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## **IP3 dissociation of a single IP3R cluster as a mechanism for whole cell calcium oscillations**

In many cells, excitation with IP3 leads to global, repetitive "waves" of intracellular calcium concentration on the time scale of minutes. These waves are caused by release of calcium from internal stores through clusters of IP3 sensitive calcium ion channels (IP3R). IP3 dissociation from IP3R channels leads to a variability of the clusters, respective their number of activatable channels, and hence can modulate the whole cell inter wave interval already on the single cluster basis.