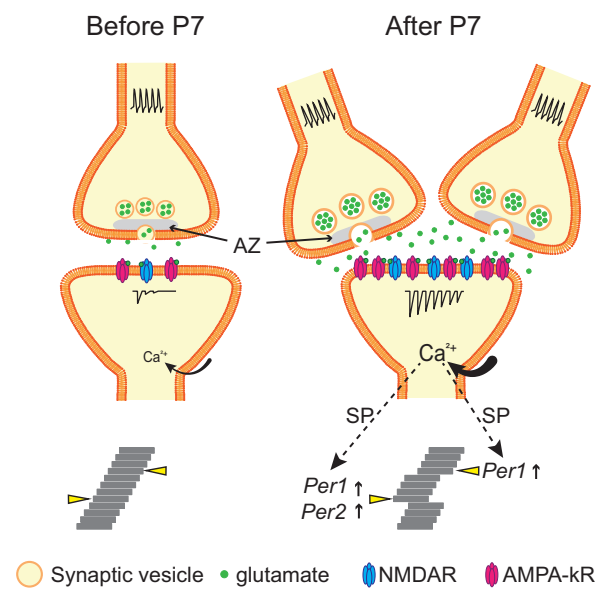

Supplementary Fig. 4. Simplified schematic proposal about the developmental pre- and postsynaptic changes that allow synchronization of ventral SCN neurons to light. Before P7, phase shifts do not occur because the pre- and postsynaptic changes that allow a strong synaptic response in RHT-SCN synapses are absent. On the contrary, after P7 pre- and postsynaptic changes have occurred (increment of release sites or active zones (AZ), augment of glutamatergic quantum, increase of postsynaptic ionotropic glutamate receptors, etc.) permitting active postsynaptic responses that induce large calcium entrance in ventral SCN neurons that allows signaling pathways (SP), and clock genes expression (Per1 and Per2) necessary for phase shifts.