



THE ROLE OF L-TYPE VOLTAGE-GATED CALCIUM CHANNELS IN EPILEPTIFORM DISCHARGES OF HIPPOCAMPAL NEURONS

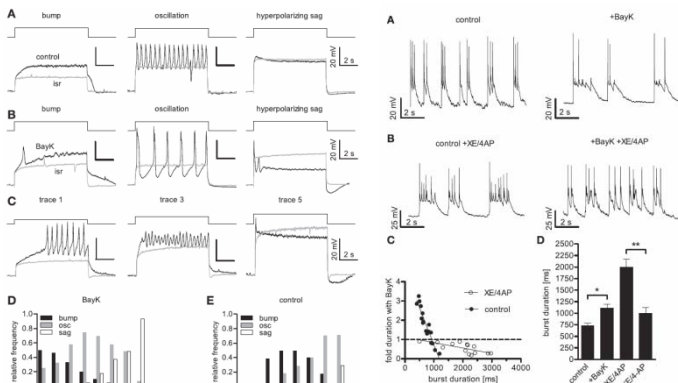
GUEST LECTURE by



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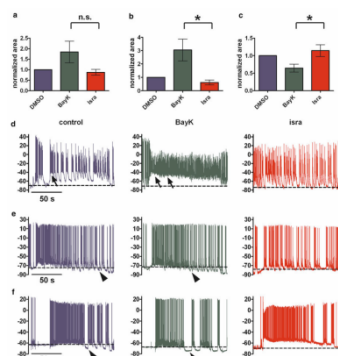
Friday, 01.04.2016
11:00

SR 07.11, Preclinics, MUG
(Harrachgasse 21, 1st floor)



L-type voltage-gated calcium channels (LTCC)-mediated voltage responses evoked by depolarizing current injections.

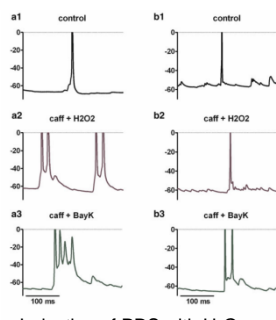
Geier et al. (2011) *Am J Physiol Cell Physiol* 300:C937-49



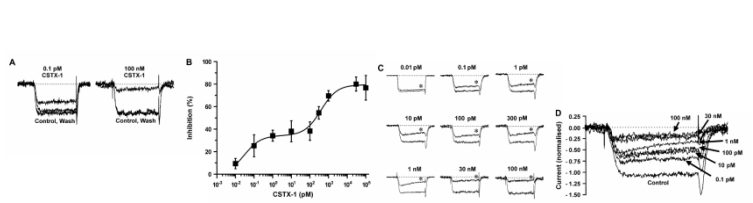
LTCC can both enhance and reduce Mg^{2+} -induced seizure-like activity.

Rubi et al. (2013) *Neuromol Med* 15:476-92

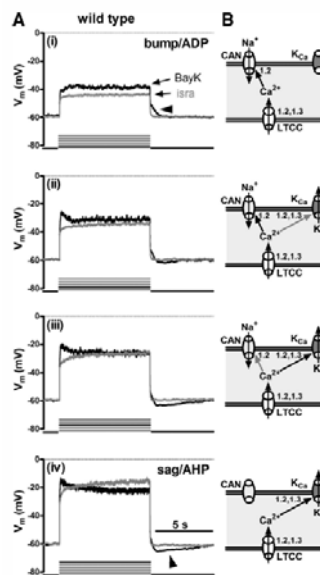
Effect of LTCC activation on neuronal activity depends on the extent of depolarization.



Induction of PDS with H_2O_2 requires LTCC.

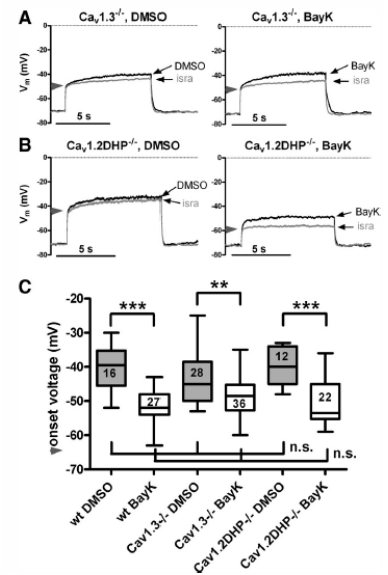


CSTX-1 blocks Ba^{2+} currents in GH4 cells in a concentration-dependent and reversible manner. Kubista et al. (2007) *Neuropharmacol* 52:1650-62



Transition between response modes in wild-type neurons.

Hasreiter et al. (2014) *Am J Physiol Cell Physiol* 306:C1200-13



$Ca_v1.2$ and $Ca_v1.3$ channels operate in an overlapping voltage range.