

Stellingen behorende bij het proefschrift

Cerebello-Thalamic connection: a study of Development, Physiology and Anatomy

1. Cerebello-thalamic transmission is dominated by ionotropic glutamate receptor responses, but metabotropic responses cannot be excluded yet (this thesis)
2. Thalamic afferents, like cerebellar nuclei axons, are likely to modulate the activity of thalamo-cortical relay neurons from tonic to burst firing and vice versa (this thesis)
3. To ensure a temporally precise activation of inhibitory or excitatory inputs, optogenetic stimulation is a seemingly ideal tool (this thesis)
4. From late embryonic stages cerebellar axons innervate the thalamic complex, which indicates that already from early developmental stages the cerebellum can affect thalamo-cortical loop formation (this thesis)
5. We suggest that both under pathological and under healthy conditions cerebellar nuclei firing can direct the level of thalamic synchronization and thereby contribute to the behaviour encoded in various cerebral regions (this thesis)
6. Basic research does not directly benefit mankind, and often it even may not fully satisfy intellectual curiosity of the researcher. Yet, like the singing of the Sirenes, it remains irresistibly attractive.
7. "A constant element of enjoyment must be mingled with our studies, so that we think of learning as a game rather than a form of drudgery, for no activity can be continued for long if it does not to some extent afford pleasure to the participant". Desiderius Erasmus of Rotterdam
8. "In God we trust, all others must bring data". Edward Deming
9. "In mathematics and science, there is no difference in the intelligence of men and women. The difference in genes between men and women is simply the Y chromosome, which has nothing to do with intelligence". Christiane Nusslein-Volhard
10. "The researchers more closely resemble sociologists than revolutionary innovators, identifying themselves, and ending up loving dogmas. As the sociologists find great difficulties imagining real changes that would force them to question dogmas. The heretics are rare among social scientists as they are among researchers and for years those who dared to hypothesize fundamental mechanisms outside of the DNA-dogma risked ostracism, if not to die at the stake". Lorenzo Tomatis
11. The human brain is awesome: it functions 24 hours a day from the day we are born and it only stops when we are taking an exam or fall in love.

