherlands. She attended her preuniversity education (VWO) in 2000 at the Prisma College Graaf Engelbrecht in Breda and graduated in 2007. In 2011, she obtained a Bachelor's degree in Biology and Applied Medical Laboratory Technology at Avans University of Applied Sciences in Breda, with a specialization in Biotechnology and Bio-informatics. After working as a chemical analyst at Purac BioChem in Gorinchem for a short while, she pursued her interest in bioinformatics and started studying Bioinformatics at TU Delft in 2012. In 2016, she obtained her Master's degree in Computer Science with a specialization in Bioinformatics. Thereafter, in 2016 until 2020, she continued with a PhD in Computational Biology at Leiden University Medical Center, where she started at the Radiology department and later at the new department Leiden Computational Biology Center. Since September 2020, Arlin is working as a postdoctoral researcher at the Cancer Computational Biology Center at the Erasmus Medical Center in Rotterdam doing research with the Department of Urology, Department of Medical Oncology, and Department of Gastroenterology and Hepatology.