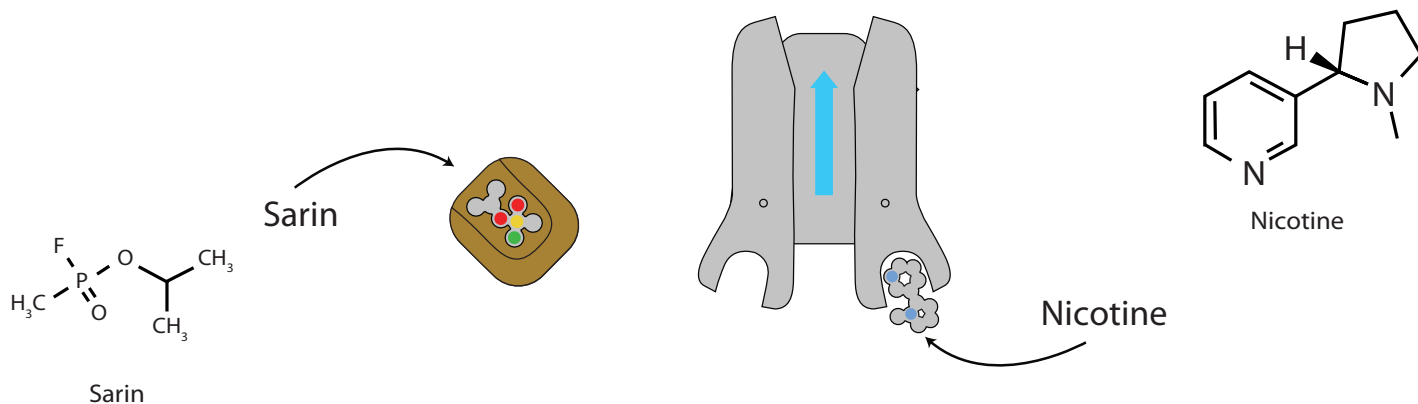


## Part IV: Modeling a Perturbance in a Cholinergic Synapse

Next you will introduce two substances that perturb neural transmission in the cholinergic synapse. **Nicotine** binds to the acetylcholine receptor to open the channel. **Sarin** binds to acetylcholinesterase. Model where these substances bind in your synapse.



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

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1b. How does sarin perturb the cholinergic synapse?

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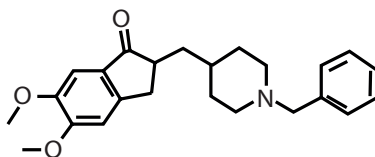
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1c. Aricept is a drug used to treat Alzheimer patients by binding to acetylcholinesterase. How does Aricept help Alzheimer patients?

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Aricept

## Part IV: Modeling a Perturbance in a Cholinergic Synapse

1d. Imagine where other perturbances might occur in the synapse. Record your thoughts.

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1e. Explore other substances which might perturb the cholinergic synapse. Describe how these substance act on the synapse and the effect they may have.

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