



University of Groningen

## Evaluating autophagy in the CNS

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### Propositions

accompanying the doctoral thesis

# Exploring the role of autophagy in the CNS

Implications for multiple sclerosis

- Autophagy is involved in different phases of MS in which it contributes to pathology or is protective; hence, modulation of this process should be tailored to the disease stage (this thesis).
- 2. Transcriptomic changes in autophagy-related genes correlate with MS pathology and are a read-out for the state of autophagy (this thesis).
- 3. Activity of mTORC1 kinase is increased during both EAE-induced inflammation and remyelination after cuprizone-induced demyelination, where the latter is autophagy-independent (this thesis).
- 4. Autophagy is not only involved in maintaining intracellular homeostasis, but can also affect external functions in a cell type-dependent manner (this thesis).
- 5. Microglial phagocytosis involves different biological mechanisms depending on the substrate, whereby autophagy is involved in myelin phagocytosis (this thesis).
- 6. The expression of autophagy-related genes differs for subtypes of sorted cells and might be cell type-specific (this thesis).
- 7. The greatest achievements can only be reached when you work together as a team.
- 8. Doing a PhD is a great engine for personal development and should be counted as a success.
- 9. Life becomes more meaningful when you realize that you will never get the same moment twice.
- 10. It is better to live your path imperfectly than to live an imitation of somebody else's expectations with perfection.
- 11. Be like the lotus: "trust in the light, grow through the dirt, believe in new beginnings".

Chairi Misrielal, November 2022