

Functional and Anatomical study of the inferior olive: From slice physiology to in vivo recordings

1. Dendritic morphologies of neurons of the inferior olive (IO) exhibit a continuum between the classically described 'curly' and 'straight' types. (this thesis).
2. Excitatory and inhibitory afferents to IO neurons have a strong, but distinct impact on subthreshold oscillations. (this thesis)
3. The timing of inhibition and excitation determines when IO neurons generate spikes. (this thesis).
4. The IO constrains the time window during which its inhibitory and excitatory inputs can affect motor learning. (this thesis)
5. Activity in the IO is significantly affected during sleep both in terms of changes in excitability and spatial coherence. (this thesis)
6. There is nothing like patching a good cell on a bad day.
7. "Sometimes science turns everyday life into everynight life". - T.M. Hoogland
8. Not discarding your last brain slice may yield the best results.
9. "Only love expands intelligence". - Humberto Maturana
10. "The best way out is always through". - Robert Frost
11. "The inferior olive is like an ingenious guitar". – C.I. De Zeeuw