

SUPPLEMENTARY FIGURE LEGENDS

Figure S1. *A–C*, Percentage weight change induced by 900 stimulus pulses at various frequencies plotted as a function of the stimulus frequency for different values of maximal *h*-channel conductance, \bar{g}_h , with specific membrane resistivity R_m set at 80 (*A*), 160 (*B*) and 320 (*C*) $\Omega\cdot\text{cm}^2$. A progressive rightward shift in the curve may be noted with increases in \bar{g}_h . *D*, Quantifying the modification threshold, θ_m as a function of \bar{g}_h shows a saturating rightward shift in the BCM-like plasticity profile with increase in \bar{g}_h , for the various values of R_m . Maximum AMPAR permeability \bar{P}_{AMPA} was set at 300 nm/s for all these simulations.

Figure S2. *A–B*, Percentage weight change induced by 900 stimulus pulses at various frequencies plotted as a function of the stimulus frequency for different values of maximal *h*-channel conductance, \bar{g}_h , with the initial weight w_{init} set at 0.25 (*A*) and 0.75 (*B*). A progressive rightward shift in the curve may be noted with increases in \bar{g}_h . All red arrows indicate the point at which compartment switched from generating a spike to generating a subthreshold EPSP. *C*, Quantifying the modification threshold, θ_m as a function of \bar{g}_h shows a saturating rightward shift in the BCM-like plasticity profile with increase in \bar{g}_h , for the various values of w_{init} . *D*, It may be noted from *A*, *B* and Fig. 2A that the maximum percentage of LTP is dependent on the value of w_{init} (Shouval et al., 2002). The dependence of this maximum percentage of LTP as a function of w_{init} is nonlinear, but monotonically decreasing function (Shouval et al., 2002).