

## Propositions:

1. All four CAMK2s are relevant to brain functioning (this thesis).
2. Studying mice in which not one gene but multiple paralogs are deleted, can lead to the discovery of novel functions (this thesis).
3. CAMK2A is associated with neurodevelopmental disorders but its expression is not linked to a critical developmental period in mice (this thesis).
4. Individuals with *CAMK2G* variants manifest with severe neurodevelopmental disorder, yet loss of CAMK2G in mice evokes mild impairments (this thesis).
5. Despite extensive research on *Camk2* knockout mice, research on *Camk2* gain-of-function knock-in mice is still scarce, possibly because patients needed to be identified first and/or these mice are too severely affected (this thesis).
6. Since the term 'isoform' can describe either a gene or protein variant, we should be cautious with the use of this term as it can lead to an incorrect interpretation of results.
7. Even though phosphorylation is a key modifying process, assessing the exact effect of phosphorylation on protein function can be a big challenge (Lienhard, 2008, *Trends Biochem Sci*).
8. The sex of the experimenter should be reported when performing behavioral experiments, because male smell alarms mice (Georgiou *et al.*, 2022, *Nat Neurosci*).
9. The recent green initiative to recycle clean plastic in the Erasmus MC resulted in the staggering amount of 10,000 kilos in the first year, showcasing the impact that hospitals have on the environment and the need for them to take more responsibility.
10. Even though most research these days needs to be clinically relevant to get funding, we should not overlook the essence of fundamental research based on curiosity, as clinically relevant research builds upon the discoveries of fundamental research ("Championing fundamental cell biology", 2022, *Nat Cell Bio*).
11. "No amount of experimentation can ever prove me right; a single experiment can prove me wrong" - Albert Einstein