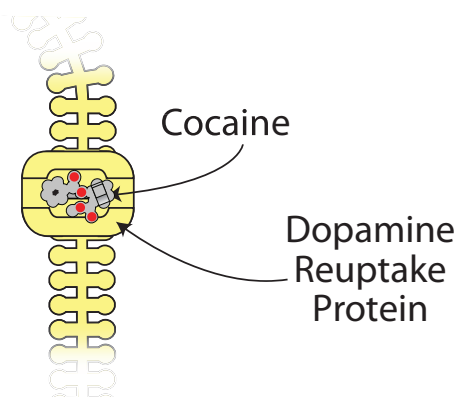


Part VI: Modeling a Perturbance in a Dopaminergic Synapse

Next you will introduce a substance that perturbs neural transmission in the dopaminergic synapse. **Cocaine** binds to the dopamine reuptake protein in the presynaptic cell.



1a. How would cocaine affect nervous transmission in this synapse?

1b. What long term effect might repeated exposure to cocaine have on the dopaminergic synapse?

1c. Optional activity. The drug haloperidol is used to treat schizophrenia and the tics associated with Tourette's Syndrome. Explain how this drug affects the dopaminergic synapse.

