Dark Current: Summary

- $V_m = -30\text{mV}$
- Maintained by:
  - CNG channels
  - High intracellular cGMP
  - Constant Na$^+$ influx
  - K$^+$ efflux ($I_K$)
  - Na$^+$-K$^+$, Ca$^{2+}$ exchanger

...But what happens when the cell leaves the dark cycle and enters the light?
Light Stimulation

- cGMP levels are decreased
- CNG channels close
  - Exchanger is still working!
- Membrane becomes more negative
  - HYPERPOLARIZED!
- Less calcium in the cell
- Less release of Neurotransmitter

Who is involved in this process?