

# Whole Cell Recordings of the Cerebellum In Vivo

Intracellulaire metingen van de kleine hersenen in vivo

## Propositions:

1. Cerebellar cortical and cerebellar nuclear neurons differ in their identifiability by electrophysiological means.
2. Rebound can be evoked in neurons of the cerebellar nuclei both in awake and anaesthetized animals by stimulating Purkinje cells or the inferior olive.
3. Neurons in the cerebellar nuclei show enigmatic subthreshold spikelet activity induced by ephaptic mechanisms; this in stark contrast to the occurrence of spikelets in electrotonically coupled neurons.
4. Neurons in the cerebellar nuclei, whose activity can induce motor output, transiently regulate activity in the inferior olive.
5. The cerebellum does not employ pure rate coding, nor does it employ pure synchrony coding.
6. A single stimulus can have many responses following it
7. Investing time in a good setup is investing time in good experiments.
8. "The best material model of a cat is another, or preferably the same, cat."  
(Norbert Wiener, 1945)
9. "Remember, whatever you believe imprisons you"  
(graffiti on a brick wall, Wooster Street, New York)
10. "Ultimately, society must recognize that science is not a democracy in which the side with the most votes or the loudest voices gets to decide what is right"  
(G.A. Poland and R.M. Jacobson, New Eng J med. (2011) 364:97-99)
11. Swearing and cursing when things don't work is a sign you care about what you do  
(*I swear 'cause I care*)