α7 nicotinic acetylcholine receptors and memory processes: mechanistic and behavioral studies

Stellingen / Statements
Behorende bij het proefschrift / Belonging to the PhD dissertation

α7 nicotinic acetylcholine receptors and memory processes: mechanistic and behavioral studies

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1. When keeping the considerations of rodent strain, species, housing conditions and estrous cycle in mind, the object recognition task is a valuable tool in behavioral and pharmacological memory research. *(this dissertation)*

2. Interventions with nicotinic acetylcholine receptor (nAChR) function are associated with effects on memory. *(this dissertation)*

3. Low α7 nAChR partial agonist concentrations potentiate ACh-evoked currents through a co-agonism mechanism, this probably accounts for the pro-cognitive effects observed in rodents. *(this dissertation)*

4. Activation of α7 nAChRs by exposure to a low agonist concentration, utilizing the co-agonist mechanism, opens new and promising therapeutic avenues in combination with classical AChE inhibitors at lower than typically prescribed doses which will most likely minimize side-effects. *(this dissertation)*

5. Subchronic treatment with optimal concentrations an α7 nAChR partial agonist does not lead to the development of behavioral tolerance in rats. *(this dissertation)*

6. While the main focus of the α7 nAChR as a target for cognition enhancement has traditionally involved agonists and positive modulators, antagonists may also prove to be a valuable tool for cognition enhancement in neurological and psychiatric disorders. *(this dissertation)*

7. "Poison is in everything, and no thing is without poison. The dosage makes it either a poison or a remedy." *(Paracelsus, 1493-1541)*

8. "Coming together is a beginning. Keeping together is progress. Working together is success." *(Henry Ford, 1863-1947)*

9. The biggest risk factor for developing cognitive impairments is having a brain.

10. Dead = not good