

## Propositions

### **Neuropsychiatric studies of sleep and 24-hour activity rhythms:**

#### **A population-based approach**

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1. In old age the 24-hour activity rhythm becomes more rigid, while the ability to maintain an active or inactive state for a longer period of time is compromised (this thesis).
2. Disturbances in sleep are mainly associated with memory-related tasks, while disturbances in the rhythm relate to worse performance in tasks that tap executive functioning and perceptual speed (this thesis).
3. The 24-hour organization, duration and experience of sleep are prominent correlates of depression and the enhanced negative feedback of the HPA axis (this thesis).
4. The microstructure of sleep, more than the macrostructure, is a marker of depressive symptoms (this thesis).
5. Sleep apnea and depressive symptoms are not related in middle-aged and elderly persons in the general population, although both are related to fatigue (this thesis).
6. Edison suggested that 'sleep is a criminal waste of time', evidence suggests that 'not sleeping is a criminal waste of life'.
7. Although actigraphy is a good indicator of behavioral rhythms, epidemiology lacks valid measures of the 24-hour biological rhythm applicable in large populations.
8. Defining sleep by eyeballing sleep stages is like tracing an EEG with paper and pencil.
9. Subjective sleep quality ratings typically do not reflect objective sleep disturbances but are an indicator of well-being.
10. 'Sleeping is no mean art: for its sake one must stay awake all day.'  
(Friedrich Nietzsche, Thus spoke Zarathustra, 1883-1885)
11. 'Kennis komt niet alleen in de vorm van papier met een kaftje eromheen.'  
(Bas Haring, 2014)