

Monitoring the immune responses to vaccination and pertussis: bordetella pertussis and beyond Diks. A.M.

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Stellingen behorende bij het proefschrift: Monitoring the immune responses to vaccination and infection – *Bordetella pertussis* and beyond

- 1. To ensure data quality and reproducibility, it is important that protocols and phenotypic descriptions are standardized between different laboratories & clinical sites (this thesis).
- 2. Understanding the cellular mechanisms underlying protective immunity will help guiding future vaccine design (this thesis).
- 3. Mucosal immunity and blocking of transmission should always be considered when evaluating the efficacy of vaccination against an infectious respiratory pathogen (this thesis).
- 4. Before we can decide whether $PLC\gamma2$ or any other protein- is a suitable therapeutic target, we should understand how much we can influence its functional range (e.g. by stabilizing or amplifying the signaling) without causing side effects (this thesis).
- 5. The in- and exclusion criteria of a vaccination cohort can heavily influence the final results and should therefore be carefully considered and described in the study protocol.
- 6. Certain infections (e.g. helminth infections) can influence vaccination responsiveness; therefore, the environmental triggers of the target population should be kept in mind during the development and evaluation of a vaccine candidate.
- 7. To improve vaccine-induced immunity, we should consider making the vaccination route more similar to the infection route.
- 8. Adding exploratory methods to the established 'standard' methods may ultimately speed up the search for new (surrogate) biomarkers.
- 9. The moment you stop learning is the moment your knowledge becomes outdated.
- 10. Vaak bu'j te bang (a common saying in the "Achterhoek" region of the Netherlands).

Both in Science and 'real life', it is a lot easier to stay within your comfort zone. I believe that we progress in science and real life by working on (and over) the edge of our comfort zones.

11. The importance of social inclusivity and contact with nature is reflected by their positive association with reduced feelings of loneliness (Hammoud et al., Scientific Reports, 2021, 11:24134).