

Analyzing spatial transcriptomics and neuroimaging data in neurodegenerative diseases

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Stellingen behorend bij het proefschrift getiteld

Analyzing spatial transcriptomics and neuroimaging data in neurodegenerative diseases

by

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- 1. Gene co-expression across brain regions is more relevant than co-expression across individuals (Chapter 3 and 6).
- Cell-type deconvolution is important, but we still don't know how to do it (Chapter
 2).
- There is a puzzling disagreement on the effect of SNCA being deleterious or protective based on genetics and expression (Chapter 2).
- 4. Initiatives that chart molecular atlases from healthy individuals are more valuable than focusing on a specific disease (this thesis).
- 5. Gene expression is relative and only becomes valuable if you measure over multiple samples in multiple conditions.
- 6. Biology is not fixed as definitions change continuously, making validation difficult.
- 7. There are too many paradigms in biology and they can only be solved with datadriven approaches.
- 8. The cell is a system, so it does not make sense to analyze differential expression of single genes.
- 9. Expression is the essence of being present.
- 10. In the era of sequencing analysis, data analysis is still undervalued.